Fall 2016

# Graduate course catalog (Florida International University). [2016-2017] 

Florida International University

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## President Mark B. Rosenberg



## Dear Graduate Students:

Welcome to FIU! This Graduate Catalog provides an overview of our institution, including information to guide you through your academic experience.

As a leading student-centered urban public research university located in one of the nation's most exciting international cities, FIU provides a rare combination of vast resources, personal attention and affordability. We offer many opportunities for community and global engagement through nearly 190 bachelor, master and doctoral degree programs. With outstanding faculty, state-of-the-art research and a quality learning environment, we prepare our students for competitive job markets and the latest technologies. Committed to both quality and access, FIU meets the educational needs of traditional students, as well as part-time students and lifelong learners.

FIU has a nationally and internationally recognized full-time faculty known for outstanding teaching and cuttingedge research. The university is a member of Phi Beta Kappa, the nation's oldest and most distinguished academic honor society. FIU is also ranked as "R1: Doctoral Universities—Highest Research Activity;" the top category by the Carnegie Foundation's prestigious classification system. Our students, faculty and alumni continually receive national and international recognition for their achievements.

FIU's College of Law received full accreditation in the fastest time allowed by the American Bar Association in December 2006. In February 2013, our Herbert Wertheim College of Medicine received full accreditation from the Liaison Committee on Medical Education, establishing South Florida's only public medical school. The first class graduated in 2013. FIU also offers a strong Arts and Sciences core, and many nationally and internationallyrecognized programs in Business, Engineering, Nursing, Public Health, Architecture and other disciplines.

The Herbert Wertheim College of Medicine includes the Benjamin Leon, Jr. Family Center for Geriatric Research and Education. This Center focuses on treating health issues that affect the culturally diverse elderly population of South Florida. Another innovative program addressing community challenges is the Green Family Foundation NeighborhoodHELP ${ }^{\text {TM }}$ program, which is one of its kind in the nation. Overall, FIU's Herbert Wertheim College of Medicine is a vital medical college that is transforming medical education and health care in the region and greatly enhancing the University's research mission.

Graduate education is central to the research core of FIU's mission. Our graduate students, under the expert guidance of our faculty, are making major contributions to intellectual discourse in many disciplines. Graduates from our professional schools and colleges have become leaders in corporate, nonprofit and governmental sectors throughout the world. Whatever your intellectual desires and career objectives may be, you will find at FIU the resources and opportunity to fulfill your personal and professional goals.

Dean Andrés G. Gil


## Dear Graduate Students:

We welcome you to explore the many offerings of our graduate programs here at FIU. FIU has the highest Carnegie Research Classification, "Research I: Highest Research Activity." The reputation of a research university is based in large part by the quality of its graduate faculty. However, graduate students are also key contributors to the University's reputation and active contributors to the University's intellectual and creative environment. Through its graduate faculty members, FIU offers graduate programs of the highest quality.

The Graduate Catalog provides information and resources to those interested in graduate education programs at FIU, including the full range of programs and courses available. We offer a wide range of graduate programs to satisfy virtually every personal or professional pursuit. We have over 120 graduate degree programs including an extensive array of doctoral, masters and graduate-level certificate programs. Florida International University is a young, vibrant and diverse university with a graduate population of over 8000 students and an overall enrollment of over 54,000 students. We have an active Graduate Student Association and other avenues for graduate involvement on campus through the University Graduate School and other student services offices.

At FIU, we take pride in designing graduate programs that prepare our students to be future leaders in their fields and to be knowledge creators. Our graduate faculty are worlds ahead scholars producing new discoveries to solve the challenges facing our nation and the world. Our focus on research-integrated graduate curricula, and the rich cultural diversity of our campus and South Florida, provide the graduate students with the most exciting and dynamic learning environment at FIU.

FIU also offers excellent infrastructure for cutting-edge graduate work. We have modern, well equipped laboratories, and ample computer facilities and support. We also boast one of the largest libraries in the State University System. All of this is available to our graduate students to help them achieve their goals in a timely manner and obtain the postgraduate appointments they desire. We also have excellent professional training and development opportunities designed to prepare the graduate students to be successful in their chosen careers.

We are glad you have chosen to be a part of our rich academic culture, and we are committed to providing you with the most stimulating learning environment.

## Academic Calendar 2016-2017

## FALL 2016

August 22 - December 10, 2016
Final Week of the Semester: December 5-10, 2016

March 15 Tuesday Sunday
May 30 Monday
July 4 Monday
August 16 Tuesday
August 18 Thursday
August 21 Sunday
August 22 Monday
August 22 Monday
August 26 Friday
August 29 Monday

August 30 Tuesday
August 30 Tuesday
August 31 Wednesday
September 5 Monday
September 6 Tuesday
September 7-9 Wednesday -
Friday
September 16 Friday
September 29 Thursday
October 27 Thursday
October 31 Monday
November 11 Friday
November 24 \& 25 Thurs \& Fri
November 26 Saturday
December 5-10 Monday-Saturday
December 10 Saturday
TBA
December 14 Wednesday
December 15 Thursday
December 22-24 Thursday -
Saturday
December 26 Monday
December 31 Saturday
January 2 Monday

March 22 - April 26 Tues - Tues Official Registration for Summer \& Fall Degree-Seeking Students only, by assigned registration time and day. Priority registration available on http://my.fiu.edu
April 27 - August 21 Wednesday - Summer and Fall open Registration for Degree-Seeking Students
Class schedule available to all returning undergraduate and graduate students for Summer 2016 and Fall 2016

First day to apply for Fall term graduation 2016
University Closed in observance of Independence Day
New Faculty Orientation Day
Non-degree seeking student registration begins
Last day to register without incurring a $\$ 100$ Late Registration Fee
Freshman Convocation (Required of All Freshmen)

## Classes begin

Short Term Tuition Loan Applications available
Last day to submit Non-degree Application for Fall 2016 term
Last day to add courses; last day to drop courses or withdraw from the University without incurring financial liability for Tuition and Fees
Last day to change a grading option
Fall semester Payment Due Date
Last day for students to apply for a Short Term Loan
\$100 late payment fee assessed for outstanding balances
Labor Day Holiday (University Closed)
Cancellation of Enrollment for unpaid Tuition and Fee balances not covered by Payment
Plan, Scholarships or other awards
Reinstatement after Cancellation for non-payment
Last day to apply for Fall 2016 graduation
Last day to withdraw from the University with a $25 \%$ refund of Tuition
Faculty Convocation
Return of Title IV deadline for financial aid recipients
Deadline to drop a course with a DR grade
Deadline to withdraw from the University with a WI grade
Veterans Day Holiday (University Closed)
Thanksgiving Holiday (University Closed)
No Saturday Classes
Final week of the semester - modified class schedule: Final exams and other course assessment activities are scheduled during this week
On-campus exams for online courses
Commencement Exercises - Please refer to https://commencement.fiu.edul
Deadline (by 11:59 pm) for faculty to submit grades
Complete grade report available to students by web
Winter Break 1 (No Classes)
Christmas Day (Observed)
Winter Break 2 (No Classes)
New Year's Day (Observed)

## SPRING 2017

January 9 - April 29, 2017
Final Week of the Semester: April 24 - April 29, 2017

September 30 Friday
October 21 Friday
Nov 1 - Dec 6 Tuesday - Tuesday Official registration for degree-seeking students by assigned registration time
Class schedule available to all returning undergraduate and graduate students for Spring 2017 term and day
Dec 7 - Jan 8 Wednesday - Sunday Open registration for degree-seeking students
December 22-24 Thursday-
Winter Break 1 (No Classes)

## Saturday

December 26 Monday Christmas Day (Observed)
December 31 Saturday Winter Break 2 (No Classes)
January 2 Monday
January 5 Thursday
January 8 Sunday
January 9 Monday
January 13 Friday
January 16 Monday
January 17 Tuesday

January 18 Wednesday
January 18 Wednesday
January 19 Thursday
January 20 Friday
January 23-27 Monday - Friday
February 3 Friday
March 3 Friday $\quad$ Return of Title IV deadline for financial aid recipients
March 13-18 Monday - Saturday Spring Break (University Open, No Classes)
March 20 Monday
April 24-29 Monday - Saturday
April 29 Saturday
TBA
May 3 Wednesday
May 4 Thursday

New Year's Day (Observed)
Non-degree seeking student registration begins
Last day to register without incurring a \$100 Late Registration Fee

## Classes begin

Short Term Tuition Loan Applications available
Last day to submit Non-degree Application for Spring 2017 term
Martin Luther King Holiday (University Closed)
Last day to change grading option
Last day to add courses; last day to drop courses or withdraw from the University without incurring financial liability for tuition and fees
Spring semester Payment Due Date
Last day for students to apply for a Short Term Loan
\$100 late payment fee assessed for outstanding balances
Cancellation of Enrollment for unpaid Tuition and Fee balances not covered by Payment
Plan, Scholarships or other awards
Reinstatement for Cancellation after non-payment
Last day to apply for Spring 2017 graduation
Last day to withdraw from the University with a $25 \%$ refund of tuition

Last day to drop a course with a DR grade
Last day to withdraw from the University with a WI grade
Final week of the semester - modified class schedule: Final exams and other course
assessment activities are scheduled during this week
On-campus exams for online courses
Commencement Exercises - Please refer to https://commencement.fiu.edul
Deadline (by 11:59 pm) for faculty to submit grades
Complete grade report available to students by web

## SUMMER 2017

May 8 - July 28, 2017

## TERM A

May 8 - June 16, 2017

February 10 Friday
March 13 Monday
March 27 - April 30 Monday Sunday
May 1 - May 7 Monday - Sunday

First day to apply for Summer 2017 term graduation
Class schedule available to all returning undergraduate and graduate students for Summer \& Fall 2017 term
Official registration for degree-seeking students by assigned registration time and day
Open registration for degree-seeking students

May 4 Thursday Non-degree seeking student registration begins

May 7 Sunday
May 8 Monday
May 12 Friday
May 15 Monday

May 16 Tuesday
May 17 Wednesday
May 19 Friday
May 19 Friday
May 22-26 Monday - Friday
May 22 Monday
May 29 Monday
June 1 Thursday
June 5 Monday
June 16 Friday
June 21 Wednesday
June 22 Thursday
TBA

Last day to register without incurring a $\$ 100$ Late Registration Fee
Classes begin
Short Term Tuition Loan Applications available
Last day to submit Non-degree Application for Summer A \& C 2017 term
Last day to add courses; last day to drop courses or withdraw from the University without incurring financial liability for tuition and fees
Last day to change grading option
Summer semester Payment Due Date
Last day for students to apply for a Short Term Loan
\$100 late payment fee assessed for outstanding balances
Cancellation of Enrollment for unpaid Tuition and Fee balances not covered by Payment
Plan, Scholarships or other awards
Last day to apply for Summer 2017 graduation
Reinstatement after Cancellation for non-payment
Last day to withdraw from the University with a $25 \%$ refund of tuition
Memorial Day Holiday (University Closed)
Return of Title IV Deadline for Financial Aid Recipients for Summer "A" Term
Last day to drop a course with a DR grade
Last day to withdraw from the University with a WI grade
Classes end
On-campus exams for online courses
Deadline (by 11:59 pm) for faculty to submit grades
Grade report for Summer Term A available to students by web**
Commencement Exercises - Please refer to https://commencement.fiu.edul

## TERM

June 19 - July 28, 2017

March 13 Monday
March 27 - April 30 Monday Sunday
May 1 - May 7 Monday - Sunday
May 19 Friday
June 15 Thursday
June 18 Sunday
June 19 Monday
June 23 Friday
June 26 Monday

June 27 Tuesday
June 28 Wednesday
July 4 Tuesday
July 5 Wednesday
July 13 Thursday
July 17 Monday
July 28 Friday
TBA
August 2 Wednesday
August 3 Thursday

Class schedule available to all returning undergraduate and graduate students for Summer \& Fall 2017 term
Official registration for degree-seeking students by assigned registration time and day
Open registration for degree-seeking students
Last day to apply for Summer 2017 graduation
Non-degree students can register for Summer B courses
Last day to register without incurring a $\$ 100$ Late Registration Fee

## Classes begin

Short Term Tuition Loan Applications available
Last day to submit Non-degree Application for Summer B 2017 term
Last day to add courses; last day to drop courses or withdraw from the University without
incurring financial liability for Tuition and Fees
Last day to change grading option
Summer semester Payment Due Date
Last day for students to apply for a Short Term Loan
$\$ 100$ Late Payment Fee assessed for outstanding balances
University Closed in observance of Independence Day
Last day to withdraw from the University with a $25 \%$ refund of tuition
Return of Title IV Deadline for Financial Aid Recipients for Summer "B" Term
Last day to drop a course with a DR grade
Last day to withdraw from the University with a WI grade
Classes end
On-campus exams for online courses

## Commencement Exercises - Please refer to https://commencement.fiu.edul

Deadline (by 11:59 pm) for faculty to submit grades
Complete grade report available to students by web

## TERM C

May 8 - July 28, 2017

February 10 Friday
March 13 Monday
March 27 - April 30 Monday Sunday
May 1 - May 7 Monday - Sunday
May 4 Thursday
May 7 Sunday
May 8 Monday
May 12 Friday
May 15 Monday

May 16 Tuesday
May 17 Wednesday
May 19 Friday
May 19 Friday
May 22-26 Monday - Friday
May 29 Monday
June 16 Friday
June 26 Monday

July 4 Tuesday
July 28 Friday
TBA
August 2 Wednesday
August 3 Thursday
August 21 Monday (Fall 2017)

First day to apply for Summer 2017 term graduation
Class schedule available to all returning undergraduate and graduate students for Summer \& Fall 2017 term
Official registration for degree-seeking students by assigned registration time and

## day

Open registration for degree-seeking students
Non-degree seeking student registration begins
Last day to register without incurring a $\$ 100$ Late Registration Fee

## Classes begin

Short Term Tuition Loan Applications available
Last day to submit Non-degree Application for Summer A \& C 2017 term
Last day to add courses; last day to drop courses or withdraw from the University without
incurring financial liability for tuition and fees
Last day to change grading option
Summer semester Payment Due Date
Last day for students to apply for a Short Term Loan
\$100 late payment fee assessed for outstanding balances
Cancellation of Enrollment for unpaid Tuition and Fee balances not covered by Payment
Plan, Scholarships or other awards
Last day to apply for Summer 2017 graduation
Reinstatement after Cancellation for non-payment
Memorial Day Holiday (University Closed)
Last day to withdraw from the University with a $25 \%$ refund of tuition
Return of Title IV Deadline for Financial Aid Recipients for Summer "C" Term
Last day to drop a course with a DR grade
Last day to withdraw from the University with a WI grade
University Closed in observance of Independence Day

## Classes end

On-campus exams for online courses
Commencement Exercises - Please refer to https://commencement.fiu.edul
Deadline (by 11:59 pm) for faculty to submit grades
Complete grade report available to students by web

## Fall 2017 semester classes begin

${ }^{* *}$ Grades will be posted on transcripts; however, graduation will not be processed until the end of the Complete Summer C Term.
Calendar dates are subject to change. Please contact appropriate offices for verification and updates.
This calendar includes official University holidays. Faculty are encouraged to make accommodations for students who wish to observe religious holidays. Students should make their requests known to the instructor at the beginning of the semester.
For a listing of religious holidays you may visit http://www.interfaithcalendar.org.

## UNIVERSITY INFORMATION

## MISSION

Florida International University is an urban, multi-campus, public research university serving its students and the diverse population of South Florida. We are committed to high-quality teaching, state-of-the-art research and creative activity, and collaborative engagement with our local and global communities.

## VISION

Florida International University will be a leading urban public research university focused on student learning, innovation, and collaboration.

## VALUES

Florida International University is committed to the following core values:

- Truth-in the pursuit, generation, dissemination, and application of knowledge
- Freedom—of thought and expression
- Respect-for diversity and the dignity of the individual
- Responsibility-as stewards of the environment and as citizens of the world
- Excellence-in intellectual, personal, and operational endeavors


## THE UNIVERSITY

Florida International University, a member institution of the State University System of Florida, was established by the Florida Legislature in 1965. Classes began in September 1972, with 5,667 students enrolled in upper division and graduate programs - the largest opening day enrollment in U.S. collegiate history. In 1984, FIU received authority to begin offering degree programs at the doctoral level. The Carnegie Foundation for the Advancement of Teaching ranks FIU as a Research University in the High Research Activity Category.

The University is a member of Phi Beta Kappa, the nation's oldest and most distinguished academic honor society. Florida International University offers more than 180 baccalaureate, master's and doctoral degree programs in the following colleges and schools: College of Arts, Sciences and Education (School of Education and Human Development, School of Environment, Arts, and Society and School of Integrated Science and Humanity); College of Business (School of Accounting, Chapman Graduate School, and Landon Undergraduate School of Business); College of Communication, Architecture + The Arts (School of Communication and Journalism and School of Music); College of Engineering and Computing (School of Computing and Information Sciences and OHL School of Construction); College of Law; Herbert Wertheim College of Medicine; Nicole Wertheim College of Nursing and Health Sciences; Honors College; Robert Stempel College of Public Health and Social Work (School of Social Work); Steven J. Green School of International and Public Affairs, and Chaplin School of Hospitality and Tourism Management.

FIU has more than 54,000 students, 1,232 full-time faculty, and over 12,750 degrees awarded annually,
making it the largest university in South Florida and placing it among the ten nation's largest colleges and universities. The University has two campuses - Modesto A. Maidique Campus in western Miami-Dade County and the Biscayne Bay Campus, a branch campus, in northeast Miami-Dade County. A shuttle bus runs continuously between the two campuses throughout the day. FIU offers programs at the FIU at I-75 academic center in adjacent Broward County and the FIU Downtown on Brickell academic center in Miami. Additionally, numerous programs are offered at off-campus locations and online.

## MODESTO A. MAIDIQUE CAMPUS

The Modesto A. Maidique Campus is a 344 -acre site on the western edge of Miami, the center of a metropolitan area of almost four million people. Apartment-style residence halls, a nationally certified environmental preserve, and athletic facilities all contribute to a pleasant collegiate atmosphere on Modesto A. Maidique Campus, which is also Florida International University's largest campus. FIU's Modesto A. Maidique Campus (MMC) has impressive campus architecture, lush tropical landscaping, a Sculpture Park, and the eight-story Green Library. There is also a state-of-the-art Wertheim Performing Arts Center, a recreation center, an expanded university center, a 4,500 seat FIU Arena and a football stadium. Modesto A. Maidique Campus also has laboratories, auditoriums, music and art studios, an art museum, an international conference theater, and an experimental theater. There is a wide variety of clubs and student organizations on campus to meet the professional, service, athletic, social, and cultural needs of the FIU community.

FIU's libraries at Modesto A. Maidique Campus and Biscayne Bay Campus have more than 2 million volumes and 135,000 serials including journals (5,000 online), electronic databases, numerous resources in other formats along with substantial holdings of federal, state, local, and international documents, maps, institutional archives, and curriculum materials.

Housing and Residential Life provides a wide variety of living accommodations on campus. Residence halls at Modesto A. Maidique Campus include Panther Hall, Everglades Hall, University Park Towers, University Apartments, Parkview Hall, and Lakeview Housing. Housing staff assist students in selecting accommodations to meet their particular needs. All are single gender accommodations. There are no co-ed, family, or married housing offerings. The campus houses a Recreational Facility and also provides a Health and Wellness Center.

## BISCAYNE BAY CAMPUS

The Biscayne Bay Campus of Florida International University is located on 200 acres on the waterfront of Biscayne Bay and has an enrollment over 6,000 students. The campus is headquarters for academic programs in Hospitality and Tourism Management; Communication and Journalism; Marine Science; and Creative Writing. Course work in Arts, Sciences and Education; Business Administration; Communication, Architecture and the Arts; Computer Science; Nursing; and Criminal Justice are also
offered (for specific degree programs please refer to Academic Programs in this catalog).

The campus houses the Glen Hubert Library, Osher Lifelong Learning Institute, and the Roz and Cal Kovens Conference Center, a state-of-the art conference facility located on Biscayne Bay.

A residential complex living accommodation is available on the Biscayne Bay Campus. The Wolfe University Center is the focal point of all student activities including clubs and entertainment, student life, and dining facilities.

## FIU at I-75

Florida International University has brought higher education closer to home for thousands of South Broward residents through its new academic center, FIU at I-75. Located at 1930 SW $145^{\text {th }}$ Avenue in Miramar, classes are held in an 89,000 square-foot LEED-certified facility. The new center includes classrooms, computer labs, case study rooms, faculty offices, student collaborative areas and a dining facility.

Select programs at the bachelor's and master's level are being offered by the College of Arts, Sciences and Education; College of Business; Steven J. Green School of International and Public Affairs; and the College of Engineering and Computing. Non-Credit programs and current courses are offered.

Students attending FIU at I-75 benefit from computer labs and access to the resources of both the FIU libraries (Modesto A. Maidique Campus and Biscayne Bay Campus) and the Broward County Public libraries. The Biscayne Bay Campus and FIU at I-75 Student Government Association sponsors social and cultural events that provide students with opportunities to enhance their experiences outside of the classroom. For more information on FIU at I-75 and its program offerings, please visit http://miramar.fiu.edu.

## FIU DOWNTOWN ON BRICKELL

FIU Downtown on Brickell consists of 60,000 square feet at 1101 Brickell Avenue. FIU Downtown on Brickell includes multi-purpose classrooms, a reception space, leadership and faculty offices, and a dining area. With its prime location, FIU Downtown on Brickell provides working professionals a convenient place to further their education. A range of master level business programs are offered at the venue. Graduate public administration and global governance academic programs complement the business offerings. FIU Downtown on Brickell is also home to the College of Arts, Sciences and Educations' Metropolitan Center, a public affairs center that focuses on economic development, land use, housing, and applied social research.

For more information on FIU Downtown on Brickell programs, please visit http://dwntwn.fiu.edul.

## MIAMI BEACH URBAN STUDIOS

The College of Communication, Architecture + The Arts' studio on Miami Beach, Florida, houses graduate design
studios for students studying architecture, landscape architecture and interior architecture. In addition, the 16,000 square feet of space at 420 Lincoln Road, known as the Miami Beach Urban Studios (MBUS), offers practice rooms for music students, exhibition and graduate studios for visual arts students, performance spaces for theatre students, and classrooms for communication and journalism students. MBUS also serves as the home of the Office of Engaged Teaching, Scholarship, and Creative Activities. In close proximity to the New World Symphony, The Wolfsonian-FIU and the Bass Art Museum, MBUS represents a commitment to broaden collaboration with other cultural institutions in South Beach.

For more information on MBUS, please visit http://mbus.fiu.edu.

## ACCREDITATIONS

All academic programs of Florida International University (FIU) are approved by the Florida Board of Education, the FIU Board of Trustees and the Florida Board of Governors. FIU is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate, baccalaureate, master's, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call (404) 679-4500 for questions about the accreditation of FIU. SACSCOC reaffirmed FIU's accreditation on December 6, 2010. General inquires about FIU, such as admission requirements, financial aid, educational programs, etc., should be addressed directly to the appropriate FIU department and not the Commission's office. Degree programs at FIU are accredited or approved by the appropriate specialized accreditation agency, or are pursuing full accreditation or approval. To obtain information about the specialized accreditation agencies, their criteria and review process, contact the Chairperson/Director of the respective degree program. The professional accrediting agencies and the respective FIU degree programs are listed in alphabetical order below.

## Accounting

Association to Advance Collegiate Schools of Business (AASCB)
Anesthesiology Nursing
Council on Accreditation of Nurse Anesthesia
Educational Programs (CoA-NA)
American Association of Nurse Anesthetists (AANA)

## Architecture

National Architectural Accrediting Board (NAAB)
Art Education
National Association of Schools of Art and Design
Commission on Accreditation (NASAD)

## Art History

National Association of Schools of Art and Design
Commission on Accreditation (NASAD)

## Art Museums

American Association of Museums
Athletic Training
Commission on Accreditation of Athletic Training
Education (CAATE)
Business
Association to Advance Collegiate Schools of Business (AACSB) International
Chemistry
American Chemical Society (ACS)
Computer Science
Accreditation Board for Engineering and Technology (ABET)
Construction Management
American Council for Construction Education
Board of Trustees (ACCE)
Counselor Education
Council for Accreditation of Counseling and Related
Educational Programs (CACREP)
Dietetics and Nutrition
Academy of Nutrition and Dietetics
Accreditation Council for Education in Nutrition and
Dietetics (ACEND)
Education
Council for the Accreditation of Education
Professionals
(CAEP)
Engineering
Accreditation Board for Engineering and Technology, Inc. (ABET)
Forensic Science
American Academy of Forensic Sciences
Healthcare
Commission on Accreditation of Healthcare
Management Education

## Hospitality and Tourism Management

Accreditation for College Programs in Hospitality Administration
Interior Architecture
Council for Interior Design Accreditation (CIDA)
(formerly FIDER)
Journalism and Mass Communication
Accrediting Council on Education in Journalism and
Mass Communications (ACEJMC)
Landscape Architecture
American Society of Landscape Architects (ASLA)
Landscape Architectural Accreditation Board (LAAB)
Law
American Bar Association (ABA)
Medicine
Liaison Committee for Medical Education (LCME)
Music
National Association of Schools of Music
Commission on Accreditation (NASM)

## Nursing

 Commission on Collegiate Nursing Education (CCNE)Occupational Therapy
American Occupational Therapy Association (AOTA) Accreditation Council for Occupational Therapy Education (ACOTE)

## Physical Assistant

Accreditation Review Commission on Education for the Physical Assistant

## Physical Therapy

American Physical Therapy Association (APTA) Commission on Accreditation in Physical Therapy Education (CAPTE)
Public Administration
National Association of Schools of Public Affairs and Administration (NASPAA)
Commission on Peer Review and Accreditation (COPRA)

## Public Health

Council on Education for Public Health (CEPH)

## Social Work

Council on Social Work Education Office of
Social Work Accreditation and Educational Excellence (CSWE)
Speech Language Pathology
American Speech-Language-Hearing Association
Council on Academic Accreditation in Audiology \&
Speech-Language Pathology (ASHA)
Theatre
National Association of Schools of Theatre
Commission on Accreditation (NAST)


## ACADEMIC PROGRAMS

## MODESTO A. MAIDIQUE CAMPUS PROGRAMS

## COLLEGE OF ARTS, SCIENCES AND EDUCATION

http://cas.fiu.edu
MASTER OF ARTS IN:
English
Liberal Studies
Linguistics
MASTER OF FINE ARTS IN CREATIVE WRITING
MASTER OF SCIENCE IN:
Biology
Chemistry
Environmental Studies
Forensic Science
Geosciences
Mathematical Sciences
Physics
Psychology
Statistics
PROFESSIONAL SCIENCE MASTERS:
Environmental Policy and Management
Forensic Science
DOCTOR OF PHILOSOPHY IN:
Biology
Biochemistry
Chemistry
Earth Systems Science
Physics
Psychology
SCHOOL OF EDUCATION AND HUMAN
DEVELOPMENT
http://education.fiu.edu/
MASTER OF ARTS IN TEACHING:
Art Education (K-12)
MASTER OF SCIENCE IN:
Adult Education and Human Resource Development
Art Education
Counselor Education
Curriculum and Instruction
Early Childhood Education
Educational Leadership
Foreign Language Education
Higher Education Administration
International and Intercultural Education
Physical Education
Reading Education (K-12)
Recreation and Sport Management
Special Education
Urban Education
EDUCATIONAL SPECIALIST IN:
Curriculum and Instruction
Educational Leadership
School Psychology
DOCTOR OF EDUCATION IN:
Adult Education and Human Resource Development
Curriculum and Instruction
Educational Administration and Supervision
Exceptional Student Education
Higher Education

## DOCTOR OF PHILOSOPHY IN CURRICULUM AND INSTRUCTION

COLLEGE OF BUSINESS
http://business.fiu.edu
EXECUTIVE MASTER OF BUSINESS ADMINISTRATION
INTERNATIONAL MASTER OF BUSINESS ADMINISTRATION
MASTER OF ACCOUNTING
MASTER OF BUSINESS ADMINISTRATION
MASTER OF INTERNATIONAL BUSINESS
MASTER OF SCIENCE IN:
Finance
Health Informatics and Analytics
Human Resource Management
Information Systems
International Real Estate
Marketing
DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION

COLLEGE OF COMMUNICATION, ARCHITECTURE + THE ARTS
http://carta.fiu.edul
MASTER OF ARCHITECTURE
MASTER OF ARTS IN:
Architecture
Interior Architecture
Landscape Architecture
MASTER OF FINE ARTS IN VISUAL ARTS
MASTER OF INTERIOR ARCHITECTURE
MASTER OF LANDSCAPE ARCHITECTURE
MASTER OF MUSIC
MASTER OF SCIENCE IN MUSIC EDUCATION

## COLLEGE OF ENGINEERING AND

COMPUTING
http://www.cec.fiu.edul
MASTER OF SCIENCE IN:
Biomedical Engineering
Civil Engineering
Computer Engineering
Computer Science
Construction Management
Cybersecurity
Electrical Engineering
Engineering Management
Environmental Engineering
Information Technology
Logistics Engineering
Materials Science and Engineering
Mechanical Engineering
Telecommunications and Networking
DOCTOR OF PHILOSOPHY IN:
Biomedical Engineering
Civil Engineering
Computer Science
Electrical and Computer Engineering
Materials Science and Engineering
Mechanical Engineering

COLLEGE OF LAW
http://law.fiu.edu
MASTER OF LAW (LL.M.)
JURIS DOCTOR
JURIS MASTER OF LAW
HERBERT WERTHEIM COLLEGE OF MEDICINE
http://medicine.fiu.edu
MASTER IN PHYSICIAN ASSISTANT STUDIES
DOCTOR OF MEDICINE
DOCTOR OF PHILOSOPHY IN:
Biomedical Sciences
NICOLE WERTHEIM COLLEGE OF NURSING AND HEALTH SCIENCES
http://cnhs.fiu.edu
MASTER OF HEALTH SERVICES ADMINISTRATION
MASTER OF SCIENCE IN:
Athletic Training
Nursing
Occupational Therapy
Speech-Language Pathology
DOCTOR OF NURSING PRACTICE
DOCTOR OF PHILOSOPHY IN NURSING
DOCTOR OF PHYSICAL THERAPY
ROBERT STEMPEL COLLEGE OF PUBLIC
HEALTH AND SOCIAL WORK
http://stempel.fiu.edu
MASTER OF PUBLIC HEALTH
MASTER OF SCIENCE IN DIETETICS AND NUTRITION
MASTER OF SOCIAL WORK
DOCTOR OF PHILOSOPHY IN:
Dietetics and Nutrition
Public Health
Social Welfare
STEVEN J. GREEN SCHOOL OF INTERNATIONAL AND PUBLIC AFFAIRS
http:/Isipa.fiu.edu
MASTER OF ARTS IN:
African and African Diaspora Studies
Asian Studies
Disaster Management
Economics
Global and Sociocultural Studies
History
International Studies
Latin American and Caribbean Studies
Political Science
Religious Studies
Spanish
MASTER OF PUBLIC ADMINISTRATION
MASTER OF SCIENCE IN:
Criminal Justice
DOCTOR OF PHILOSOPHY IN:
Economics
Global and Sociocultural Studies
History
International Crime and Justice
International Relations

Political Science
Public Affairs
Spanish

## BISCAYNE BAY CAMPUS PROGRAMS

http://bbc.fiu.edul

## COLLEGE OF ARTS, SCIENCES AND EDUCATION <br> http://seas.fiu.edu <br> MASTER OF FINE ARTS IN CREATIVE WRITING MASTER OF ARTS IN: English

COLLEGE OF COMMUNICATION, ARCHITECTURE + THE ARTS
SCHOOL OF COMMUNICATION AND JOURNALISM
https://sjmc.fiu.edul
MASTER OF SCIENCE IN MASS COMMUNICATION
ACADEMIC CERTIFICATES IN:
Global Strategic Communications
Integrated Marketing Communication: Latin American Certification
Spanish-Language Journalism
Student Media Advising

## CHAPLIN SCHOOL OF HOSPITALITY AND <br> TOURISM MANAGEMENT <br> http://hospitality.fiu.edu/ <br> MASTER OF SCIENCE IN: <br> Hospitality Management

## FIU at I-75 PROGRAMS

http://broward.fiu.edu

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COLLEGE OF ARTS, SCIENCES AND EDUCATION
http:/Icas.fiu.edu
PROFESSIONAL SCIENCE MASTER IN
ENVIRONMENTAL POLICY AND MANAGEMENT
SCHOOL OF EDUCATION AND HUMAN
DEVELOPMENT
http://education.fiu.edu/
MASTER OF SCIENCE IN:
Adult Education and Human Resource Development
Reading Education (K-12)
```


## COLLEGE OF BUSINESS

http://business.fiu.edul
HEALTHCARE MASTER OF BUSINESS
ADMINISTRATION
MASTER OF SCIENCE IN:
Finance
Health Informatics and Analytics
Information Systems

## PROFESSIONAL MASTER OF BUSINESS ADMINISTRATION

## COLLEGE OF ENGINEERING AND COMPUTING <br> http://cec.fiu.edu <br> PROFESSIONAL MASTER OF SCIENCE IN: <br> Construction Management <br> Engineering Management

## STEVEN J. GREEN SCHOOL OF INTERNATIONAL AND PUBLIC AFFAIRS

http://sipa.fiu.edu
MASTER OF PUBLIC ADMINISTRATION
ACADEMIC CERTICATES IN:
Community Development
Homeland Security and Emergency Management

FIU DOWNTOWN ON BRICKELL PROGRAMS

## COLLEGE OF BUSINESS

http://business.fiu.edu/
EXECUTIVE MBA (EMBA)
PROFESSIONAL MASTER OF BUSINESS
ADMINISTRATION (FLEX)
HEALTHCARE MBA (HMBA)
MASTER OF ACCOUNTING (MACC)
MASTER OF SCIENCE IN:
Finance
International Real Estate
PROFESSIONAL MBA (PMBA)

## STEVEN J. GREEN SCHOOL OF INTERNATIONAL AND PUBLIC AFFAIRS

http:/Isipa.fiu.edu
MASTER OF PUBLIC ADMINISTRATION
MASTER OF ARTS IN GLOBAL AFFAIRS

## GRADUATE CERTIFICATE

PROGRAMS

Certificates are offered to students with bachelor's degrees who wish to obtain advanced education in a particular area of concentration, but do not necessarily want to commit to a master's degree. Successful completion of a Graduate Certificate is entered on the student's transcript. Some or all of the courses taken in a Graduate Certificate can often be applied to a master's degree. In addition to the Graduate Certificates offered through the University Graduate School, non-credit Professional Certificates are offered through University College.

## COLLEGE OF ARTS, SCIENCES AND EDUCATION <br> http://cas.fiu.edu <br> GRADUATE CERTIFICATE IN: <br> Biodiversity Conservation and Management <br> Cognitive Neuroscience <br> Environmental Studies <br> Geographic Information Systems <br> Marriage and Family Therapy <br> Mathematics <br> Water, Environment and Development Studies <br> Women's and Gender Studies

SCHOOL OF EDUCATION AND HUMAN
DEVELOPMENT
http://education.fiu.edul
PROFESSIONAL GRADUATE CERTIFICATE IN:
Spanish/English Bilingual Education
GRADUATE CERTIFICATE IN:
Academic Advising
Educational Leadership
Grades K-5 Mathematics Teaching
Grades 6-8 Mathematics Teaching
Grades K-5 Science Teaching
Grades 6-8 Science Teaching
Teacher Leadership
TESOL (Teaching English to Speakers of Other Languages)

## COLLEGE OF BUSINESS

http:/lbusiness.fiu.edul
GRADUATE CERTIFICATE IN:
Healthcare Management

## COLLEGE OF COMMUNICATION,

 ARCHITECTURE + THE ARTShttp://carta.fiu.edul
GRADUATE CERTIFICATE IN:
Cruise Ship and Super Yacht Design
Furniture Design
History, Theory and Criticism of Architecture
Landscape Architecture
Museum Studies

## SCHOOL OF COMMUNICATION AND JOURNALISM <br> http://sjimc.fiu.edul <br> GRADUATE CERTIFICATE IN: <br> Global Strategic Communications <br> Integrated Marketing Communications: Latin American Certification <br> Spanish-Language Journalism <br> Student Media Advising

## COLLEGE OF ENGINEERING AND

 COMPUTINGhttp://www.cec.fiu.edu
GRADUATE CERTIFICATE IN:
Construction Engineering and Management Electric Power Engineering and Management Engineering Management
Enterprise Systems
Information Technology in Civil Engineering

Mechanical Engineering
COLLEGE OF LAW
http://law.fiu.edul
GRADUATE CERTIFICATE IN:
Environmental and Natural Resources Law Intellectual Property

## HERBERT WERTHEIM COLLEGE OF

 MEDICINEhttp://medicine.fiu.edu
GRADUATE CERTIFICATE IN:
Core Clinical Clerkship
Molecular and Biomedical Sciences
NICOLE WERTHEIM COLLEGE OF NURSING AND HEALTH SCIENCES
http:/lcnhs.fiu.edu
PROFESSIONAL CERTIFICATE IN:
Family-Focused Health Care Across Cultures
GRADUATE CERTIFICATE IN:
Communication Sciences and Disorders
Culturally Competent Nursing Education
Gerontology
Nurse Executive
Occupation-Based Injuries
Post Master's Certificate in Nursing Education
Post-Master's Nurse Practitioner
ROBERT STEMPEL COLLEGE OF PUBLIC
HEALTH AND SOCIAL WORK
http:/Istempel.fiu.edu
GRADUATE CERTIFICATE IN:
Addictions
Child Welfare
Environmental Health
Epidemiology
Health Economics
Health Policy
Health Promotion
Management in Social Work
Maternal and Child Health
Pediatric Nutrition
Post-MSW Certificate in Clinical Practice
Public Health Foundations
Social Work Practice with the Elderly

## STEVEN J. GREEN SCHOOL OF

INTERNATIONAL AND PUBLIC AFFAIRS
http://sipa.fiu.edu
GRADUATE CERTIFICATE IN:
African and African Diaspora Studies
Afro-Latin American Studies
Asian Globalization
Asian Studies
Community Development
Conflict Resolution and Consensus Building
European and Eurasian Studies
Homeland Security and Emergency Management
Human Resource Policy and Management

Integrated Marketing Communications: Latin American Certification
Iberian Studies
International and Comparative Public Administration
Japanese Studies
Latin American and Caribbean Studies
Middle East and Central Asian Studies
National Security Studies
Public Finance, Procurement and Contract Management
Public Management
Religious Studies
Sustainable Communities
Transnational and Regional Studies

## UNIVERSITY GRADUATE SCHOOL

| Lakshmi Reddi | Dean |
| :--- | ---: |
| Kevin O'Shea | Senior Associate Dean |
| Sonja Montas-Hunter | Associate Dean |
| Louis Farnsworth | Director |

The University Graduate School has oversight of post baccalaureate programs in all colleges and schools with the exception of the programs in the College of Law and the Doctor of Medicine program in the College of Medicine. Working with the Graduate Faculty and the Graduate Council of the Faculty Senate, the University Graduate School develops and implements the policies and procedures that guide graduate education at the University.
Graduate Admissions is usually the first point of contact entering graduate students have with the University Graduate School. Students are admitted to the University Graduate School upon recommendation of the graduate program to which they have applied. The University Graduate School oversees the university-wide fellowship programs: Presidential Fellowships, McNair Fellowships, Doctoral Evidence Acquisition, and Dissertation Fellowships. The University Graduate School also works with the graduate programs to provide support to Graduate Assistants. The stipend for Graduate Assistants is provided by the graduate program, within guidelines set by the University Graduate School, and the accompanying tuition waivers are provided by the University Graduate School.

Students completing thesis master's degrees and all students in doctoral programs have more contact with the University Graduate School as they obtain University Graduate School approval for their thesis or dissertation committee, thesis or dissertation proposal, thesis or dissertation defense announcement, and final thesis or dissertation.
The University Graduate School works with the Graduate Senators and Graduate and Professional Student Committee to help enrich the total graduate student experience: academically, socially, and culturally. Through its Professional Development Program, the University Graduate School delivers professional and careerdevelopment training to graduate students. The University Graduate School serves as an ombudsman for graduate students.

All graduate students are encouraged to visit the University Graduate School (PC 230), or call (305) 3482455, or log on to the web site, http:/lgradschool.fiu.edu to find answers to questions regarding any phase of their graduate education.


## UNIVERSITY LIBRARIES

Uniquely positioned at the intersection of information, technology, and innovation, the University Libraries engage with local and global partners to foster student-centered learning and to support internationally recognized research. The Libraries are wonderful gathering places to pursue scholarly research, to learn about and use information technology, to write, to study, and to draw on a rich collection of print and electronic resources. Here you will find just about everything you need in order to collaborate and create new knowledge for the 21st century: over 2 million volumes, tens of thousands of movies and songs, maps, manuscripts, rare books, electronic books, microfilms, and some 400 online databases containing millions of articles from tens of thousands of online journals, newspapers, government reports, and more. You can access many of these resources right from home by tapping into our online books, streaming videos, journals, newspapers, historical documents, photographs, and other materials.

To help you with your research needs, our librarians will gladly assist you in person, by phone, by email, and by live chat and by SMS text, in collaboration with subject specialists and will work with you one-on-one showing you how to navigate the resources, assist with search strategies, and provide research consultation on in-depth projects. Group instruction is provided for classes by request and in consultation with faculty; and in open workshops on focused topics like Citation and Bibliography Management. The Libraries also offer wireless internet access, mobile devices, laptop checkout, late-night hours, high quality document scanning to email, study rooms, color photocopying and printing, group- and quiet-study- spaces, collaborativelearning areas, disability access, graduate-research carrels, and cafés. Have your computing questions answered at the University Technology Services desk and consult with skilled tutors at the Center for Excellence in Writing. The Libraries also house world-renowned digital collections including the Digital Library of the Caribbean, the Everglades Digital Library; state-of-the-art Geographic Information Systems (GIS) labs; the Latin American and Caribbean Center; and Special Collections. In addition, as an FIU student you have privileges at most other libraries in South Florida and all other Florida State University System libraries.

In keeping with FIU's core value--student-centered service--the Libraries have redesigned and renovated several prime service areas as technology hubs, complete with ubiquitous wireless computing, small-group presentation rooms, open area collaboration zones, flat-screen technology, HDTV media viewing and listening rooms, flexible modular furniture, and many other features designed to accommodate the way you collaborate, study, and use information throughout your university career and beyond.

Visit our locations: the Green Library at Modesto A. Maidique Campus, the Hubert Library on the Biscayne Bay Campus, the Engineering Library Service Center, and virtually at http://library.fiu.edu.

## UNIVERSITY MUSEUMS

## THE PATRICIA AND PHILLIP FROST ART MUSEUM

The Patricia \& Phillip Frost Art Museum on the Modesto A. Maidique Campus has served as an arts resource for the university and surrounding communities in South Florida for over 35 years. The Frost Art Museum enriches and educates diverse audiences through the language of art with its collections of a broad range of over 6,000 works of art from around the world and exhibitions and public programs which enhance the collections. The collection includes a strong representation of paintings by important American artists including Hans Hofmann, William Merritt Chase and Roy Lichtenstein; American printmaking from the 1960s and 70s; a growing number of artworks by contemporary Caribbean and Latin American artists. The non-Western collections include Pre-Columbian objects, Japanese netsukes and prints, and Benin bronzes and other African pieces. In addition, through the Betty Laird Perry Emerging Artist Awards, works by graduating art students at FIU are collected. An important part of the Frost collection is the Sculpture Park installed throughout the Maidique Campus.

The Frost was founded in 1977 as a gallery to introduce FIU students to original works of art. As interest grew, it expanded to an active display space in an administrative building in the heart of campus. The Museum's exhibition program, along with associated public programs, drew audiences and acclaim from all of South Florida. In 2008, after 10 years of planning, it moved to its own dedicated, world-class museum building. The Frost Art Museum offers a robust series of changing exhibitions to the public throughout the year. Since its opening, the Museum has organized exhibitions of Modern Masters from the Smithsonian Institution; Taiwan Art; The Missing Peace: A Tribute to the Dalai Lama; Volf Roitman; Modernism from Venezuela; a Baroque Selection from Dutch and Flemish Masters; The Figure, Past and Present - a Permanent Collection exhibition, and many others. Other, smaller changing galleries allow for the display of the Museum's permanent collections, collaborative exhibitions with The Wolfsonian-FIU; video installations and site-specific works. Student and faculty exhibitions are an important component of the Museum's academic function. They present the work of student and faculty artists and alumni, many of whom have gone on to receive state and national recognition, including National Endowment for the Arts, MacArthur Foundation, Cintas Award, Guggenheim Fellowship Award and Florida Visual Artist grants and fellowships.

The Frost Art Museum presents a significant series of public programs in conjunction with the major exhibitions it borrows and organizes each year. The Steven \& Dorothea Green Critics' Lecture Series brings art world luminaries and renowned artists, critics, curators, designers and scholars to South Florida's diverse audiences. Other on-going programs provide visitors the chance to engage with the contemporary and confront the controversial with talks, films, live music and art.

The Museum's varied educational programs nurture and increase each participant's knowledge of art for groups of all ages and backgrounds, including the culturally diverse FIU community and residents of, and
visitors to, South Florida. More than 12,000 students from Miami-Dade County Public Schools participate in tours and hands-on activities at the Museum annually. The Museum also offers guided tours of the current exhibition and the Sculpture Park. Another aspect of the Museum's education programs is the Graduate Certificate in Museum Studies, offered in conjunction with the Department of Art \& Art History. This program prepares individuals for employment in museums, historic preservation, and collection management. Students in the program curate an exhibit every spring from the Museum's permanent collection.

Please visit the Museum's website at http://thefrost.fiu.edu or call (305) 348-2890.

## THE WOLFSONIAN-FIU

Located in the heart of Miami Beach's Art Deco District, The Wolfsonian-FIU is a museum and research center that uses objects to illustrate the persuasive power of art and design, to explore what it means to be modern, and to tell the story of social, political, and technological changes that have transformed our world. It encourages people to see the world in new ways, and to learn from the past as they shape the present and influence the future. The Wolfsonian achieves its mission through exhibitions, publications, educational programs, and individual scholarship.

The Wolfsonian became part of FIU in July 1997 when its founder, Mitchell Wolfson Jr., donated his extraordinary collection, as well as the museum building and an off-site storage annex, to the University. The core of The Wolfsonian's holdings consists of decorative arts, fine arts, propaganda, architectural materials, and industrial and graphic design from the period 1850s through the 1950s. The United States, Great Britain, Germany, Italy, and the Netherlands are the countries most extensively represented. There are also smaller but significant collections of materials from a number of other countries, including Austria, Czechoslovakia, France, Hungary, Japan, and the former Soviet Union. The collection includes works on paper, furniture, paintings, sculpture, glass, textiles, ceramics, lighting and other appliances, and many other kinds of objects, as well as a rare books library with more than 120,000 items.

In addition to its permanent collection galleries, The Wolfsonian presents temporary exhibitions that address broad themes of the nineteenth and twentieth centuries, such as nationalism, political persuasion, industrialization, architecture and urbanism, consumerism and advertising, transportation, and world's fairs. Although drawing primarily on its own holdings, The Wolfsonian also features exhibitions and objects on loan from other collections.

Through its public programs, The Wolfsonian offers a range of lectures, films, symposia, tours, and workshops geared to visitors of all ages. It has paired with MiamiDade County Public Schools to develop activities and interpretive materials for students and teachers in the arts and social sciences. To inquire about an exhibition (present, past, upcoming), program, or the general calendar, please visit http://www.wolfsonian.org or call (305) 531-1001.

The Wolfsonian offers important resources to the FIU community. The museum hosts classes in its classrooms, offers tours of its galleries to student groups and courses,
and makes the collection of its rare books library (305-535-2641) available to students and faculty members for research projects. Students interested in learning more about these resources should contact the museum's assistant director for research and academic initiates at (305) 535-2613 or jon@thewolf.fiu.edu.

## THE JEWISH MUSEUM OF FLORIDA-FIU

The Jewish Museum of Florida-FIU (JMOF-FIU) is the only museum dedicated to telling the story of more than 250 years of Florida Jewish history, arts and culture, with a growing collection of more than 100,000 items. It is located in the trendy SoFi area of South Beach at 301 Washington Avenue. The Museum is housed in two restored historic buildings that were once synagogues for Miami Beach's first Jewish congregation. The original synagogue was built in 1929, and the second, built in 1936, was designed by Art Deco architect Henry Hohauser and features 80 stained-glass windows, a copper dome, and a marble bimah. The two buildings are joined together by Bessie's Bistro, named after former Miss America, Bess Myerson.

While reflective of the Jewish experience in Florida, JMOF-FIU creates understanding of the shared immigrant experience in our multicultural society. The Museum's core exhibition, MOSAIC: Jewish Life in Florida, 1763 to Present began as a statewide grassroots collecting effort, which included gathering photographs, artifacts and oral histories from descendants of pioneer families, as well as the state's more recent arrivals. Mosaic traveled to 13 Florida cities from 1990-1994 and generated so much interest that by 1995, it evolved into the Jewish Museum of Florida.

JMOF-FIU became part of the FIU in 2012, creating a historic partnership that leverages the resources of the Museum and FIU to ignite a new era of interdisciplinary education and research. Using the lens of the evolving immigration experience of Jews in Florida, JMOF-FIU serves as a forum to promote tolerance, further global understanding and create connections to Jewish culture, history, arts and contemporary civic life for diverse audiences. Accredited by the American Association of Museums, JMOF has achieved a standard of excellence in its methodology for research, collecting, conservation, archiving, storing and interpreting its holdings.

The Museum's extensive collection focuses on the people who have shaped and continue to influence the development of our state, drawing crucial links between their contributions and the social, political, economic, cultural and religious aspects of Jewish life in Florida and the relationship of Jews to the dominant non-Jewish population. As such, the collection offers a wealth of opportunity for students and faculty for scholarly research across subject matters, from the arts and sciences to gender and religious studies, with artifacts, ephemera, documents, photographs and oral histories from every region of the state.

JMOF-FIU presents a vibrant schedule of thoughtprovoking history and art exhibits that change periodically, paired with a dynamic array of programs including: lectures, concerts, workshops, family activities, walking tours and presentations on topics of Jewish studies worldwide, with international scholars and presenters and local movers and shakers. Many of the programs are in collaboration with FIU departments including the Green

School of International and Public Affairs, Global Jewish Studies and School of Music as well as various cultural and community organizations.

JMOF-FIU is also an extended classroom for thousands of Miami-Dade County Public School students, inspiring them to explore their own cultural heritage and traditions and those of all ethnic groups in our multicultural society.

For more information, please visit http:I/jmof.fiu.edul or call (305) 672-5044.

## Academic Planning and Accountability-Continuing Education (APA-CE)

FIU's Academic Planning and Accountability-Continuing Education (APA-CE) consists of two major program areas: Credit Programs and Non-credit Programs. Programs offered through APA-CE extend the instructional and academic resources of the university by using innovative approaches including distance education, flexible class scheduling, customized training and off-campus academic programs. Local, state, national, and international communities are served with cost-effective, high quality and distinctive programs and services.

## ACADEMIC CREDIT PROGRAMS

Academic Planning and Accountability-Continuing Education oversees courses and programs for academic credit offered by schools and colleges that are delivered online, off-campus, on weekends, or in cohorts.

Academic Planning and Accountability-Continuing Education also works with public agencies or professional organizations that wish to contract with the University to provide credit courses and degree programs at the work site in order to meet employee training needs.

For more information on Continuing Education Credit Programs please visit http://continue.fiu.edu.

## NON-CREDIT PROGRAMS

Academic Planning and Accountability-Continuing Education provides a variety of non-credit programs and certificates through its Continuing and Professional Education programs. These innovative, professional and personal enrichment programs help diverse audiences of all ages to grow professionally, change careers, and/or enhance skills. Current programs include professional development and coaching. For more information please visit http://continue.fiu.edu.

## Academic Planning and Accountability-Dual Enrollment (APA-DE)

## DUAL ENROLLMENT

Dual enrollment is a successful acceleration mechanism that allows high school students to pursue an advanced curriculum related to their post-secondary academic interest. Successful completion of dual enrollment courses allows eligible high school students to simultaneously earn high school core or elective credit and post-secondary credit toward an associate degree or a baccalaureate degree.

For more information please visit http://undergrad.fiu.edu/de. For policies and admission requirements, and for participating schools please visit http://universitycollege.fiu.edu/programs/highschool program.

## FIU ONLINE

FIU Online offers online academic credit courses and degree programs for traditional students, professionals, and adult learners. The undergraduate bachelor's programs include:

- Business Administration: Finance
- Business Administration: Human Resource Management
- Business Administration: International Business
- Business Administration: Management
- Business Administration: Marketing
- Communication Arts: Organizational Communication Studies Track
- Criminal Justice
- Early Childhood Education: Early Childhood Development
- Health Services Administration
- Hospitality Management
- Interdisciplinary Studies
- Nursing: Registered Nurse to BSN Program
- Psychology
- Public Administration
- Recreation and Sports Management: Recreation and Sport Management
- Recreation and Sports Management: Recreational Therapy
- Religious Studies
- Sociology/Anthropology: Sociology
- Sustainability and the Environment
- Women's and Gender Studies

Our online graduate degree programs are very competitive and allow students to choose from a variety of master's degrees in:

- Business Administration (MBA)
- Business Administration: Healthcare (Healthcare MBA)
- Computer Engineering: Network Security Concentration
- Construction Management
- Criminal Justice
- Curriculum and Instruction: Curriculum Development Track
- Engineering Management: Systems Engineering
- Forensic Science
- Health Services Administration (Hybrid)
- Hospitality Management
- Hospitality Management: Executive Track
- Human Resource Management
- International Business
- International Real Estate
- Mass Communication: Global Strategic

Communication

- Music Education
- Public Administration
- Special Education - Autism Endorsement

At the doctoral level, FIU Online offers the Doctor of Nursing Practice (DNP).

FIU Online also offers many undergraduate and graduate certificates and hundreds of non-credit online courses and programs.

For more information please visit http://www.fiuonline.com.

## GRADUATE ADMISSIONS

Florida International University encourages and accepts applications from qualified applicants without regard to sex, physical handicap, national origin, cultural, racial, religious or ethnic background or association.

## MINIMUM REQUIREMENTS FOR ADMISSION INTO GRADUATE PROGRAMS

Applicants to a graduate program of the University must meet the minimum standards set forth by the University and the program. Applicants must check the individual program requirements before submitting their applications.

A student seeking admission into a graduate program offered by the University must have a bachelor's degree from a regionally accredited institution or, in the case of foreign students, from a well established institution of higher learning that is authorized to grant degrees by appropriate authorities in that country. The applicant must submit official transcripts, test scores and other supporting documents to Florida International University, Graduate Admissions Office, P.O. Box 659004, Miami, FL. 332659004. All credentials and documents submitted to the Graduate Admissions Office become the property of Florida International University. Originals will not be returned to the applicant or forwarded to another institution.

In the absence of specific program admission requirements, the applicant should have a minimum of a " B " average in the last 60 credits of upper level work, or a graduate degree from an accredited institution.

Degree programs individually determine admission requirements with respect to requiring nationally-normed examinations and the required scores.

Admissions at the graduate level are competitive and meeting minimum program requirements does not guarantee admission.

An applicant who fails to meet this criteria may gain admission via an exception to the admissions standards which must be initiated by the specific academic department.

## APPLICATION PROCESS

Students interested in applying for admission into a graduate degree program or a graduate certificate must submit their applications online by visiting FIU's website at http://gradschool.fiu.edu for applications and instructions. A $\$ 30.00$ non-refundable fee (U.S. Dollars) will be charged for each online application.

## INACTIVATION PROCESS

Applications are valid for term of application only. Applications, which have not been acted on by the Department or remain incomplete, will be cancelled by the ADD/DROP deadline date of the applicable term. Likewise, No-Shows (admitted students who do not enroll for the term of admission) will have their admission revoked. Once an application is cancelled, the students will need to submit a new application and application fee in order to reactivate their admissions file.

## READMISSION

An admitted degree-seeking student who has not enrolled in any course at the University for three (3) or more consecutive terms, including the summer term, will be required to apply for re-admission. (This policy does not apply to students on military withdrawals or approved Leave of Absence - LOA.) Students applying for readmission must meet the University and program regulations in effect at the time of application for readmission. Applications for readmission are processed the same as an application for initial admission with the exception of submitting documentation already provided as part of the previous application. However, if the applicant has completed courses in another institution of higher education since the last attendance at FIU, however, transcripts from that institution need to be submitted in addition to the application. Regarding the readmission of doctoral applicants, the academic unit must follow the Doctoral Readmissions Procedures outlined in the UGS's website.

## Application Deadlines for Domestic Students SEMESTER <br> Fall <br> Spring <br> Summer APPLICATION DEADLINE June $1^{\text {st }} /$ Ph.D. February $15^{\text {th }}$ October $1^{\text {st }}$ March $1^{\text {st }}$

If the application and supporting documents are not received by the appropriate deadline for the desired term, the applicant may need to submit a new application and fee for the next semester, unless a request to defer term of entry is submitted for consideration to the Graduate Admissions Office.

Note: Individual programs may have deadlines earlier than the University deadlines. Applicants should check with the program to which they are seeking admission to determine the application deadline.

## CONDITIONAL TWO TERM ADMISSION

A masters' level graduate program may recommend for conditional admission applicants whose undergraduate GPA in their upper-level coursework is below 3.00 or whose standardized test score is below the program requirements. Students who have already taken 9 graduate credits at FIU are not eligible for ten percent Masters' level conditional admission. Any graduate credit (fewer than 9) already taken will be counted towards satisfying the conditional admission. Applicants to Doctoral or Ph.D. level programs are not eligible.

Students admitted under the ten percent conditional admission are required to: achieve a GPA of 3.00 or higher for the first 9 graduate-level credits and complete these 9 credits within first three consecutive semesters, beginning with the term of admission.

## TRANSFER OF GRADUATE CREDIT FROM OTHER INSTITUTIONS

Doctoral programs may accept up to $20 \%$ of the required total coursework, subject to approval of the Program Director, of graduate credit earned from another institution beyond a bachelor's degree. An exception is made for courses contained within an earned master's or doctoral
degree. For such courses, the maximum is one fewer than half of the total credits required for the program.

Master's degree programs may accept up to 20\% of the required total coursework, subject to approval of the Program Director, of graduate credit earned from another institution beyond a bachelor's degree.

Education Specialist students are treated in the same manner as Master's Degree students.

Acceptance of transfer credits for a course is dependent upon the following provisions:
a. the student received a grade of 3.0 or better on a 4.0 scale
b. the course was taken at an accredited institution
c. the course was relevant, as judged by the admissions committee of the department or program, to the graduate program in which the student is accepted
d. the course is listed on an official transcript received by the Graduate Admissions Office
e. the course will not be older than six years at the time of receipt of a master's degree or nine years at the time of receipt of a doctoral degree (does not apply to credits earned as part of a completed graduate degree program)
Note: Students are advised to verify this information with the appropriate Graduate Program Director.

## ACADEMIC RECORDS

Official transcripts must be sent directly from each previous institution to the Graduate Admissions Office. Documents in a language other than English must be translated by an official translation agency. Notarized translations are not acceptable.

## ADMISSION OF INTERNATIONAL STUDENTS

Foreign graduate applicants are accepted subject to space and fiscal limitations. In addition to the general University admissions requirements, foreign applicants must be academically eligible for graduate level study in their own country. Applicants from non-English speaking countries must demonstrate proficiency in the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version of the Test of English as a Foreign Language), or 6.5 overall on the International English Language Testing System (IELTS), or 53 on the Pearson Test of English (PTE) Academic. However, some departments may require higher scores. Applicants who hold an undergraduate or graduate degree from an institution within the United States or other English speaking countries are not required to submit English proficiency exam scores. The applicant must check the individual departmental requirements.

International student applicants must meet all the admission requirements of the University as described in the previous sections and also comply with the following:
Application Deadlines for International Students Due to the additional processing time needed, International Students should submit their applications and supporting documents much earlier than students who are U.S. Citizens or Residents. It is recommended that all international students comply with the following application deadlines:

SEMESTER
Fall
Spring
Summer

APPLICATION DEADLINE
May $1^{\text {st/ }} / \mathrm{PhD}$ February $15^{\text {th }}$
September $1^{\text {st }}$
February $1^{\text {st }}$

Note: Individual programs may have deadlines earlier than the University deadlines. Applicants should check with the program to which they are seeking admission to determine the application deadline.

## Tuition for International Students

An international student is considered a non-resident and is assessed non-resident fees.

## ANNUAL ESTIMATE ${ }^{1}$ OF COSTS FOR NEW ${ }^{2}$ INTERNATIONAL GRADUATE STUDENTS

| Single Student (18 semester hours) |  |
| :--- | ---: |
| Tuition and Fees $^{3}$ | $\$ 18,429$ |
| Living Expenses $^{4}$ | $\$ 15,108$ |
| Books and Supplies | $\$ 1,852$ |
| Medical Insurance |  |
| Total | $\$ 2,403$ |

${ }^{1}$ Based on 2015-2016 costs.
${ }^{2}$ Admitted for Fall 2006 or thereafter.
${ }^{3}$ Tuition and fees are subject to change. Fees include: Per credit fees: $\$ 72.61$ per credit. Per Semester fees: Student Health Fee (\$93.69 per semester), the Athletics Fee (\$10.00 per semester) and Transportation Access Fee (\$90.70). Amounts shown reflect 9 graduate credit hours during Fall and Spring terms only.
${ }^{4}$ Living Expenses are estimated at $\$ 1,678.00$ per month to cover room, board, transportation, and personal expenses. This cost is for twelve months.
${ }^{5}$ All international students are required to carry medical insurance. This cost is for twelve months.

## Declaration and Certification of Finances

The Declaration and Certification of Finances must be completed and returned to the Graduate Admissions Office. A Certificate of Eligibility (Form I-20A) will be issued once the applicant has been found admissible to the University.

The University is required by immigration authorities to check carefully the financial resources of each applicant prior to issuing the Form I-20A. Therefore, it is important that applicants are aware of the cost of attending the University and have the necessary support funds for the period of enrollment. Applicants should refer to the Annual Estimate of Cost Chart.

The total funds available for the student for the first or second academic year, or both, must equal the total estimate of institutional costs and living expenses. All items in the Declaration and Certification of Finances must be accurately answered to avoid unnecessary delay in processing. This document must be received by the Graduate Admissions Office two months prior to the anticipated entry date.

A married student should plan on an additional \$6,000 in costs to cover the living expenses of a spouse.

A couple with children should anticipate further yearly additional costs of no less than $\$ 4,000$ for each child.

## MEDICAL INSURANCE

The State of Florida requires that all international students maintain health insurance coverage to help defray the costs in case of catastrophic medical emergency. The
policy must provide specific levels of coverage which have been established to ensure that the policy is adequate to provide for costs at U.S. hospitals, usually much higher than costs in many other parts of the world. In addition, a policy must have a claims agent in the United States who may be contacted by medical providers and who facilitates prompt payment of claims. The University has approved a plan which meets the state requirements and which meets the needs of most students; however, a student may select alternate coverage provided it meets the state requirements for minimal coverage. A copy of these requirements is available from University Health Services. Students are advised not to purchase insurance policies prior to arrival without verifying that the policies meet FIU/SUS requirements. Compliance with the insurance regulation is required prior to registration.

## FULL-TIME ENROLLMENT

Non-immigrant alien students in F-1 visa status are required by United States immigration regulations to be enrolled full-time, except for the Summer Terms, and to make satisfactory progress toward the degree program in each term; otherwise the student's immigration status will be jeopardized. Full-time graduate enrollment is defined as a minimum of nine semester hours during Fall and Spring terms and six credits during Summer terms. Doctoral students who have reached candidacy are considered active when registered for three credits per term. Master's students who have completed all requirements except for the thesis, and have an approved thesis on file in the University Graduate School, are considered active in program when registered for one credit per term.

It is the student's responsibility to comply with all non immigrant alien requirements as stated under the United States laws Section 101(a)(15)(f)(i) of the Immigration and Nationality Act and the provisions of the USA PATRIOT Act.

## EMPLOYMENT

The legal regulations governing F-1 student employment are complex, and advisors are available in the Office of International Student and Scholar Services to explain these regulations. In general, however, employment is available only to students who maintain their legal status in the U.S. and is regulated under three categories:

1) On-campus employment: F-1 students may be employed on the FIU campuses for a maximum of 20 hours per week during fall and spring semesters while school is in session, and full time during holidays, vacations, and summer. On-campus employment includes teaching and research assistantships for graduate students and hourly part time work. Students must contact individual campus departments to inquire about employment opportunities.
2) Off-campus employment: F-1 students may request off-campus employment under very limited conditions and only after maintaining F-1 status for at least one full academic year. Off-campus employment opportunities are not readily available, and students should not rely on off campus employment as a source of income to finance their studies.
3) Practical training: F-1 students may request optional practical training employment to accept jobs related to their studies. Students usually pursue practical training employment after completion of degree requirements, although in some cases practical training may be authorized prior to completion of studies. Since practical training employment is limited to one year of full-time employment for each degree level, students cannot rely on it as a source of income to finance their studies.
Note: An international student will not be granted admission to the University until all academic and non academic requirements have been met. Under no circumstances should a student come to the University without having received the official Letter of Admission and the SEVIS Form I-20.

All correspondence and document submissions should be directed to: Graduate Admissions Office, Florida International University, P.O. Box 659004, Miami, Florida 33265-9004.

## CREDIT FOR NON-COLLEGE LEARNING

Graduate credit will not be awarded for life experiences.
In cases where a student's learning experience would appear to have been sufficient to develop the understanding and skills associated with a course that would otherwise be included in his or her graduate program of study, he or she will be allowed to register for Independent Study credits and demonstrate competency through development of an appropriate project acceptable to the faculty member who represents that specific area of specialization.

Not more than 10 semester hours of a 30 semester hour master's degree, nor 15 semester hours of a 60 semester hour master's degree, may be so earned.

## TRAVELING SCHOLAR PROGRAM

The University participates in a traveling scholar program which enables a graduate student to take advantage of special resources, special course offerings, research opportunities, unique laboratories and library collections available on another campus but not available on his or her own campus. Further information may be obtained from the Graduate Program Director of the program in which the student is enrolled.

## TUITION AND FEES

## FEES

Registration and tuition fees are established by the Board of Trustees as required by the Florida Legislature. These fees are subject to change without notice. As of Fall 2016, the authorized fees are:

## PER CREDIT HOUR TUITION AND FEES FOR CONTINUING GRADUATE STUDENTS

|  | Florida <br> Resident <br> $\$ 436.68^{\mathrm{a}}$ | Non-Florida <br> Resident <br> $\$ 982.73^{\mathrm{b}}$ |
| :--- | :--- | :--- |
| Graduate <br> Per Semester Fees <br> Intercollegiate | $\$ 10.00$ | $\$ 10.00$ |
| Athletics <br> Student Health <br> Services <br> Transportation <br> Access | $\$ 93.69$ | $\$ 93.69$ |

${ }^{\text {a }}$ This amount includes $\$ 73.97$ per credit fees.
${ }^{\mathrm{b}}$ This amount includes $\$ 99.97$ per credit fees.
c Transportation Access is $\$ 84.58$ in the Summer term. Fall/Spring = \$90.70; including the sales tax.

## PER CREDIT HOUR TUITION AND FEES FOR NEW a

 GRADUATE STUDENTS|  | Florida <br> Resident <br> $\$ 455.64^{\mathrm{b}}$ | Non-Florida <br> Resident <br> $\$ 1,001.69^{\mathrm{c}}$ |
| :--- | :--- | :--- |
| Graduate <br> Per Semester Fees <br> Intercollegiate | $\$ 10.00$ | $\$ 10.00$ |
| Athletics | $\$ 93.69$ | $\$ 93.69$ |
| Student Health <br> Services | $\$ 90.70$ | $\$ 90.70$ |
| Transportation <br> Access |  |  |
| a |  |  |
| d Admitted for Fall 2006 or thereafter. <br> this amount includes $\$ 75.69$ per credit fees. <br> c This amount includes $\$ 101.69$ per credit fees. <br> d Transportation Access is $\$ 84.58$ in the Summer term. <br> Fall/Spring $=\$ 90.70$, including the sales tax. |  |  |

## FEE WAIVERS

Students using a fee waiver for part of the fee payment must pay their portion on or before the last day to pay fees.

State employees using the State employee fee waiver to pay their fees must register on or after the day established in the official University calendar for State employee registration. The State Employee Fee Waiver pays up to six credit hours of tuition and fees per term. Summer sessions A, B, and C are considered one term. State employees who register for more than six hours will be required to pay for the additional credit hours plus all per student related fees. A properly completed and approved waiver form must be presented at the Student Financials Office by the date published for the last day to pay fees. Fee Waivers will be processed only for those courses shown on the approved fee waiver request form presented at the time of registration. Only one fee waiver form per employee will be accepted each semester. The

State employee fee waiver will not be accepted as payment for course registrations prior to the announced date for state employee registration. State Employee Fee Waivers do not cover Thesis, Dissertation, Internships, Directed Individual Study, Non Credit Courses, Sponsored Credit Programs, Certificate Programs, Field Experience, Practicum, or courses taken for audit grades.

Senior citizens fee waivers are available to persons 60 years of age or older who meet the requirements of Florida residency as defined in this catalog. The fee waiver allows qualified individuals to attend credit classes on an audit basis. Senior citizens using the fee waiver must register during the first week of classes. Senior citizens using the fee waiver must pay the photo ID fee during their first term in attendance and once per academic year thereafter.

Florida law requires that State employee fee waivers and senior citizen fee waivers be granted on a space available basis only; therefore, individuals using these waivers must comply with the procedures outlined in the schedule of classes for each semester. Refunds will not be given for employees who have registered and paid prior to the state employee registration day and wish to use the fee waiver.

## FEE PAYMENT

Fees may be paid online through the MyFIU portal (https://my.fiu.edu) or at the Student Financials Office at Modesto A. Maidique Campus, PC 120, or at Biscayne Bay Campus ACI 140. The on-line payment system accepts credit card payments of AMEX, DISCOVER, MASTERCARD, and VISA. Note: There is a $2 \%$ nonrefundable fee for paying with credit card. Check payments may also be done through the on-line system without a fee. Night drop boxes outside the Student Financials Offices on either campus are available 24 hours a day for fee payments by check or money order through the last day to pay fees. The University is not responsible for cash left in the night drop or sent through the mail. Please take into consideration delivery and processing time when mailing your payment. The Student financials Office is not responsible for any delayed or misdirected mail by the U.S. Postal Service or Campus Mail Services. Failure to pay fees by the established deadlines will result in a late payment fee and may cause you to be dropped from all courses. See Fee Liability below.

## Payment Plan

The payment plan will allow students to pay their current term's tuition and fees in two installments. The first/initial installment of your total tuition and fees must be paid by the Last Day to Pay and the remaining balance will be due by the established installment due dates by the established deadlines. There is a $\$ 15.00$ service charge to sign up for the plan. Enrollment to the Payment Plan can be accomplished by going to the MyFIU portal (https://my.fiu.edu) and selecting "Payment Plan" in the Finances section. Installments not paid on time will be subject to the late payment fee.

## Late Registration Fee

Students who register after the established deadline for registration will be subject to $\$ 100$ late registration fee.

## Late Payment Fee

Students who pay fees after the established deadline for payments will be subject to a $\$ 100$ late payment fee. If applicable, this fee may be assessed in addition to the late registration fee described in the preceding section.

## Financial Aid Recipients

Financial aid is available to those qualifying through the Financial Aid Office. A limited number of short term loans are available to full time enrolled students who may experience problems in meeting fee payment due dates.

All financial aid recipients must pay the difference between their financial aid or fellowship awards less Federal Work Study and their final fee assessment. The student's schedule will then be automatically validated. Acceptance of a financial aid package constitutes acceptance of the above validation process.

## Fee Liability

Students are liable for all fees associated with all courses in which they are registered at the end of the drop/add period. The fee payment deadline is published in the official University calendar. If fees are not paid in full by the published dates, all courses may be cancelled.

## Reinstatement of Classes

Appeals for reinstatement of registration for classes dropped for fiscal reasons must be filed in writing on the prescribed form with the Student Financials Office by the time specified on the cancellation notice. Reinstatement will be considered for all classes on the class schedule at the end of the drop/add period. Reinstatement cannot be requested selectively for certain classes. All reinstatement activity, including fee payment, must be completed by the date on the cancellation notice. All students whose registrations have been reinstated will be assessed a late payment fee. If the late registration fee is applicable it will also be assessed.

## Application Fee

A non-refundable fee of $\$ 30$ will be charged for each online application for admission to the University; unless deferred by the academic unit. Online applications will remain active for one semester.

## Orientation Fee

A mandatory Graduate Orientation fee will be assessed to all newly admitted Graduate students. The fee will cover administrative costs, materials/publications and meal(s) associated with Graduate Orientation. New students admitted for fall 2009 and thereafter will have the $\$ 35$ fee applied to their account automatically upon registering for classes.

## CHECKS

The University will accept personal checks for amounts due to the University. These checks must be in the exact amount due only. The Student Financials Office will not accept checks above the amount due, third party checks or checks for cash. State law requires that a service fee be assessed on a check returned unpaid by the bank for any reason. Service fees are based on the amount of the unpaid check. Checks for $\$ 0.01-\$ 50.00$ are charged a $\$ 25.00$ fee; $\$ 50.01$ - $\$ 300.00$, a $\$ 30.00$ fee; $\$ 300.01$ -
$\$ 800.00$, a $\$ 40.00$ fee; and a fee of $5 \%$ of the amount of the check for all checks greater than $\$ 800.00$. Checks returned by the bank can be redeemed only by cash, cashier's checks, or money orders. A personal check will not be accepted to replace a dishonored check. If a check is returned from an on-line payment, returned check fines will also be charged as per the amounts indicated above.

Returned checks will be assigned to an agency for collection if not promptly paid. When an account has been assigned, the collection agency fee will be added to the University charges for collection at the current contract rate. Returned checks on student accounts will result in cancellation of classes and will require petition for reinstatement. See reinstatement of classes above.
The Student Financials Office will not accept a check on any student's account which has had two previous dishonored checks.

## REFUNDS

Refunds will be processed and issued to all students whose fee accounts show an overpayment after the last day to pay fees. Refunds will be issued via direct deposit. Direct deposit information can be entered on line in the Finances section (add a direct deposit link) of the MyFIU portal (https://my.fiu.edu). If direct deposit information is not provided, the refund will be issued in the form of a check and will be available for pick up. Students due a refund will not be required to submit a refund application to receive their refund, it will automatically be calculated. If there is an amount due to the university in the accounts receivable system, the refund will be held until an arrangement to pay the prior balance has been made.

Students who have completed registration and have paid all fees due and have completely withdrawn from the University prior to the end of the fourth week of classes are eligible for a refund of $25 \%$ of total fees paid.

In the following exceptional circumstances, a full refund of total fees paid will be made upon presentation of the proper documentation:

- Death of a student or immediate family member (parent, spouse, child or sibling). Death certificate required.
- Involuntary call to military service. Copy of orders required.
- Illness of student of such severity or duration to preclude completion of courses. Confirmation by a physician required.
Processing of refunds will begin after the end of the add/drop period for each semester.
Appeals for tuition refunds must be submitted in writing to the Office of the Registrar within 6 months after the end of the term for which the refund is requested. There are no exceptions to this policy. Refunds for financial aid recipients will be determined based on the "Return of Title IV Policy". Please refer to "the award terms and condition booklet" for specific details.


## PAST DUE ACCOUNTS

Delinquent accounts are sufficient cause to prohibit registration, graduation, release of transcripts, or release of diplomas.

The University reserves the right to assign any past due account to an agency for collection. When an account has been assigned, the collection agency fee will be
added to the University charges for collection at the current contract rate.

## Deadlines

Students are reminded that deadlines are strictly enforced. The University is not able to grant credit or to extend the fee payment period beyond the time set in its official calendar. The University does not have the authority to waive late fees unless it has been determined that the University is primarily responsible for the delinquency or that extraordinary circumstances warrant such waiver. The University has no authority to extend deadlines for individual students beyond those set by the official calendar.

## PARKING RULES AND REGULATIONS

All persons who park vehicles on the university's campuses must register their vehicle(s) with the department of Parking and Traffic, obtain a decal or permit, and display the decal or permit, as prescribed by the Parking Rules and Regulations. The University assumes no liability for vehicles parked or operated on University property. The issuance of a decal or permit does not guarantee a place to park.

## Transportation Access Fee

All enrolled students will pay a Transportation Access Fee each semester. The fee will appear on the Student Fee Schedule.

Students may request their parking decal online at http://parking.fiu.edu or at the Department of Parking and Transportation offices located in the PG5 Market Station at Modesto A. Maidique Campus or in the Wolfe University Center, Room 353 at the Biscayne Bay Campus. They will need to bring the current vehicle registration when obtaining their decal at the office. All decals must be permanently affixed to the outside of the vehicle, either on the left side of the rear bumper or lower left corner, on the outside of the rear window. All decals are valid until the expiration date indicated on the decal. A duplicate decal will be issued upon request for an additional charge. This decal is valid only for the vehicle under which it is registered. Duplicate decals are available to persons who have obtained an original decal for the current academic year. The duplicate decals are for additionally owned vehicles and for situations where the original decal must be replaced due to an accident, maintenance, etc.

## Housing

All students in university housing complexes need to obtain a current semester housing sticker from the Department of Parking and Transportation. This sticker allows the vehicle to be parked legally in student housing areas. This sticker is valid for the indicated semester(s) only. This housing sticker should be affixed to the left or right side of their current student decal.

## Disabled

Any person who has been certified in accordance with Sections 320.084, 320.0848, or 320.0842, Florida Statutes, and has been issued a Disabled placard by the Department of Motor Vehicle Bureau shall obtain and display a university parking decal in the classification which would otherwise be appropriate.

## Towing and Impoundment

The university may tow and impound any vehicle, which is found to be parked illegally or in violation of these rules.

## Rules and Regulations Pamphlets

A copy of the University Parking Rules and Regulations is available online at http://parking.fiu.edu and at the Department of Parking and Transportation offices located in the PG5 Market Station at Modesto A. Maidique Campus or in the Wolfe University Center, Room 353 at the Biscayne Bay Campus. It is the responsibility of each student to become familiar and comply with the University's parking and traffic rules and regulations.

## LIBRARY FINES

| Per book per library hour | $\$ .25$ |
| :--- | ---: |
| Maximum fine per book | $\$ 10.00$ |
| Lost book fine | $\$ 100.00$ |

Note: All fees are subject to change as permitted by law. Additional fees may be added and special purpose fees may be assessed in some instances.

## FINANCIAL AID

## WHAT IS FINANCIAL AID?

Financial aid is a source of financial support provided by federal, state and local governments, universities, community organizations, and private corporations to help students meet the cost of attending college. It includes gift-aid (grants and scholarships) and self-help aid (loans and student employment).

- Grants are awards based on financial need which do not have to be repaid.
- Fellowships are non-repayable awards based either on merit, special talent and/or financial need.
- Student employment allows students to earn money toward their education by working part-time while attending school.
- *Student loans are available to students at low interest rates (Fixed Federal Direct Loans).


## APPLYING FOR ASSISTANCE

The Free Application for Federal Student Aid (FAFSA) is the form used annually to apply for most types of financial assistance. FIU's school code 009635 is required when completing the FAFSA. Applications for financial assistance are available annually in January for the following academic year which begins in August. FIU's annual priority deadline is March 1st. Applications completed after this deadline will be processed in order of completion.

For assistance in completing the FAFSA application, visit the 7 Steps to the FAFSA Application link on the front page of the Financial Aid website: onestop.fiu.edu.

The FAFSA is available on the Web:

- FAFSA web filers will require a FSA ID to be used in lieu of student/spouse signatures:
http://www.fsaid.ed.gov.
- Next to complete the FAFSA electronically on the Web, the web site address is: http://www.fafsa.gov.
- FAFSA Worksheets are available in the Financial Aid Office to assist students with the FAFSA on the Web format.
- Using the Panther ID, students may check the "TO DO LIST" for any e-form (electronic online) required documents that are requested for file completion through my.fiu.edu. "How to Guides" for e-forms can be found on the financial aid webpage under Forms at: onestop.fiu.edu.


## ADMISSIONS

To be eligible for financial aid programs, students must be admitted to a degree-seeking program. However, students should not wait until they are admitted to apply for assistance.

## SUMMER ASSISTANCE

To receive Summer assistance for 2017, the 2016-2017 FAFSA must be on file. Summer awards are automatically posted as long as there are no pending documents required and the student meets the preliminary review of

Satisfactory Academic Progress (SAP) for Summer and the following academic year.

## TRANSFER STUDENT PROCEDURES

Financial aid cannot be transferred from one postsecondary institution to another during the academic year. Students planning to transfer in mid-year should complete the FAFSA using both their current institution and Florida International University (FIU Federal School Code 009635) to ensure consideration for all applicable financial assistance.

## ELIGIBILITY CRITERIA

To qualify for most need-based financial assistance, students must meet the following basic eligibility requirements:

- demonstrate financial need;
- be a U.S. citizen or eligible non-citizen;
- be registered with Selective Service, if required;
- be enrolled at least half-time in an eligible program of study; (5 graduate-level credits during the academic year)
- not be in default on a loan, or owe a repayment on Title IV aid received at any institution;
- maintain satisfactory academic progress

Additional requirements may apply depending on the aid programs for which a student is applying.

## DETERMINING FINANCIAL NEED

Financial need is defined as the difference between the estimated cost of attendance and the amount students/spouses can reasonably be expected to contribute towards their educational expenses, expected family contribution (EFC). Need analysis is a federally mandated formula which measures, in an equitable and systematic way, how much students and their families are expected to contribute towards their higher education. Income, assets (excluding their primary residence), family size, number of family members attending college and other factors are evaluated to give a complete assessment of a family's financial strength.
Cost of attendance minus EFC= Financial need

## VIEWING YOUR FINANCIAL AID

Students can view application status and awards using their Panther ID through Student Center on the student portal, my.fiu.edu.

## RETURN OF FINANCIAL AID POLICY

Federal regulations mandate that the Financial Aid Office comply with the Return to Title IV Funds (R2T4) policy in which any student who drops all courses, officially withdraws before completing $60 \%$ attendance for the semester or does not earn at least one credit with a "D-" or higher, may be liable to repay all or a portion of the Title IV aid that was disbursed. Grades that affect Return to Title IV Funds are F, FO, IN, DR, W, WA, WI. Title IV funds include the following financial aid programs awarded to Graduate students: Perkins Loan, Unsubsidized Stafford Loans, TEACH Grant, and GradPLUS Loans. The amount
of the return is based on formulas established by the U.S. Department of Education. For additional information regarding the Financial Aid Return to Title IV Policy view the complete policy located on the Financial Aid webpage.

## AWARDING PROCEDURES

Award decisions for newly admitted students who complete their financial aid application will be issued annually in mid February with an Early Estimated Award Notice. A financial aid package may consist of a combination of grants, loans, and student employment. Other sources of assistance such as merit awards and private and institutional scholarships will be taken into consideration when preparing the award.

Award decisions for returning students who meet the March 1st priority deadline should expect to receive an award decision by mid-June.
*The Financial Aid Office reviews Spring 2015 grades to determine if Satisfactory Academic Progress has been met before an award determination is made for summer and the following academic year for all returning students.

## SOURCES OF ASSISTANCE

The University participates in all Federal and State funded programs. Institutional assistance is available for students with academic promise and financial need.

## Graduate Assistantships

Graduate students pursuing a master's or doctoral degree may qualify for assistantships/fellowships and other awards offered through individual graduate academic units. Applicants should contact the Graduate Program Director in the appropriate department.

## FINANCIAL AID SERVICES

- Log on to Your FIU Panther Mail Today! FIU does most of its business electronically, including informing you of your Financial Aid Award Notice which provides you with your academic year awards. Initial financial aid correspondence is mailed to your local address. Thereafter, communications are sent electronically to your FIU Panther Mail. You are responsible for keeping your Email address up to date. You may use the "Self-Service Personal Profile" located on my.fiu.edu to update your local information. To update other addresses (e.g. permanent), you must visit the Office of the Registrar.
- Financial Aid Counseling: A Financial Aid administrator is available on a walk-in basis to assist students with special problems, technical questions and exceptions.
- Web Access: Students may obtain information on the status of their application at http://my.fiu.edu/.
- LIVE CHAT: Students can communicate on-line with Financial Aid representatives through PANTHERCHAT available through the Enrollment Services webpage at: www.onestop.fiu.edu.
- Financial Aid e-forms: Requested financial aid forms can be obtained and e-forms Guides are available for your review at onestop.fiu.edu.
For additional information contact the OneStop Enrollment Services Office by telephone at (305) 348-7000 or by
visiting at Modesto A. Maidique Campus, Student Academic Success Center or Enrollment Services at the Biscayne Bay Campus, ACI 100.



## UNIVERSITY GRADUATE SCHOOL RULES AND REGULATIONS

## CLASSIFICATION OF STUDENTS

Students are classified as degree-seeking students and non-degree-seeking students.

## Degree-Seeking Students

Degree-seeking students are students who have been admitted into a degree program, but have not completed the requirements for the degree.

## Non-Degree-Seeking Students

Non-degree-seeking students may be: (1) Graduate Certificate students; (2) Advanced Diploma students; (3) students affiliated with a College or School; or (4) unaffiliated students. Students who are unaffiliated are limited to taking 12 credits at the University. Affiliated students must be approved by a College or School and may take up to 12 hours of coursework as a non-degreeseeking student. Higher allowable course hours apply to students accepted in Graduate Certificate or Advanced Diploma programs.

The following regulations apply to non-degree-seeking students:

1. A $\$ 30.00$ non-refundable application fee (U.S. dollars) made payable to Florida International University must accompany applications submitted.
2. Non-degree-seeking students are not required to meet the usual admission requirements and are not officially admitted as regular students. Enrollment as a non-degree-seeking student does not imply a right to be admitted in the future as a regular, degree-seeking student. Credits earned as a non-degree-seeking student will not be counted toward a degree at the University unless such a student subsequently applies for regular admission and is accepted as a degreeseeking student. Credits must meet time limit and grade of no less than a " B ".
3. Registration is permitted only on a space-available basis and is determined at the time of registration.
4. No more than 12 graduate level semester hours earned as a non-degree-seeking student may be counted toward a degree. The acceptance of such credits must be recommended by the graduate program and approved by the Academic Dean. Graduate Certificate students may count up to 18 graduate level credits provided they meet the requirements specified below under Graduate Certificates. Applicants denied admission to the University will not be allowed to register for courses in any program or as non-degree-seeking students for a period of one year.
5. Immigration regulations prevent most foreign nationals from enrolling in courses without being admitted into a formal degree or certificate program, depending on the type of visa that they hold. International students should contact the Office of International Student and Scholar Services for further information.

## Affiliated Students

Students applying for affiliated status as non-degree seeking students must be approved by the appropriate Dean's Office and the University Graduate School in accordance with criteria approved by that College or School's Faculty Curriculum Committee. Non-Degree Seeking student policies apply to Affiliated Students. The form and instructions are available at http://onestop.fiu.edu/forms/index.html.

## Graduate Certificate Students

Students seeking admission to a Graduate Certificate program need to apply through the Graduate Admissions Office using the on-line application form. Students fully admitted and enrolled in other programs may use the paper application available through the Graduate Admissions Office to apply to certificate programs. The normal application fee applies to Graduate Certificate applications.

## ACADEMIC DEGREE REQUIREMENTS MASTER'S DEGREE

## Course Requirements

Programs leading to a master's degree will normally require at least 30 credit hours of non-thesis course work. Master's programs normally include courses at the 5000 and 6000 levels. No course counted toward a student's undergraduate degree may be included in that student's masters degree program except in approved 4+1 bachelor's-master's degree programs.

## Thesis Requirements

Thesis committees must have a minimum of three members, at least two of whom are from the unit offering the degree. All FIU faculty who are members of the thesis committee must be members of the Graduate Faculty. All committee appointments must be approved by the Dean of the University Graduate School.

A thesis proposal must be approved by the University Graduate School at least one semester prior to the date of graduation.

Once an approved thesis proposal is on file, continuous registration for at least 1 thesis credit hour each semester (including the summer term) is required until the thesis requirement is fulfilled. During the academic year, international students must maintain full-time enrollment.

## Time Limits

For the Master of Fine Arts degree, all requirements, including the successful defense of a thesis where required, must be completed within eight years of first enrollment in the master's program. For all other master's degree programs all requirements, including the successful defense of a thesis where required, must be completed within six years of first enrollment in the masters program. No courses used in a program of study that are beyond these time limits at the time of graduation can be used toward degree completion with the exception of credits that are part of an earned graduate degree.

## Graduation Requirements

The University will confer the master's degree when the student has met the following conditions:

1. Earned an overall average GPA of 3.0 in all courses in the graduate degree program.
2. Recommended by the faculty of the College or the School.
3. If applicable, submission of the final approved thesis via ETD.
4. Certified by the Academic Dean of the College or the School that all requirements for the degree being sought have been completed.
Master's students who have been recommended for the degree by the faculty of the School or College may participate in the commencement ceremonies.

## DOCTORAL DEGREE

## Course Requirements

Programs leading to a doctoral degree require at least 75 credit hours beyond the bachelor's degree. These shall include a minimum of:

1. 30 credit hours earned in academic courses which are part of the doctoral program. Doctoral programs normally include courses at the 6000 level and above. Courses at the 5000 level may be included in a doctoral degree program in appropriate cases.
2. A student may enroll for dissertation credits after completing all coursework, passing the candidacy examination and being advanced to candidacy. Dissertation credits may not be taken before advancement to candidacy.

## Dissertation Requirements Candidacy

A student is admitted to candidacy upon successfully completing all required coursework, language requirements, qualifying examinations and passing the candidacy examination. Some programs require students to defend the dissertation proposal as part of candidacy. The student's written request for candidacy must be approved by his or her major professor and forwarded to the program director, the unit dean, and then to the Dean of the University Graduate School.

Each candidacy examination must be prepared and graded by a committee consisting of a minimum of three faculty of the academic unit offering the degree. Admission to candidacy requires that a majority of the committee members agree that the student passed the examination. A candidacy examination may not be passed conditionally. A "Pass" on the examination cannot be made contingent upon other factors such as the completion of additional coursework or the preparation of extra research projects.

Students must be informed in writing of the results of their performance on the examinations within 30 days of the examination date. If the student fails the candidacy examination the committee, at its discretion, may provide for reexamination at a mutually satisfactory time but no more than one year from the original date of the examination. Passing the candidacy examination is requisite to continuing in the graduate program. Students who fail the candidacy examination twice will be dismissed from the doctoral program.

After a doctoral student is admitted to candidacy, continuous registration for at least 3 dissertation credit hours each semester (including the summer term) is required until the dissertation requirement is fulfilled. During the academic year, international students must maintain full-time enrollment.

## Dissertation Committee

Dissertation committees must have a minimum of four members: at least three of whom are from the unit offering the degree and one of whom is from another academic unit at FIU. All FIU faculty who are members of the dissertation committee must be members of the Graduate Faculty and the chair of the dissertation committee must hold Dissertation Advisor Status. All committee appointments are made by the Dean of the University Graduate School.

## Dissertation Proposal

A dissertation proposal must be approved by the University Graduate School at least three semesters prior to the date of graduation.

## Time Limits

All requirements, including the successful defense of a dissertation, must be completed within nine years of first enrollment in the doctoral program. No courses used in a program of study that are beyond these time limits at the time of graduation can be used toward degree completion with the exception of credits that are part of an earned graduate degree.

## Graduation Requirements

The University will confer the doctoral degree when the student has met the following conditions:

1. Earned an overall average GPA of 3.0 in all courses in the graduate degree program.
2. Completed and defended satisfactorily a doctoral dissertation.
3. Recommended by the faculty of the College or the School.
4. Submission of the final approved dissertation via ETD.
5. Certified by the Academic Dean of the College or the School that all requirements of the degree being sought have been completed.
Doctoral students must have completed all requirements for the degree in order to participate in the commencement ceremonies.

## GRADUATE CERTIFICATE PROGRAMS

A certificate program is a combination of courses with a common base or interest selected from one or more academic disciplines and so arranged as to form an area of academic concentration. Three types of certificates are awarded: academic, professional, and continuing studies. Students must apply and be admitted into the certificate program through the academic department.

Graduate Certificates require 15 to 18 hours of graduate credit. At least six of the hours must be in core courses taken by all individuals obtaining a given Graduate Certificate.

All the credits earned in a Graduate Certificate Program may be used in a master's degree program provided the student is admitted to the master's degree program prior to the completion of no more than 12 Graduate Certificate credits. Non-Degree Seeking student policies apply to Graduate Certificate students.

At the discretion of the departmental graduate committee, or equivalent, students holding a bachelor's degree who have completed 12 Graduate Certificate credits with a 3.25 or better GPA may be admitted to a master's degree program without taking the GRE or GMAT examination even if the student has an undergraduate GPA between 2.75 and 3.0.

In all cases the Graduate Program Director will evaluate whether or not the Graduate Certificate credits are acceptable in that particular graduate program.

## CHANGE OF GRADUATE DEGREE PROGRAM

Only fully admitted and enrolled students may apply to change a graduate degree program without paying an additional application fee. All other students must submit a request through the Graduate Admissions process. Change of Graduate Degree Program forms are evaluated as new applications by the department into which the student wishes to transfer. A "Change of Graduate Degree Program" form and instructions are available on the University Graduate School website at: http://gradschool.fiu.edu/forms.html.

## REGISTRATION

Students should verify dates and registration information with the OneStop Enrollment Services Office, Student Academic Success Center (SASC), Modesto A. Maidique Campus, (305) 348-7000; ACI-100, BBC Enrollment Center, (305) 919-5750; Room 3002, FIU at I-75, (954) 438-8600 or visit http://onestop.fiu.edu.

All degree-seeking students registering for more than 15 credits in any given semester must obtain the approval of the Dean of the University Graduate School. Registration for courses is as follows:
Official Registration is held during the preceding semester (check the Academic Calendar for the dates). Degree-seeking students are given an appointment day and time based on their classification, GPA, and credit hours completed. Students may also add/drop at this time. Open Registration is held following Official Registration. There is no appointment day and time and registration is on a first-come, first-served basis; for degree-seeking students. Students who have not yet registered are encouraged to do so at this time. Students who have already registered may also add or drop courses during this period.

## Registration Access

All students are able to retrieve their grades, registration appointment time and day; classroom assignments; registration holds (if any) and register/drop/add courses using the MyFIU Self-Service portal (http:/Imy.fiu.edu).
Students must use their Panther ID and password in order to utilize the system.

New students must reset their passwords at http://myaccounts.fiu.edu in order access their FIU accounts. Current students experiencing difficulties with
accessing their FIU accounts may reset their password at http://myaccounts.fiu.edu.

## IMMUNIZATION

As a prerequisite to registration, Florida International University requires all students to comply with the following immunization policy regulations from the Florida Board of Governors regarding measles, mumps, rubella, meningitis and hepatitis $B$ immunity:

## 1. Measles, Mumps, Rubella:

All students born after December 31, 1956, must present documented proof of immunity to measles (Rubeola) and German measles (Rubella), as described below:
Acceptable Proof of Immunity consists of:
a. Proof of two (2) vaccinations (doses) of MMR (Measles/Mumps/Rubella) received at least 28 days apart or two doses of measles and one Rubella

- Vaccinations must have been received after your first birthday
- Vaccinations must have been received in 1969 or later
b. Proof of immunity by way of a blood test lab result (Measles and Rubella Titer)
c. A written statement from a healthcare provider documenting a diagnosis of measles (Rubeola). Must include date of diagnosis, be signed by the healthcare provider and be on his/her official stationery. This is acceptable for measles only and does not apply to Rubella


## Exemptions:

Students will be exempt from the pre-registration immunization requirement for measles, mumps, and rubella, only if they meet any one of the following three criteria:

1. Students born before January 1, 1957.
2. Medical Exemption: To claim a medical exemption, a letter must be provided from the healthcare provider, signed on his/her stationery, stating the medical reason(s) why the student is not able to receive the measles and/or Rubella vaccine(s) and for how long - a permanent or temporary medical condition warranting exemption.
3. Religious Exemption: For details on how to claim religious exemption, please visit the Student Health Services website.
To prevent delays in the ability to register for classes, all of the above documents requesting medical or religious exemptions must be received by the Student Health Services at least four weeks prior to registration. Temporary Deferments: Temporary deferments are acceptable for the following conditions:
4. Documented pregnancy or fertility treatment
5. Documentation of breastfeeding
6. Documented illness

Deferment status requests must be submitted to the Student Health Services at least four weeks prior to registration and the request must be signed by a healthcare provider and be on his/her official stationery.
2. Meningitis and Hepatitis $B$ :

All students must present documented proof of vaccination/immunity to meningococcal meningitis and hepatitis B as described below:
Acceptable Proof of Immunity consists of:
a. Proof of one dose of meningitis vaccine and a total of three doses of hepatitis $B$ vaccines
b. Proof of immunity by way of a blood test lab result (applicable to hepatitis B only)
c. A written statement from a healthcare provider documenting a diagnosis of hepatitis B . Must include date of diagnosis, be signed by the healthcare provider and be on his/her official stationery. This is acceptable for hepatitis B only and does not apply to meningococcal meningitis
Exemptions:
Students declining to receive vaccination for meningitis and/or hepatitis $B$ must present a signed waiver of liability acknowledging that they have received and read information pertaining to the disease and despite knowledge of the risks have decided to waive receiving the vaccine. These waivers can be accepted and viewed on my.fiu.edu under the "Student Center" and "Student Health Portal" tabs. NOTE: A parent or legal guardian must sign the waiver for any minor under the age of 18. Parents or legal guardians may contact Student Health Services or obtain the form by visiting the Student Health Services website.

## Acceptable Forms of Documentation:

The following documents are acceptable proof of immunity, provided that the dates are acceptable and the documents are signed and stamped by the healthcare provider:

- FIU Immunization Documentation Form
- Health Department Records
- Childhood Immunization Records
- School Immunization Records
- Military Service Records
- Documentation of having the disease during his or her lifetime: Applies to Measles (Rubeola) and Mumps only
- Laboratory test (serology) results demonstrating immunity:
- Measles (Rubeola) positive IgG titer required
- Rubella postitive IgG titer required
- Hepatitis $B$ positive $A B$ antibody surface titer required
- Meningitis lab test not valid and will not be accepted


## Can't Find Your Immunization Documents?

If the student cannot locate his or her immunization records and is confident he/she has taken the vaccines, a positive lab test against both the Measles and Rubella and/or Hepatitis B is sufficient. The student also has the option to take the required vaccines again with his or her doctor, at a local health department or at the SHS at one of FIU's campuses.

## Where can I get immunized?

MMR, meningitis, and hepatitis B vaccines are available for a nominal charge at the FIU Student Health Services clinics at both the Modesto A. Maidique Campus and Biscayne Bay Campus. For further information and
additional locations, visit the Student Health Services website and click the Immunization link.

## LATE REGISTRATION FEE

Any student, degree-seeking or non-degree seeking, who initiates registration during the Drop/Add period is assessed a $\$ 100.00$ late registration fee. Students may initiate late registration during the first week of classes.

## DROPPING AND ADDING COURSES

The official Drop/Add period runs throughout the first week of classes (check the Academic Calendar for specific dates). During this period a student may drop or add courses without financial penalty or initiate registration with financial penalty (i.e., the late registration fee). Students may also drop courses or withdraw from the University with no record of enrollment and without a tuition fee liability. If the tuition fee has already been paid, the student may be eligible for a refund that will be generated by the Student Financials Office and mailed to the local address on file.

Students are responsible for their own enrollment and for adhering to all published deadlines for enrollment activity.

## LATE ADDS

Students may add courses with appropriate authorization until the end of the third week of classes. No course may be added after this deadline.

## LATE DROPS

Courses officially dropped after the Drop/Add period and through the eleventh week of the term, (summer terms have different deadlines - check the Academic Calendar for specific dates), are recorded on the student's transcript with a grade of 'DR' (dropped). The student is financially liable for all dropped courses. Non-attendance or nonpayment will not constitute a drop.

## APPEAL TO DROP/WITHDRAW

A student may submit a petition for an exception to an enrollment deadline for a late drop by submitting a completed petition form to the OneStop Enrollment Services. A drop after the deadline will be approved only in the following exceptional circumstances:

1. Death of a student or immediate family member (parent, spouse, child, sibling, or grandparents). Death certificate required.
2. Involuntary call to military service. Copy of orders required.
3. Illness of student of such severity or duration to preclude completion of courses. Confirmation by a physician required.
According to FL BOG Regulation 7.002, when approval of an appeal or petition could result in a change in a student's fee liability (i.e. his or her student bill) for the term in question, then the deadline to submit appeals is six months after the end of the term in which the course was taken. The student must provide appropriate documentation.

## WITHDRAWAL FROM THE UNIVERSITY

A currently registered student can withdraw from the University only during the first eleven weeks of the semester. In the summer semester, withdrawal deadlines will be adjusted accordingly. A Withdrawal Form must be completed and submitted to the Office of the Registrar. Non-attendance or non-payment will not constitute a withdrawal. (Refer to the Academic Calendar for the deadline dates.)

The transcript of a student who drops all classes before or during the first week of classes will contain no record of enrollment and no tuition fee will be assessed. If the tuition has already been paid, a refund will be generated by the Student Financials Office and mailed to the local address on file. If a student officially withdraws from the University prior to the end of the fourth week of classes, a 25 percent refund, will be issued.

The transcript of a student who officially withdraws after the Drop/Add period and before the end of the eleventh week of the term will reflect a 'WI' for each course.

The transcript of a student who stops attending the University without officially withdrawing from the University will reflect an 'F' grade for each course.

## GRADING SYSTEM

## Grade

A
A-
B+ 3.33
B 3.00
B- 2.67
C+ 2.33
C 2.00
D Failure 1.00
F Failure 0.00
F0 Failure based on non-attendance 0.00
P Satisfactory (Pass) N/A
IP Thesis/Dissertation in Progress N/A
U Unsatisfactory N/A
EM Credit by Departmental Examination N/A
IN Incomplete* N/A
AU Audit N/A
W Withdrew from Course N/A
WA Administratively Withdrawn N/A
WI Withdrew from the University N/A
NG No Grade Assigned by Instructor N/A (system generated)

Repeat Course Indicators
R Repeated Course (last attempt)
T Repeated Course (initial attempt)
*An incomplete grade (IN) is a temporary grade. If a student has not met the terms and conditions associated with the incomplete grade within two semesters of the grade's assignment, then the IN will become an F (or failing) grade.

## HOW TO CALCULATE A GRADE POINT AVERAGE (GPA)

A Grade Point Average (GPA) is calculated for all students. GPAs are calculated only for grades earned at FIU.

There are two types of GPAs: Semester and Cumulative. The semester GPA is calculated using the courses taken in that semester. The cumulative GPA is a summary of all FIU courses taken over a student's career. Remember, when a student's career changes (i.e., undergraduate to graduate), the GPA calculation begins anew. Transfer course grades are not included in any GPA calculations. To calculate a GPA, one must know the course grade, the course credits or semester hours associated with that course, and the values associated with each grade assigned. See the Grading System list above for "Points Per Credit Hour" values.

To calculate a GPA, first multiply the number of course credits/semester hours for each course by the grade point values associated with the grade received in that course. Then add all of those totals together and divide that sum by the total number of course credits/semester hours. For a semester GPA use all regularly graded courses in that semester (plus P/F courses in which an $F$ or $U$ was earned), and for the cumulative GPA use all courses. Do not average semester GPAs in order to calculate the cumulative GPA.

Note: All GPAs are rounded to two decimal points.
Note: On the Grading System list above, some grades will not affect GPA, such as "P" (Satisfactory), "U" (Unsatisfactory), "IN" (Incomplete) or "DR" (Dropped). Thus, do not include the credits for such graded courses in the calculation.
Here is an example of semester GPA calculation:
Calculating a Semester GPA

| Course | Grade | Course <br> Credits <br> Attempted | Points <br> Per Cred <br> Hour | Points Per Course |
| :---: | :---: | :---: | :---: | :---: |
| ENC 1101 | B | 3.0 x | $3.00=$ | 9.00 |
| MAC 2147 | B+ | 4.0 x | 3.33 = | 13.32 |
| BSC 1010 | A- | 3.0 x | 3.67 = | 11.01 |
| BSC 1010L | A | 1.0 x | $4.00=$ | 4.00 |
| AMH 2041 | C | 3.0 x | $2.00=$ | 6.00 |
| ARH 2050 | F | 3.0 x | $0.00=$ | 0.00 |
| Total |  | 17 |  | 43.33 |
| Semester G | PA | 43.33 divide | by $17=2$ | 548 |

## GRADING OPTIONS

The Colleges and the Schools make the determination of the grading option of each course except for thesis and dissertation credits. A course may be offered for a letter grade as listed above or Pass/Fail. The student may choose to audit a course and an 'AU' grade will be recorded on the student's record. The grading option must be indicated at the time of registration. The grading option cannot be changed after the first week of classes. There are no exceptions to this deadline. The grading options for thesis and dissertation credits are Pass, In Progress, Unsatisfactory, and Fail.

To register for an audit, the student must obtain the permission and signature of the instructor of the course audited. Once the student is registered in the course as "Audit", the grading option cannot be changed.

## INCOMPLETE GRADE

A grade of incomplete (IN) is a temporary symbol given at the discretion of the instructor for work not completed because of serious interruption not caused by the student's own negligence. An incomplete must be made up as quickly as possible but no later than two consecutive semesters (including Summer semester) after the initial taking of the course or it will automatically default to an " F " grade. There is no extension of the two semester deadline. The student must not register again for the course to make up the incomplete.

Students who have incomplete grades on their records must remove the incomplete by the end of the fourth week of the term in which they plan to graduate. Failure to do so will result in a cancellation of their graduation. The student will need to reapply for graduation.

## FORGIVENESS POLICY

Graduate courses are not authorized for grade forgiveness.

## DEPARTMENTAL CREDIT BY EXAMINATION

Departmental credit by examination is available for certain courses. A student who has already gained knowledge of a subject offered at the university and wishes to take an examination in lieu of taking the course should discuss the matter with his or her academic advisor and with the department offering the course.

Awarding departmental credit by examination is the prerogative of each academic unit. To receive credit by examination, a student must be a regular degree-seeking student. Once the student is awarded the departmental credit by examination, an 'EM' grade will be recorded on the transcript.

## CHANGE OR CORRECTION OF GRADES

Once submitted, end-of-semester grades (except Incompletes and NR's, which default at the end of two terms) are final. They are subject to change only through a Change of Grade process to correct an error in computation or transcription, or where part of the student's work has been unintentionally overlooked.

## FINAL WEEK OF THE SEMESTER

During the last week of the semester, classes meet for an extended period of time for various instructional purposes such as: final exams, lectures, group projects, and/or individual presentations.

## FINAL GRADES

Final grades are available through the MyFIU SelfService portal (http://my.fiu.edu).

## TERM COURSES ARE OFFERED

Listed next to certain courses in this catalog are the designations ' F ', ' S ', and ' SS '. These designations indicate that the academic department normally offers these courses during the Fall ('F"), Spring ('S'), Summer ('SS') terms. Students should be aware that there are circumstances beyond the University's control (low
enrollments, financial constraints, or other extenuating situations) which may result in the courses not being offered as indicated. The University is not responsible for failure to offer a course as indicated.

## APPLICATION FOR GRADUATION

Students who plan to graduate are required to apply for graduation through the MyFIU Self-Service portal (http:I/my.fiu.edu) and be enrolled in graduate level courses in the graduating term.

Students whose graduation application is denied by their academic department must re-apply for graduation and complete the remaining requirements needed to graduate. Graduate student must be enrolled in at least 1 graduate credit and doctoral student must be enrolled in at least 3 dissertation credits the semester they graduate. Students cannot graduate the same semester they are readmitted to the University.

## ACADEMIC WARNING, PROBATION, AND DISMISSAL

## Warning

A graduate student whose cumulative graduate GPA falls below a 3.0 will be placed on warning, indicating academic difficulty.

## Probation

A graduate student on warning whose cumulative graduate GPA remains below 3.0 in the following semester will be placed on probation, indicating serious academic difficulty. The College or School of the student on probation may indicate the conditions which must be met in order to continue enrollment.

## Dismissal

A graduate student on probation whose cumulative and semester GPA's fall below a 3.0 will be automatically dismissed from his or her program and the University. A graduate student will not be dismissed prior to attempting a minimum of 12 hours of coursework as a graduate student. The student has ten working days to appeal the dismissal decision. This appeal must be made in writing to the Dean of the University Graduate School. To appeal, a Petition for Exception to Graduate Requirements must be completed. The petition is an online process which is initiated by the academic unit in which you were pursuing your degree. Should you wish to initiate this appeal, you must contact your academic unit. The dismissal from the University is for a minimum of one year prohibits students from registering for any courses. After one year, the student may apply for readmission to the University in the same or a different program, or register as a non-degreeseeking student if applicable.
Dismissed students who are readmitted or who register as non-degree-seeking students are placed on academic probation.

## STUDENT RECORDS

Florida International University assures the confidentiality of student educational records in accordance with State University System rules, state, and federal laws including the Family Educational Rights and Privacy Act of 1974, as
amended. Student academic records are maintained in the Office of the Registrar and in the academic department of the student's major. Students in some degree programs may be subject to background checks and/or drug testing prior to eligibility for internships or practicums. All currently enrolled and former students have the right to review their records to determine their content and accuracy. For the cost of photocopying, students may generally have copies of any documents in their file, except for other institutions' transcripts.

## RELEASE OF STUDENT INFORMATION FROM EDUCATION RECORDS (FERPA ANNUAL NOTICE)

The disclosure or publication of student information is governed by policies of Florida International University and the Florida Board of Education of the State University System of Florida within the framework of State and Federal Laws, including the Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99).

A student's consent is required for the disclosure or publication of any information which is a) personally identifiable and b) a part of the educational record. However, certain exceptions to that generality, both in types of information that can be disclosed and in access to that information, are allowed within the regulations of the Family Educational Rights and Privacy Act. The University may disclose information pertaining to the student to a parent/legal guardian as long as they submit both the FERPA form in which part B is filled out and signed along with proof that the child is a dependent.

Florida International University discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted as its agent to provide a service instead of using University employees or officials (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the University. Upon request, the University also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

The University may disclose, without consent, "directory," or public, information such as a student's name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, students are allowed to request that the school not disclose their directory information.
Florida International University considers the following to be directory information items:

1. name, local and permanent address, and telephone number(s);
2. date and place of birth;
3. student classification and major and minor fields of study;
4. participation in officially recognized activities and sports;
5. weight and height of members of athletic teams;
6. dates of attendance, degrees and awards received;
7. the most recent previous educational agency or institution attended by the student; and
8. photographic image.

In order to prevent access to or release of Directory Information, students must request non-disclosure through their MyFIU Self-Servivce portal (http://my.fiu.edu) website prior to the first class meeting day of the semester. Access to, or release of Directory Information will be withheld until further written instruction is received from a student or the parents of a dependent student.

Students have a right to challenge the accuracy of their educational records and may file written requests to amend these records. The Office of the Registrar (PC 130) should be contacted for further information regarding the procedure to follow for questions or problems.

For complete information regarding the policies outlined above, please contact:
University Registrar
Florida International University
Modesto A. Maidique Campus - PC 130
Miami, Florida 33199
e-mail:Register@fiu.edu

## PANTHER ID

The University has implemented an identification systemPanther ID. This identification number is the primary identification number for all students. Applicants and current students can retrieve this number by going to the MyFIU Self-Service portal (http://my.fiu.edu) website.

## TRANSCRIPTS

The transcript is the complete student record of courses taken at the University, in addition to the number of transfer credits accepted. The GPA is calculated for all courses taken at the University after Fall Term 1975. Once a baccalaureate, master's, or doctorate degree is earned, the GPA calculation starts again.

Students must request their transcript in online. The transcript will not be released if the student has a University financial liability and/or a defaulted student loan. Other holds may prevent the release of official transcripts. Students should contact the department who assigned the hold if clarification is needed. The University may charge a fee up to $\$ 10.00$ per transcript.

## CLASS ATTENDANCE

The University expects students to attend their classes in order to create an effective learning environment in which to master course content and satisfy performance objectives and learning outcomes as outlined by instructors.

Instructors may establish specific class attendance requirements and may consider attendance and participation in class in evaluating student performance. During the first week of class, instructors must inform students of any special requirements and articulate any
penalties, including a failing grade that may result for nonattendance.

In general, instructors must excuse students from classes due to their military obligations, jury duty, religious days, illness, disability accommodations as approved by The Disability Resource Center, serious family emergencies and/or participation in official university activities, i.e., athletic events, artistic performances, curricular activities. Instructors must afford students a reasonable amount of time to complete course work and/or assignments missed during their approved absence.

Only registered students appearing on an official course roster may attend a class at the university.

## POLICY STATEMENT WITH REFERENCE TO RELIGIOUS HOLYDAYS

A faculty member who wishes to observe a religious holy day shall make arrangements to have another instructor teach the class in his or her absence, if possible, or shall reschedule the class.

Because there are some classes and other functions where attendance may be considered essential, the following policy is in effect:

1. Each student shall, upon notifying his or her instructor at the beginning of the semester, be excused from class to observe a religious holy day of his or her faith.
2. While the student will be held responsible for the material covered in his or her absence, each student shall be permitted a reasonable amount of time to make up any work missed.
3. No major test, major class event, or major University activity will be scheduled on a major religious holy day.
4. Professors and University administrators shall not arbitrarily penalize students who are absent from academic or social activities because of religious observances.

## ENROLLMENT CERTIFICATION

The Office of the Registrar is responsible for certification of students' enrollment. Certifications cannot be processed if the student has a financial liability. Enrollment certifications for a current student can only be done after the drop/add period ends.

Enrollment certification can be obtained through the MyFIU Self-Service portal (http://my.fiu.edu) or in person at the Office of the Registrar (PC130, Modesto A. Maidique Campus), BBC Enrollment Center (ACI-100, Biscayne Bay Campus).

## Enrollment Status - Graduate:

Fall and Spring Semesters
Full time: $\quad 9$ credits or more
Half time: $5-8$ credits
Less than half time: 4 credits or fewer
Summer Semester
Full time: 6 credits
Note that audited credits do not count toward enrollment status.

Doctoral students who have reached candidacy or master's students, who have completed all requirements except for the thesis, and have an approved thesis proposal on file in the University Graduate School, are considered full-time when registered for three credits per term.

Enrollment status is for continuous enrollment for the semester in which the student is in attendance. Reduction of course load may change the student's status. Contact the Office of the Registrar for further details.

## FLORIDA RESIDENCY INFORMATION FLORIDA STUDENT DEFINITION

For the purpose of assessing registration and tuition fees, a student shall be classified as a Florida or non-Florida Resident for tuition purposes.

To qualify as a Florida Resident for tuition purposes, the student or the parent/legal guardian of a dependent student, must:

1. Have established a legal residence in this State and have maintained that legal residence for 12 consecutive months immediately prior to the start of the term in which the student is seeking Florida resident classification. The student's residence in Florida must be a bona fide domiciliary rather than for the purpose of maintaining a mere temporary residence or abode, incident to enrollment in an institution of higher education, and should be demonstrated as indicated below (for dependent students as defined by IRS regulations, a parent or guardian must qualify).
2. Students claiming to be independent must meet one of the following:
a) The student is 24 years of age or older by the first day of classes of the term for which residency status is sought; if student is under the age of 24 , they must demonstrate earned income, through income tax forms, of a minimum of $\$ 11,500$ in the prior year or present evidence of that amount or greater by means of contracts or appointment letters;
b) The student is married;
c) The student has children who receive more than half their support from the student;
d) The student has other dependents who live with and receive more than half of their support from the student;
e) The student is a Veteran of the United States Armed Forces or is currently serving on active duty in the United States Armed Forces for purposes other than training;
f) Both of the student's parents are deceased or the student is or was (until age 18) a ward/dependent of the court;
g) The student is working on a master's or doctoral degree during the term for which residency status is sought;
h) The student is classified as an independent by the financial aid office at the institution.
3. Submit (or in the case of a dependent student, the parent must submit) written or electronic verification that includes two or more of the following documents (no single piece of evidence shall be conclusive).

Please not that all residency documentation must be submitted by the first day of the semester for which Florida residency is being sought; late documentation will be considered for the following academic term.
a) The documents must include at least one of the following:
i. A Florida voter's registration card.
ii. A Florida driver license.
iii. A State of Florida Identification card.
iv. A Florida vehicle registration.
v. Proof of a permanent home in Florida which is occupied as a primary residency by the student or the student's parent.
vi. Proof of a homestead exemption in Florida.
vii. A dependent student who attended a Florida high school for a minimum of two (2) academic years immediately preceding the student's initial enrollment in an institution of higher education and graduated from a Florida high school or earned a Florida General Education Development (GED) within the last twelve (12) months may use the high school transcript or GED certificate as evidence of Florida residency. The student must present at least one (1) additional document identified in sections 1009.21(3)(c)1. or 1009.21(3)(c)2., evidencing their parent's legal residency in Florida.
viii. Proof of permanent full-time employment in Florida (at least 30 hours per week for a 12 month period).
b) The documents may include one or more of the following:
i. A declaration of domicile in Florida; if a declaration of domicile, pursuant to section 222.17, Florida Statutes, is being used as one of the documents to establish residency for tuition purposes, the date an applicant shall be deemed as establishing residency for tuition purposes shall be twelve (12) months hence from the date that the Clerk of Circuit Court notes the declaration was sworn and subscribed to the Clerk. Nothing in this subsection shall prevent the use of additional documentation as evidence that legal residency was established by other means pursuant to section 1009.21(3)(c), as of a date earlier than that established by the declaration of domicile.
ii. A Florida professional or occupational license.
iii. Florida incorporation.
iv. A document evidencing family ties in Florida.
v. Proof of membership in a Florida-based Charitable or professional organization.
vi. Any other documentation that supports the student's request for resident status, including, but not limited to, utility bills and proof of 12 consecutive months of payments; a lease agreement and proof of 12 consecutive months of payments; or an official state, federal, or court document evidencing legal ties to Florida.
4. No contrary evidence establishing residency elsewhere.
5. Be a former student at a public institution of higher education who was properly classified as a resident who re-establishes domiciliary status and re-enrolls within a period of twelve (12) months.
6. A non-United States citizen may be eligible to establish residency for tuition purposes if evidence is presented verifying that the student has legal status in the United States, has met the residency requirements of section 1009.21, and the person is one of the following:
a) A foreign national in a nonimmigrant visa classification that grants the person the legal ability to establish and maintain a bona fide domicile in the United States.
i. The following visa categories grant the person the legal ability to establish and maintain a bona fide domicile in the United States: A, E, G, H-1B, H-1C, I, K, L, N, NATO 1-7, O-1, R, S, T, U, and V.
ii. The following visa categories do not grant the person the legal ability to establish and maintain a bona fide domicile in the United States: B, C, D, F, H-2, H-3, M, P, Q, and TN. J visa holders are not eligible to establish residency for tuition purposes except as provided in section 1009.21(10).
b) A permanent resident alien, parolee, asylee, Cuban-Haitian entrant, or other legal alien granted an indefinite stay in the United States.
c) Pursuant to section 1009.21(2)(d), a dependent student who is a U.S. citizen may not be denied classification as a resident for tuition purposes based solely upon the immigration status of the student's parent.

## OUT-OF-STATE NON-RESIDENT-FOR-TUITION- PURPOSES RECLASSIFICATION TO IN-STATE RESIDENT-FOR-TUITION-PURPOSES

## To qualify as a resident for tuition purposes:

A student who is classified as a nonresident for tuition purposes may become eligible for reclassification as a resident for tuition purposes by presenting a minimum of three (3) documents identified in sections 1009.21(3)(c)1. or 1009.21(3)(c)2., that convincingly demonstrate the establishment of permanent legal residence in Florida other than for the sole purpose of pursuing a postsecondary education. Documentation must demonstrate that the student or, if the student is a dependent, their parent has maintained legal residence in Florida for at least twelve (12) consecutive months immediately prior to the first day of classes for the term for which residency reclassification is sought except as otherwise provided in section 1009.21(6).

## To request reclassification of resident status:

a) If a person who is a dependent child and his or her parent move to this state while such child is a high school student and the child graduates from a high school in this state, the child may become eligible for reclassification as a resident for tuition
purposes when the parent submits evidence that the parent qualifies for permanent residency.
b) If a person who is a dependent child and his or her parent move to this state after such child graduates from high school, the child may become eligible for reclassification as a resident for tuition purposes after the parent submits evidence that he or she has established legal residence in the state and has maintained legal residence in the state for at least 12 consecutive months.
c) A person who is classified as a nonresident for tuition purposes and who marries a legal resident of the state or marries a person who becomes a legal resident of the state may, upon becoming a legal resident of the state, become eligible for reclassification as a resident for tuition purposes upon submitting evidence of his or her own legal residency in the state, evidence of his or her marriage to a person who is a legal resident of the state, and evidence of the spouse's legal residence in the state for at least 12 consecutive months immediately preceding the application for reclassification.

## Appealing the Denial of Residency Reclassification

A student may once appeal the denial of a request to be reclassified from out-of-state status to in-state status for tuition purposes. The student will need to meet with a manager-level staff in the Office of the Registrar to discuss the decision and their options. The appeal must be provided in writing with accompanying documentation that might support reconsideration of the original decision. A committee will meet to review the appeal and its accompanying documentation. The committee will make a determination in the case and will notify the student in writing of its final decision within sixty days of the meeting.

## VETERANS INFORMATION

The Office of Veteran and Military Affairs assists all veterans and their dependents who wish to receive VA educational benefits. The Office also provides personal counseling, fee deferments, tutorial assistance, and workstudy jobs. The VA Office is located in "The Tower" at the center of the Modesto A. Maidique Campus; and in ACI100, Biscayne Bay Campus.

Veterans who are planning to attend the University should contact the Office of Veteran and Military Affairs two months prior to the anticipated date of entry. Such time is required to expedite the processing of paperwork for educational allowances from the Veterans Administration.

## Fall/Spring Semesters

| TRAINING STATUS | CREDIT HOURS |
| :--- | :--- |
| Full time | 9 Credits |
| $3 / 4$ time | 7 Credits |
| Half time | 5 Credits |
| Less than half time | 4 Credits |

## Summer and Dynamically Dated Courses <br> Within a Semester <br> TRAINING STATUS <br> Full time <br> CREDIT HOURS <br> $3 / 4$ time <br> 6 Credits <br> 4-5 Credits <br> 3 Credits <br> 2 Credits

Note that audited credits do not count toward training status definitions.

For rate of monthly payment of educational allowances for veterans and dependents, please contact the Office of Veteran and Military Affairs.

For additional information regarding other Veterans Educational Programs, contact the Office of Veteran and Military Affairs at "The Tower" on the Modesto A. Maidique Campus, (305) 348-2838.

## COLLECTION AND USAGE OF SOCIAL SECURITY NUMBERS

In accordance with Florida law, the University collects social security numbers from its students for the following reasons:

1. For use in processing admission applications for purposes of identification and verification of student records;
2. For use in administering federal and state programs/loans, including verification of eligibility. These programs include, but are not limited to:
a. Financial Aid and other related loan programs;
b. Scholarship Programs, including Bright Futures; and
c. Veterans Administration benefits for qualified students
3. For use in complying with IRS Reporting Requirements pertaining to the Hope Scholarship Credit and the Lifetime Learning Credit provided under federal legislation;
4. For use in preparing Student Enrollment Reports required to be submitted to the National Student Loan Data System under Federal Law;
5. For use in providing official student transcripts to authorized third parties (i.e. educational institutions and employers upon receipt of required releases) for student identification purposes;
6. For enrollment verification and eligibility for health insurance coverage, auto insurance coverage, and benefits, as requested by students.
7. For submitting reports to the Florida Board of Governors as required.
Please note that this is only a listing of the collection and use of social security numbers by the University in the admissions, registration and financial aid areas. All students are advised that social security numbers are confidential and may only be released in accordance with applicable law.

## GENERAL INFORMATION

## HUMAN RESOURCES

The Division of Human Resources provides human resource management services for all employees in the academic and administrative areas including student employees, research and graduate assistants, college work study and temporary employees on all campuses. The division comprises the following areas: HR Administration, Recruitment Services, Compensation Administration, Employee and Labor Relations, Payroll, Employee Records, Benefits Administration, HR Management Systems, Talent Management and Development, Equal Opportunity Programs and Diversity, Employee Assistance Programs, Human Resources Relations, and Human Resources (Herbert Wertheim College of Medicine). It is through this office that new employees participate in the New Employee Experience (NEE) to gain knowledge of FIU's past, present, and future for their individual career success and institutional impact.

The Modesto A. Maidique Campus (MMC) office is located in PC 224, (305) 348-2181. The Biscayne Bay Campus (BBC) office is located in LIB 322, (305) 9195545. For additional information, visit the Division of Human Resources website at: http://hr.fiu.edu.

## EQUAL OPPORTUNITY PROGRAM AND DIVERSITY (EOPD)

Florida International University is committed to equal opportunity and diversity for all students, faculty, staff, visitors and applicants for employment. EOPD is responsible for the development, implementation and monitoring of diversity, equity and affirmative action programs, policies and procedures to ensure equal employment without regard to age, color, disability, marital status, national or ethnic origin, political affiliation, race, religion, sex (including pregnancy), sexual orientation, veteran status or gender information. This is accomplished by various programs, goals and initiatives:

- The University's Affirmative Action Plan for Women and Minorities, and for Individuals with Disabilities and Veterans and the Florida Equity Accountability Plan;
- American with Disabilities Act (ADA)
- Diversity Initiatives
- External Partnerships
- Minority Scholarships
- Position Vacancy Announcements/Hiring Recruitment
- Internal and External investigations
- Training

The office is located on the MMC campus in PC 321, (305) $348-2785$. For additional information, visit the Office of Equal Opportunity Programs and Diversity website at: https://hr.fiu.edu/index.php?name=equal opportunity programs.

## INDIVIDUALS WITH DISABILITIES

The American Disabilities Act (ADA) provides that no qualified individual with a disability shall be denied access to or participation in programs, services, and activities at

Florida International University. This act applies to all aspects of campus activities, including employment, student programming and services. Students seeking accommodations must register with the Disability Resource Center (DRC) at drc@fiu.edu or (305) 3483532 (MMC) or (305) 919-5345 (BBC).

Filing a Complaint: It is the policy and practice of Florida International University to comply fully with the requirements of the Americans With Disabilities Act of 1990 (ADA), Section 504 of the Rehabilitation Act and all other federal and State laws and regulations prohibiting discrimination on the basis of disability. Complaints of disability discrimination, harassment, or retaliation must be filed with the Office of Equal Opportunity Programs and Diversity (EOPD) within 120 calendar days of the incident(s). EOPD is responsible for investigating discrimination and/or harassment complaints/allegations.

If you wish to learn more about your ADA rights, the University's policies against discrimination and sexual harassment as well as the process for filing a formal complaint contact the Office of Equal Opportunity Programs and Diversity in PC 321; (305) 348-2785 or on the EOPD website at the following link: https://hr.fiu.edu/index.php?name=equal opportunity programs.

## SEXUAL AND UNLAWFUL HARASSMENT POLICY

All members of the University Community are entitled to study and work in an environment free of discrimination and harassment. Florida International University's equal opportunity policy prohibits discrimination against students and employees on the basis of their race, color, creed, age, disability, sex (including sexual harassment), religion, marital status, national origin, or sexual orientation.

Sexual harassment is unlawful under Title IX of the 1972 Education Amendments, Title VII of the Civil Rights Act of 1964, and the Florida Civil Rights Act. As a matter of University policy, sexual or other unlawful harassment occurring in the course of any University activity, whether on or off campus is prohibited.

Harassment on the basis of race, color, creed, age, disability, sex (including sexual harassment), religion, marital status, national origin, or sexual orientation, or any other protected status under federal, state or local law, ordinance or regulation applicable to the University, is a violation of FIU's policy.

Any such harassment of any individual in the course of any University-administered program, job or activity is prohibited and shall not be tolerated. The University shall take prompt and effective corrective action to address unlawful harassment, including, where appropriate, dismissal or expulsion. The policy explicitly applies to University students, faculty, staff, administrators, independent contractors and all other individuals engaged in University activities. Individuals who know of harassment, or believe that they have been harassed in violation of this policy, are encouraged to utilize the University complaint procedures.

FIU takes all matters of Harassment including Sexual Harassment, Sexual Assault and Sexual Violence seriously. In accordance with Title IX regulations, the University has designated Shirlyon McWhorter, Director of Equal Opportunity Programs \& Diversity, as the

University's Title IX Coordinator responsible for overseeing FIU's Title IX compliance effort. Kristen Kawczynski, Director of Student Conduct \& Conflict Resolution, (students) and Julie Berg, Sr. Associate Athletic Director (Athletics) are designated as FIU's Title IX Deputy Coordinators.

Reporting Harassment: Students, faculty, staff, visitors, independent contractors and all other individuals engaged in University activities are encouraged to report any conduct of which they have direct knowledge and which they in good faith believe constitutes harassment in violation of this policy. Managers have a legal duty to report any conduct of which they have direct knowledge, and which they in good faith believe constitutes harassment in violation of this policy. If you have concerns or need to report an incident of sexual misconduct, please contact Shirlyon McWhorter, Title IX Coordinator, at (305) 348-2785 or smcwhort@fiu.edu, or Kristen Kawczynski at kristen.kawczynski@fiu.edu and Julie Berg at bergi@fiu.edu.

Retaliation Is Prohibited: An individual's good-faith filing of or pursuing a complaint under this policy or otherwise reporting, complaining, assisting or cooperating in good faith with a complaint of harassment shall not be the basis for any adverse University decision regarding the student, employment or other status of any student, faculty member, staff member, administrator, independent contractor or other individual engaged in University activities. Such retaliation is forbidden by this policy.

Confidentiality: Every reasonable effort shall be made to protect the privacy of the complainant, the accused, and witnesses in the investigation and resolution process, subject to the need to conduct a full and impartial investigation, remedy violations, monitor compliance, and administer this policy.

Any employee, applicant, or student who believes that he or she may be a victim of unlawful discrimination may file a complaint with the Office of Equal Opportunity Programs and Diversity, PC 321 Modesto A. Maidique Campus, (305) 348-2785.

## UNIVERSITY POLICE DEPARTMENT

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (Clery Act)
All postsecondary institutions, both public and private, that participate in federal Title IV student aid programs are required to comply with the Clery Act regulations. Although Clery Act compliance is an institutional responsibility, full compliance is a campus wide effort, and concerns all members of the Community. Policy statements must be developed and crime reports must be collected from a wide variety of campus security authorities.
These authorities include, but are not limited to Police; Non-police security staff responsible for monitoring campus property; individuals and offices to which crimes should be reported; and Officials of the University with significant responsibility for student and campus activities.

- The University Police Department publishes an annual Campus Security Report every year by October 1st containing three years of campus crime statistics and specific campus security information including university policy statements.
- Disclose crime statistics for the FIU campuses and areas immediately adjacent to the campus and certain non-campus facilities and other remote university properties. The statistics must be gathered from police or security, local law enforcement and from other university officials such as deans, directors and department heads, who have significant responsibility for student and campus activities. The crime statistics may be found on the University Police website listed below.
- Provide "timely warning" notices of specific crimes that occurred on campus, or within the jurisdiction of the University police (or those reported to the police in areas adjacent to the campuses of FIU).
- The University Police Department is responsible for preparing and distributing the Campus Security Report. The University Police Department works with local police departments and all university departments to compile the information contained in the annual report.
The University Police Department encourages the FIU community to pick up a copy of the Campus Security Report as a guide for safe practices on and off campus. You may obtain a copy at the University Police Department.

The Campus Security Report is also available electronically on the University Police website (http://police.fiu.edu).
(U.S. Department of Education, 2011)

## INTERCOLLEGIATE ATHLETICS

FIU Athletics has been a program of tremendous growth since its inception 40 years ago. FIU is a member of the National Collegiate Athletic Association (NCAA), and the entering the fourth year in Conference USA for 17 men's and women's athletic programs. Conference USA currently does not sponsor a championship in the new sport of beach volleyball. FIU continues to elevate the athletics program and has won four Conference USA Championships between 2015-2016 with back-2-back championships in Women's Swimming \& Diving, a championship in Baseball and Men's Soccer. Sports programs and services in Intercollegiate Athletics provide an opportunity for student-athletes to develop their athletic skills and leadership abilities in an educational setting. Much emphasis is placed on the student as a studentathlete to ensure intellectual, emotional and social wellbeing.

## Athletics Team Membership

Several of the FIU Athletic teams have won conference championships in recent seasons including women's swimming \& diving, golf, baseball, and men's soccer while many other student-athletes have garnered accolades across the sport programs. FIU's intercollegiate sports programs for women include basketball, volleyball, soccer, golf, tennis, track, softball, cross-country, swimming/diving, and added the emerging sport of beach volleyball which began competition in the spring of 2013. Men's sports include basketball, football, soccer, baseball, track, and cross-country.

## Athletic Facilities

The Athletic Department utilizes eight facilities that serve as the sites for athletic, educational, and recreational activities.

Phase I of Ocean Bank Field at FIU Stadium was opened in Fall 2008. The stadium features over 20,000 permanent seats, 1,400 club seats, an upper concourse and 19 full service luxury suites. In addition to the suites the stadium features a 6,500 sq. ft. Stadium Club, which is a multi-purpose banquet hall that can be used for various events such as weddings, banquets, conferences and pre-game parties. The stadium is the home of our intercollegiate football program. In 2013 the north concourse and seating was added finishing off the lower bowl of the stadium.

Located in the west end zone bleachers of Ocean Bank Field at Football Stadium is the R. Kirk Landon Field House. The R. Kirk Landon Field House is a 55,000 sq ft facility that houses the FIU intercollegiate football team, coaches, and weight training facility and ticket office staff. The University Credit Union Box Office is located at the west entrance to the field house and services all FIU sports. It also houses a $12,500 \mathrm{sq} \mathrm{ft}$ weight room that accommodates all FIU intercollegiate student-athletes.

The FIU Arena is home to our intercollegiate men's and women's basketball teams as well as our women's volleyball team. It is a multi-purpose facility with a seating capacity for 5,150 and is the venue for our convocation and graduation ceremonies. The main floor can hold four volleyball courts and two basketball courts. The two auxiliary gyms can each hold one basketball court or a volleyball court. Also housed in the arena are seven classrooms and eight locker rooms. The new expanded entrance to the FIU Arena added 11,000 square feet with new bathroom facilities, box office, meeting rooms, elevators, and concession area. In 2015 new seating was installed along with a brand new state of the art flooring system.

The Baseball Stadium is the home to our intercollegiate baseball team. The stadium has a seating capacity of 2,200 , and offers a luxury suite with a capacity of 20 overlooking the field. The Baseball Stadium also has three covered batting cages located just outside the left field fence.

The FIU Soccer Stadium is the home of our intercollegiate men's and women's soccer programs. This lighted soccer stadium seats 1,500 and the dimensions of the field span 120 yards in length by 70 yards in width.

The FIU Tennis Center has twelve lighted courts and is home to the women's tennis program. Six courts are open for daily recreational play.

The FIU Softball Stadium houses our intercollegiate softball program and our new elevated grandstands completed in 2014 seats 500. Adjacent to the Felsberg Field are three covered batting cages, and three bullpen areas.

The FIU Beach Volleyball Courts were completed in 2012 and are home to our top 5 nationally ranked beach volleyball program.

FIU students are admitted to all regular season intercollegiate athletic home games free of charge. Presentation of a valid university identification card is required.

For additional information visit the athletic department's website at fiusports.com or call the University Credit Union Box office at 348-4263 (FIU-GAME).

## STUDENT ATHLETE ACADEMIC CENTER

Under the leadership of Academic Affairs, the Student Athlete Academic Center provides a range of academic support services for student athletes-including advising, tutoring, and monitoring of academic progress. The Center is located west of the FIU Arena, at the Modesto A. Maidique Campus, and has hours of operation to meet the needs of the full-time student athlete. The Center is equipped with a computer laboratory, study carrels, and classrooms. It is staffed with advisors, tutors, and learning specialists. The unit works in conjunction with various university academic departments, as well as with other university support units to ensure the academic success of athletes. For information call (305) 348-6412.

## INTERNATIONAL STUDENT AND SCHOLAR SERVICES

The International Student and Scholar Services (ISSS) office provides assistance to international students, faculty, and researchers in non-immigrant status ( $F$ or J visas). The staff provides advising services on immigration, cultural personal, social, and financial concerns at both the Modesto A. Maidique (MMC) and Biscayne Bay Campus (BBC).

ISSS ensures institutional compliance with the federal agency requirements for the Department of Homeland Security (DHS) in reporting and tracking our international students.

In addition, the department also serves as a liaison to academic and administrative departments throughout the University.

All new and/or international transfer students MUST attend a MANDATORY orientation program before the start of their first semester and MUST report to the ISSS office within the first week of the start of classes. The ISSS also offers social and cultural programs to assist students in adapting more effectively to the University community and to living in Miami. An active International Student Club on each campus collaborates with the department in organizing various social activities. Club programs enable students to participate in the international dimension of the University and provide opportunities for involvement in the great Miami community.
ISSS is located in the Student Academic Success Center (SASC), Room 230, Modesto A. Maidique Campus, (305) 348-2421; and WUC 363, Biscayne Bay Campus, (305) 919-5813.
For additional information visit our website at: https://globalaffairs.fiu.edu/isssl.

## OFFICE OF STUDY ABROAD

The Office of Study Abroad provides students with numerous opportunities to earn academic credit while traveling outside of the United States either led by a faculty member on the FIU study abroad programs or independently in the International Student Exchange
program. Duration varies from a few weeks to a semester or even an academic year abroad.

Students participating in the ISE Program will pay FIU tuition and fees and, with pre-approval from their department, will receive transfer credit for the courses taken abroad. Grades earned on the ISE programs will not be averaged into the FIU GPA. In order to be eligible for the ISE Program, students must be in good academic standing with a minimum 3.0 GPA.

FIU Study Abroad programs are typically offered during the summer, although some programs are offered during the fall, Spring and Winter session terms. The programs are designed and led by FIU faculty. Students participating in these programs will pay FIU tuition and fees in addition to a program fee for the cost of the program abroad. Grades earned on these programs will be averaged into the FIU GPA as these are FIU credit-bearing courses.

The Office of Study Abroad will also assist you in preparing for an academic credit-bearing internship abroad, and direct enrollment at accredited foreign institutions and applying for study abroad scholarships, specifically the Boren fellowship and the US Fulbright student program.

For more information about studying abroad, please contact the Office of Study Abroad, located at the Modesto A. Maidique Campus, PC 113, at: (305) 348-1913 or email us at edabroad@fiu.edu; http://studyabroad.fiu.edul.

## STUDENT AFFAIRS

The Division of Student Affairs seeks to enhance the academic mission of the University by promoting a vast array of educational, social, and cultural opportunities and programs. We believe that a student's education takes place both inside and outside the classroom. We aim to provide an environment that supports the growth and development of our students by catering to their social, intellectual, emotional, and spiritual needs. From orientation to job interview skills, volunteer opportunities to multicultural programs, health promotion to residential life, Student Affairs is here to help you make the most of your university experience.

## CAMPUS LIFE

The Department of Campus Life provides a variety of programs and services to students and the University community. Student's academic learning and success is enhanced through their active participation in the cocurricular opportunities offered in areas of leadership development, communication and organizational skills, service, event planning and evaluation techniques. In addition to many already successful programs that are offered, Campus Life collaborates with other departments to coordinate programs and events.

The Department of Campus Life includes the Student Government Association, Black Student Union, Council for Student Organizations (MMC), Student Organizations Council (BBC), Student Programming Council, Sorority and Fraternity Life, Multifaith Council, Homecoming Council, and Panther Power (BBC).
Location: GC 2240, Modesto A. Maidique Campus, (305) 348-2138; WUC 141, Biscayne Bay Campus, (305) 9195804.

## CAREER AND TALENT DEVELOPMENT

The centralized Career and Talent Development (CTD) office assists registered students at all university locations with career plans and employment needs across all academic disciplines and with all types of employers. CTD also works closely with the specialized CTD teams that are located in the School of Hospitality and Tourism Management, College of Business, the Nicole Wertheim College of Nursing and Health Sciences, and the College of Law. CTD's high-tech and high-touch philosophy offers 24-7 services plus individualized attention through the walk-in program and one-on-one appointments.

CTD encourages students to register with the office immediately after enrolling in classes---whether as a transfer, or a graduate student. The office can help you identify a major, find an internship, or locate a career that is right for you. Get involved with Career and Talent Development. Our programs and services include:

- CAREER DEVELOPMENT AND MANAGEMENT This area offers career assessments, individual student counseling appointments, career development workshops in a variety of topics, to assist in identifying your next educational and/or career path.
- INTERNSHIPS - We assist students in identifying and securing practical experience in their chosen major. Internship opportunities could include part-time as well as full-time. Internships often provide a salary and/or academic credit with local, national, or international organizations. These experiences have been proven to significantly increase the possibility of gaining full-time career employment at time of graduation.
- EMPLOYMENT UPON GRADUATION - Students are encouraged to become fully registered with CTD, this allows you to take full advantage of the Practice Interview Program, Resume Referral Service, and Online Job Vacancies. You will also receive regular emails about networking opportunities and job fairs.
CTD also provides specialized programs and workshops like dining etiquette lunches/dinners, salary negotiating, interviewing effectively, and how to network. Other activities include resume critiques, internship and career fairs, and practice interviews.
Location: SASC 305, Modesto A. Maidique Campus, (305) 348-2423; WUC 225, Biscayne Bay Campus, (305) 9195770; EC 2780, Engineering, (305) 348-1281.
Web site: http://career.fiu.edu.


## CENTER FOR LEADERSHIP AND SERVICE

The Center for Leadership and Service (CLS) provides students with developmental and experiential opportunities that foster leadership and community engagement, grounded in values and moral purpose. Through leadership education, service learning, advocacy, and volunteerism, students will become active global citizens on campus, in the community, and in the workplace.

Leadership education is both curricular (for credit) and co-curricular (non-credit). PAD 3431 Exploring Leadership is a three-credit introductory leadership course open to all students. SOW 4932 Service Learning examines social issues and develops a response through a service project.

These courses are part of an academic certificate in Leadership Studies offered through Public Administration. Non-credit leadership development programs range from one-hour skill building workshops, to semester-based programs (Academy of Leaders), to yearlong living/learning communities on campus. All of these programs are interactive and experiential in nature and are offered at a variety of times to accommodate our diverse student population. Programs are developmental in nature, so students can begin with an entry-level program and progress to more advanced leadership training while at FIU. Consult the department web site for program descriptions and application details, http://leadserve.fiu.edu.

CLS is also the central office for service development, by offering a clearinghouse and resource center for volunteer activities, service-learning, and advocacy for social issues. Three major service projects are sponsored by CLS. Alternative Break (AB) educates students about social issues and encourages them to make a difference by participating in direct service projects in communities throughout the country and abroad. Dance Marathon is a student-run philanthropy dedicated to raising money for the Children's Miracle Network. Students can serve on the planning committee or participate as dancers in the overnight fundraiser that benefits the Miami Children's Hospital Foundation. Relay for Life is the signature fundraising event for the American Cancer Society. A committee of FIU students organizes the overnight walk and thousands participate in the event to celebrate life and provide hope for those touched by this disease. By taking leadership roles in organizing and implementing these projects, students are able to practice and refine their leadership skills.

Students may also take on leadership roles by providing peer education. The LEAD Team is a student group that promotes and supports leadership development. The LEAD Team participates as program promoters and department ambassadors, group facilitators, classroom presenters, and consultants to student organizations.

The Center for Leadership and Service is dedicated to developing the leadership capacity and service ethic of all students, regardless of position or title.
Location: Student Academic Success Center (SASC), 230, Modesto A. Maidique Campus, (305) 348-6995; WUC 220, Biscayne Bay Campus, (305) 919-5360.
Web site: http://leadserve.fiu.edu.

## CHILDREN'S CREATIVE LEARNING CENTER

Established in 1975, the Children's Creative Learning Center, an Educational Research Center for Child Development, is an AdvancED accredited Program. The Center, a department within the Division of Students Affairs, is located on the Modesto A. Maidique Campus and offers an array of programs for young children.

The program serves children who have achieved bathroom independence between the ages of $2 \frac{1}{2}$ through 5 years, Monday through Friday. Main building hours are from 7:45 a.m. to 6:00 p.m.. Children who may be working toward achieving bathroom independence and are between the ages 2 to $2 \frac{1}{2}$ years are eligible for the

Center's Toddler program, housed in the Graham Center, Monday through Friday, from 8:30 a.m. to 5:30 p.m.

The Center participates in the Florida Voluntary PreKindergarten (VPK) Program for four-year-old children, and is available within the hours of the full-day program. Step Up For Students Kindergarten Scholarship is available for low-income kindergarten families. The Center is a School Readiness Provider.

Center enrollment priority is given to children of FIU students. To request an admission form, stop by the Center or call (305) 348-2143.
Web site: http://children.fiu.edu.

## COUNSELING AND PSYCHOLOGICAL SERVICES

Counseling and Psychological Services (CAPS) provides a variety of services and resources designed to help currently registered FIU students achieve and maintain optimum mental health. Therapists, utilizing the short-term psychotherapy approach, assist students in developing effective coping skills and decision making abilities; developing effective communication skills; and identifying and managing daily stressors. All therapeutic services are confidential and can be utilized either in person or Online, depending on the type of service desired.

## CAPS services include:

- Individual, group, and couples therapy for issues such as: anxiety, depression, stress, grief, and interpersonal and relationship problems
- In-person screenings for substance abuse and eating disorders/body image issues
- Psycho-educational and Neuropsychological testing
- Biofeedback
- Crisis intervention
- Psychiatric services


## CAPS online programs include:

- Workshops for time management, anger management, and stress management
- Screenings for anxiety, depression, eating disorders, and bipolar disorder
- TAO - a therapy assisted online program for anxiety reduction and overcoming depression


## Victim Empowerment Program (VEP)

VEP services are free of charge and confidential
Location/Contact: SHS 270, MMC, (305) 348-2277, BBC by appointment
--VEP services include:

- Assistance in accessing community and University resources, and helping students understand the different options available to them during or after experiencing actual or threatened abuse or violence. This information is also available to students who may want resources for someone they know or for students who have been affected by actual or threatened violence that happened to someone they know.
- Help with issues related to relationship abuse, sexual assault, stalking, assault and battery, homicide of friend or relative, hate crimes, harassment, and re-emergence of problems as a result of a past abuse such as childhood sexual abuse.
--Other VEP services available (according to the wishes of the student) are:
- Safety planning
- Understanding and navigating the criminal justice system
- Assistance in making police reports (if desired)
- Petitioning the court for an injunction for protection ("restraining order")
- Finding legal assistance
- Finding emergency safe shelter
- Communicating with professors and/or other parties as requested by the victim
- Help with university administrative procedures
- Student conduct proceedings
- Escort to appointments, hearings, and medical facilities
- Help with other solutions that may be necessary Additional information and resources available at http://vep.fiu.edu.


## Outreach Programming

Throughout the year, the staff at CAPS participates in campus wide outreach activities designed to increase student awareness about mental health and services provided at the center. In addition, CAPS sponsors a series of workshops to enhance students' personal and academic skills, and collaborates with other departments at FIU by co-sponsoring events. CAPS outreach events are a great way to learn, be entertained, have fun, and make new friends.
Location: SHSC 270, Modesto A. Maidique Campus, (305) 348-CAPS (2277); WUC 320, Biscayne Bay Campus, (305) 919-5305.

## Web site: http://caps.fiu.edu

Victim services may also be accessed through a 24 -hour crisis hotline: (305) 348-3000.
Web site: http://vac.fiu.edu

## DISABILITY RESOURCE CENTER

The Disability Resource Center (DRC) collaborates with students, faculty, staff, and community members to create diverse learning environments that are usable, equitable, inclusive, and sustainable. The DRC provides FIU students with disabilities the necessary support to successfully complete their education and participate in activities available to all students.

For a complete list of our services, visit our website at http://drc.fiu.edu.

If you have a history or diagnosis of disability and plan to utilize academic accommodations, please contact the DRC.
Location: GC 190, Modesto A. Maidique Campus, (305) 348-3532; WUC 131, Biscayne Bay Campus, (305) 9195345.

## Class Attendance

If a qualified student with a disability believes it may not be possible to abide by the attendance policy due to disability related reasons, the student should contact the Disability Resource Center (DRC) at the beginning of the semester, or as soon as possible after the need for an exception arise, to discuss the possibility of the accommodation being initiated.

The DRC may determine that a student's disability entitles the student to an adaptation of the usual course
attendance policy. Adaptations of course attendance policies will be determined on an individual, case-by-case basis. Adaptations of the course attendance policy does not mean that unlimited absences will be permitted. Florida International University's Disability Resource Center attempts to make every effort to accommodate students' disability related academic needs. However, neither the university nor an individual faculty member is required to waive essential or fundamental academic requirements of a course regardless of the nature of a student's disability.

Regardless of the adaptation of the course attendance policy, the student is required to meet all of the academic course requirements and to complete all assignments and examinations. It is the student's responsibility to obtain the material and notes from missed classes. The student will be graded according to the criteria stated in the class syllabus.

Students should note that absences for non-disability related reasons will not be excused by the DRC and are only vetted through the professor of the course. When an attendance accommodation is determined to be reasonable, a DRC Access Consultant will work with the faculty to define the parameters of the accommodation. This does not mean a student may miss class whenever they like.

If a student finds that he or she is not doing well in the class due to extended absences, the student is urged to consider options such as dropping the class, withdrawing from the class or taking an incomplete.

## Training

The DRC and EOP will coordinate the provision of training to academic advisors and faculty members regarding best practices in accommodating students with disabilities.

## STUDENT HEALTH SERVICES

Good health is essential to students' success while at the university and throughout their life. Therefore, Student Health Services (SHS) is committed to providing registered students with free or low-cost quality medical care, which will allow them to thrive both academically and personally. Nationally accredited ambulatory healthcare centers are located at both the Biscayne Bay (BBC) and Modesto A. Maidique (MMC) campuses to serve our students. The care offered has a strong focus on education.

## Clinical Services include:

- Care for common illness and injuries
- Women's health services
- Pre-matriculation and preventive vaccines
- Preventive screenings, EKG's, and Laboratory testing (blood work, urine test, and cultures)
- After hours, holiday, and weekend nurse answer line. MMC (305) 348-2401 opt. 2; BBC (305) 919-5620 opt. 2.


## Pharmacy services at MMC include*:

- Over-the-counter (OTC) products and prescription medications at competitive prices.
- An excellent selection of natural and organic products
- Individualized education and counseling on prescription medications and OTC products
*Although a full-service pharmacy is not available at BBC, pre-packaged medications are dispensed by practitioners at that location.


## Other services

- Assist students with obtaining University-sponsored student health insurance plans to help offset the cost of services not covered under the health fee.

For more information about us and a complete list of our services, visit our website at http://studenthealth.fiu.edu.
Location: Student Health Center 110 and 154 (near the College of Law), Modesto A. Maidique Campus, (305) 348-2401 ext. 2; Health Care Center (HCC) Building located by parking lot 1-C, Biscayne Bay Campus.

## HEALTH PROMOTION SERVICES

Health Promotion Services focuses on developing Healthy Panthers through a variety of primary prevention programs offered by the Healthy Living and Health Compliance service units. The main goal for HPS is to engage students, educate them on healthier lifestyle choices and create on-campus experiences that foster healthy living.

The Healthy Living Program (HLP) strives to make the "healthy choice, the easy choice for students." While participating in the HLP events and services, FIU students learn new ways to eat healthier, manage their stress, manage their sexual health and make healthier lifestyle choices. Services and workshops are offered on a variety of topics such as: stress management, dietitian and nutrition education, sleep hygiene, sexual health, aromatherapy, massage therapy, and acupuncture.

In addition, Health Compliance (HC) services assists students in navigating through the registration process by educating students on pre-matriculation health requirements such as mandatory vaccines and health insurance for international students.

For more information about all the services offered oncampus that assist with personal well-being please visit http:/lstudentaffairs.fiu.edu/wellness/.
Location: Student Health Center 180 (near the College of Law), Modesto A. Maidique Campus, (305) 348-2401 ext. 5, Biscayne Bay Campus; Health Promotion Services (third floor of the Wolfe University Center 307), (305) 348-919-5307.

## HOUSING AND RESIDENTIAL LIFE

The Department of Housing and Residential Life provides on-campus housing for undergraduate students on the Modesto A. Maidique Campus (MMC). Graduate students in need of accommodations near MMC are encouraged to use the off-campus housing website at https://classifieds.fiu.edul. There are several private student housing options located off campus within walking distance to MMC.

On-campus housing is available for students taking classes at the Biscayne Bay Campus (BBC). Bayview is a privately-run residence hall at BBC. More information about Bayview is available at http://www.bayviewfiu.com/.
Location: Housing Office, University Park Towers (UPT) 121, Modesto A. Maidique Campus, (305) 348-4190, Fax: (305) 348-4295; e-mail: housing@fiu.edu.

## MULTICULTURAL PROGRAMS AND SERVICES

The Office of Multicultural Programs and Services (MPAS) provides retention-centered services for our diverse student body. MPAS offers students the personal, academic, social, and cultural support needed for the achievement of their educational goals. Staff members assist with leadership development, counseling, career and academic advisement, financial assistance, tutorials, and serve as liaisons to academic units and student support services. MPAS offers a wide variety of university and community-wide signature events and programs including a month-long MLK Commemorative Celebration, Lavender Graduation, Excellence Awards Program, LGBTQA Mentors Program, Male Mentoring Initiatives, SAGE Scholarship Reception/Silent Auction, Strengths Summit, and the LGBTQA Pride Month activities. Students can also take advantage of the STARS (Students Taking Advantage of Resources Successfully) and VEO (Valuing Each Other) workshop series throughout the academic year. In addition, MPAS offers and monitors various scholarships: Golden Drum, MPAS, MLK and the SAGE scholarships.

Student Support Services (SSS), a federal grant program funded by the U.S. Department of Education, is also under the MPAS umbrella. The program provides retention services to 163 first-generation, low-income students toward the successful completion of their bachelor's degree.

LGBTQA Initiatives also falls under MPAS and provides programs and activities to meet the needs of Lesbian, Gay, Bisexual, Transgender, Queer/Questioning and Ally (LGBTQA) students at FIU. Programs are offered that create awareness, education and visibility on issues relating to sexual orientation, gender identity and gender expression.

Student Organizations advised through MPAS include Alpha Kappa Alpha Sorority, Inc., Black Student Union, Stonewall Pride Alliance, the Gay Straight Alliance (BBC) NAACP, and Black Female Development Circle, Inc. Student Support Services Club, and the Global Indigenous Group.
Location: GC 216, Modesto A. Maidique Campus, (305) 348-2436, WUC 253, Biscayne Bay Campus,(305) 9195817; SSSP, GC 265, Modesto A. Maidique Campus, (305) 348-6424; WUC 253, Biscayne Bay Campus, (305) 919-5817.
Web site: http://mpas.fiu.edu.

## WELLNESS \& RECREATION SERVICES

Recreational sports programs and fitness facilities are available for Florida International University students, faculty, staff and alumni through the Wellness and Recreation Centers at MMC and BBC. Funding for these services is primarily through student fees allocated by the FIU Student Government Association (SGA).

A variety of Intramural (IM) Sports are offered on each campus, including men's, women's and co-rec leagues in sports such as flag football, basketball, volleyball, softball and soccer, and tournaments for sports like racquetball, tennis, and table tennis. Individuals looking for a team are encouraged to register as "free agents". Registration for Intramural Sports can be initiated via the web on the Wellness and Recreation Center website (see URL

## below).

The $50,000+$ square foot MMC Wellness and Recreation Center (WRC) is equipped with state-of-the-art exercise and cardiovascular fitness equipment. In addition to free weights, the center provides resistance and selectorized equipment, steppers, upright and recumbent bicycles, treadmills, rowers, and ellipticals. A basketball gym, locker rooms and a Pro Shop are also available. The WRC is located west of the Student Health Services Complex near Parkview Hall.

Over 80 free PantherFIT group fitness classes per week are scheduled in the WRC. Free classes offered throughout the year include Pilates, Ultimate Abs, and Zumba ${ }^{\circledR}$, as well as specialty classes such as Yoga, Spinning®, and Capoeira. Fitness orientations, body composition evaluations, and personal training are also featured. Non-credit fitness workshops and American Heart Assoc. (AHA)/CPR/AED certifications are offered.

The Wellness and Recreation Center - BBC is located on the first floor of the Wolfe University Center (WUC), room 160. The 70,000 square foot Center (which includes an aquatic facility) features 21 cardiovascular machines with a TV/Video Village, locker rooms and showers, 9 flat screen televisions, a Bose sound system, an array of LifeFitness selectorized, and Hammer Strength fitness equipment. Additionally, there is a state-of-the-art aerobics studio with ballet bars and separate Bose sound system. Cardio vascular group exercise classes include Yoga, Hip Hop Dance, Belly Dancing, Body Sculpting, Dance Aerobics, and Zumba®. Free massages are offered on Mondays. Additionally, the Wellness \& Recreation - BBC offers Kayaking, Night time Kayaking and Stand-up Paddle Board excursions from our Outdoor X program.

The two campuses offer other facilities for recreational use. The Tennis Centers on each campus offer lighted courts, and tennis lessons are available. The BBC Aquatic Center and MMC Panther Hall Pool provide on-campus swimming opportunities. At MMC, students have free access to nearby Tamiami Pool during lap swim hours. At MMC, the FIU Arena houses two indoor racquetball courts available on a reservation basis. A current, activated OneCard ID is required for access to all recreation facilities and programs.

Other areas of interest include adventure recreation programs (offering outdoor experiential education trips in and out-of-state), sport clubs, the Lose It Weight Loss Program, and special events.

Both Wellness and Recreation offices provide student employment opportunities as sports officials, customer service and weight room attendants, recreation facility supervisors, lifeguards, group fitness instructors, personal trainers, and office assistants. MMC is home to the FIU Bike Shop for repair services and retail sales.
Location:
Wellness and Recreation Center - MMC: (305) 348-2575
Wellness and Recreation Center - BBC: (305) 919-5678
WRC - MMC Membership Desk: (305) 348-2951
MMC Panther Hall Pool: (305) 348-1895
BBC Aquatic Center: (305) 919-4549
IM Sports: (305) 348-1054 (MMC), (305) 919-4595 (BBC)
Tennis Center: (305) 348-6327 (MMC), (305) 919-4595 (BBC)
MMC Racquetball reservations: (305) 348-2900
Bike Shop: (305) 348-4880
Web sites: http://recreation.fiu.edu and http://bbcrec.fiu.edu.

## MULTIFAITH COUNCIL

The Multifaith Council serves student groups involved in a variety of activities. Professional representatives from various faiths are available for personal appointments. Individual denominations sponsor campus-wide programs including worship, study groups, social gatherings, and cultural events. Campus Ministry sponsors programs and activities that are non-denominational.
Location: GC 318, Modesto A. Maidique Campus, (305) 348-3902; CM 101, Biscayne Bay Campus, (305) 9195247.

## OFFICE OF THE OMBUDSMAN

The Ombudsman Office acts as an impartial and confidential forum to assist students who have encountered problems or conflicts at the University, particularly problems or concerns not adequately addressed through normal channels. This may include correcting processes or procedures that hinder resolving the issue or are causing an inordinate delay. The Ombudsman may resolve problems through various methods, including investigation, informal mediation, or making referrals to the appropriate university department for review. The Ombudsman should be utilized in situations where all areas of appeal have been exhausted or proven unsuccessful.
Location: GC 219, Modesto A. Maidique Campus, (305) 348-2797 and HL317A, Biscayne Bay Campus, (305) 9195943.

## STUDENT CONDUCT AND CONFLICT RESOLUTION

Student Conduct and Conflict Resolution serves the FIU community by educating members about the Student Code of Conduct and the value of respecting others. Through the student conduct process, we hold students accountable for their behavior in a fair and developmental manner while upholding the rights of the community.

Infringement of an academic nature should be directed to the Vice Provost for Academic Affairs. Complaints that are non-academic should be directed to the Office of Student Conduct and Conflict Resolution.

The Office of Student Conduct and Conflict Resolution:

- Holds students accountable for violations of the Student Code of Conduct by administering the student conduct process.
- Selects and trains the members of the Student Conduct Committee and hearing officers.
- Provides educational programs for faculty, staff, and students regarding the student conduct process; ethics and integrity; conflict resolution; and dealing with disruptive students in the classroom.
- Provides support resources to community member who may be victims of misconduct.
- Provides student conduct record background checks for various agencies (Secret Service, FBI, CIA, State Department, DEA, Federal Marshals, Law Enforcement Agencies, Military, Graduate Schools, Law Schools, Dean Certifications, Florida Bar Examiners).
- Manages admissions clearances: The University reserves the right to review the case of any student
who has been involved in misconduct prior to admission to determine eligibility for admission.
Please refer to the Student Code of Conduct section in the FIU Student Handbook for more information regarding the student conduct process and procedure. To report a possible violation of the Code of Conduct or a Student of Concern, visit the SCCR website at http://conduct.fiu.edu. The Office of Student Conduct and Conflict Resolution is located in GC 311 at the Modesto A. Maidique Campus, (305) 348-3939.
Web site: http://conduct.fiu.edu.


## STUDENT MEDIA

Student media at FIU include The Beacon newspaper, fiusm.com, and WRGP radio.

The Beacon is an editorially independent publication produced by students and distributed free. The purpose of The Beacon is to keep the university community informed about campus news, events and activities; to serve as a forum for opinion and commentary concerning campus related topics; and to protect the interests of the University community and its component parts. It is published Monday and Thursday during the fall and spring terms, except during holiday breaks. It is also published eight times during the summer term. Students can work on the staff in news and features, photography, and/or advertising. No prior experience is required.

WRGP is FIU's radio station located at 88.1, 95.3 (MMC), and 96.9 (BBC) FM. Its programming is an eclectic mix of the latest music on the cutting edge of the alternative scene, FIU sports play-by-play, and news. Programming also includes daily specialty shows that cover the music spectrum of metal to reggae, and in between Caribbean, hip-hop, rap, Latin rock, jazz, and classical mornings. The station operates 24 hours seven days a week. The station provides a means for students to acquire experience in various disciplines related to the broadcast industry, including hands-on experience in a realistic, business-like setting encompassing teamwork and professional standards. Students can work in areas such as broadcasting, business, promotions, and/or engineering. Prior experience is not required.

Fiusm, is a multi-media website that incorporates all of student media. Not only can you read about an event, but you can also listen and watch it with fiusm's streaming video. The website is updated five days a week. Fiusm accepts advertising.
Location: The Beacon, GC 210, Modesto A. Maidique Campus, (305) 348-2709; WUC 220, Biscayne Bay Campus, (305) 919-4722. WRGP, GC 319, Modesto A. Maidique Campus, (305) 348-3071; fiusm.com, GC 210, Modesto A. Maidique Campus.

## UNIVERSITY CENTERS

The University Center on each campus provides vital services to students and the University community. The Graham University Center (GC) at Modesto A. Maidique Campus and the Wolfe University Center (WUC) at Biscayne Bay Campus are the focal points for the University community to meet and interact in an educational and vibrant environment. Staff in the centers coordinate the scheduling of space and assist with the production of student and university sponsored events.

As the hub of University life, these centers house the offices of Student Government Association (SGA); Campus Life; Student Programming Council (SPC); Council of Student Organizations (CSO); Student Organization Council (SOC); and Office of Sorority and Fraternity Life.

## Graham Center

The Graham Center building has offices, retail stores, food outlets, academic classrooms and event venues. The offices that offer student support services are the Office of the Vice President for Student Affairs, Ombudsman Office, Campus Life, Center for Leadership and Service, Disability Resource Center, Multi-faith Council, Office of Multicultural Programs and Services, Office of Orientation and Parent Programs, Student Conduct and Conflict Resolution, Student Media, Upward Bound and Pre-College Programs, and Women's Center. The Beacon student newspaper and the student radio station (WRGP) keep offices and production rooms at the Graham Center.

The Graham Center also offers the following services: event planning, audiovisual/multi-media support, state-of-the-art computer labs, Lost and Found, ATMs, locker rentals, notary public service, vending machines, and Kaplan Test Preparation classes. Additionally, GC offers event facilities such as: meeting rooms, ballrooms, and auditoriums for lectures, banquets, receptions, and weddings. The 23 -classroom wing -- located on the second floor and interconnecting with the Barnes \& Noble café - has a large lounge ideal for individual and group studying. University community can enjoy entertainment and the arts by visiting the Student Art Gallery and Piano Lounge, and the Porter Davis Game Room.

The GC mini-mall offers a variety of food locations: The Fresh Food Company serves breakfast, lunch and dinner in an all-you-care-to-eat style. Other offerings include Chili's Too, Faculty Club, Recharge-U convenience store, Jamba Juice, Pollo Tropical, Subway, Burger King, Almazar, Sushi Maki, Einstein Bros. Bagels, and Bustelo Café. Other retail venues include: Barnes and Noble Bookstore (with Starbucks Café), Santi's Hair and Nail Salon, Golden Touch Haircuts \& Shaves, Panther's Dry Cleaners, Panther TECH store and Ricoh@FIU (Copy Center, packing and shipping).

The administrative offices of the Graham Center are located in GC 1210, at the Modesto A. Maidique Campus, The main office number is (305) 348-2297 and the web site is grahamcenter.fiu.edu.

## Wolfe University Center

The Wolfe University Center (WUC) is located at the heart of FIU's Biscayne Bay Campus. It is home to the 300-seat Mary Ann Wolfe Theater, houses a state-of-theart computer lounge, five large meeting rooms, and a multi-purpose ballroom. A multi-purpose dining and catering facility, the Wellness and Recreation Center, and several comfortable study lounges are also provided in the facility. A recent renovation to Panther Square, the Center's lobby and student programmatic space, creates a high-tech destination on campus where students can study, connect with others and host events.

The Center is also host to the Team Ropes Adventure Challenge (TRAC), one of the most complete and professional team-building training programs in South Florida. TRAC is an experiential education program that focuses on human development and group dynamics. Participants will learn new skills through a series of
adventure-based activities that provide training in leadership, teambuilding development, communication, and problem solving skills.

Center tenants include Student Affairs departments for Disability Resource Center, Multicultural Programs and Services, Career Services, Health Promotion Services, and Counseling and Psychological Services. University support offices include the University Credit Union, the FIU One Card Office/Wells Fargo, Ricoh @ FIU (copy center, packing and shipping), and International Student and Scholar Services. The administrative offices of the Wolfe University Center are located in WUC 325 at Biscayne Bay Campus, (305) 919-5800 and website is http://wuc.fiu.edu.

The Barnes and Noble University Bookstore is located on the first floor at both University Centers.
Location: GC 2200, Modesto A. Maidique Campus, (305) 348-1506; WUC 130, Biscayne Bay Campus, (305) 9195359.

## WOMEN'S CENTER

The Women's Center at FIU provides numerous programs and services to support FIU students in their personal, academic, and professional development. The Women's Center collaborates and coordinates with other university departments and student organizations to meet the needs and enhance the lives of our diverse female population. While our programs and services focus on women, they are open to the entire community and include confidential referrals, leadership, and volunteer opportunities. We educate and advocate for systemic changes that will improve the lives of everyone on campus.

Our curriculum includes the following programs:

- Women in STEM Living Learning Community partnership with Housing \& Residential Life
- Sisterhood Retreat (Women's Empowerment Weekend)
- Women Who Lead Conference
- Workshops and Discussion Series (also available by request)
- National Love Your Body Day events
- International Day for the Elimination of Violence Against Women
- Sexual Assault Awareness Month events including Take Back the Night
- FIU Gender Equity Coalition (FIUGE) student organization
- National Organization for Women (NOW) student organization
- Voices for Planned Parenthood (VOX) student organization
- UN Women (USNC-UN Women) student organization
Location: GC 2200, Modesto A. Maidique Campus, (305) 348-1506; WUC 220, Biscayne Bay Campus, (305) 9195359.

Web site: http://women.fiu.edu.










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Elias Bardawil

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\text { and Diversity } \quad \text { Shirlyon J. McWhorter }
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Compliance and Integrity
Carlos B. Castillo

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Karyn Boston Allen Vann


## Florida's Statewide Course Numbering System

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System (SCNS). This numbering system is used by all public postsecondary institutions in Florida and by participating nonpublic institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions. Students and administrators can use the online SCNS to obtain course descriptions and specific information about course transfer between participating Florida institutions. This information is at the SCNS website at http://scns.fldoe.org.

Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type of institution and discipline field or specialization.

The course prefix and each digit in the course number have a meaning in the SCNS. The listing of prefixes and associated courses is referred to as the "SCNS taxonomy." Descriptions of the content of courses are referred to as "statewide course profiles."

## THE COURSE PREFIX

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or subcategory of knowledge. The prefix is not intended to identify the department in which a course is offered. Rather, the content of a course determines the assigned prefix to identify the course.

## GENERAL RULE FOR COURSE EQUIVALENCIES

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between participating institutions that offer the course, with a few exceptions, as listed below in Exceptions to the General Rule for Equivalency.

For example, a freshman composition skills course is offered by 84 different public and nonpublic postsecondary institutions. Each institution uses "ENC_101" to identify its freshman composition skills course. The level code is the first digit and represents the year in which students normally take the course at a specific institution. In the SCNS taxonomy, "ENC" means "English Composition," the century digit " 1 " represents "Freshman Composition," the decade digit "0" represents "Freshman Composition Skills," and the unit digit "1" represents "Freshman Composition Skills I."

In the sciences and certain other areas, a " C " or " L " after the course number is known as a lab indicator. The " $C$ " represents a combined lecture and laboratory course that meets in the same place at the same time. The "L"
represents a laboratory course or the laboratory part of a course that has the same prefix and course number but meets at a different time or place.

Transfer of any successfully completed course from one participating institution to another is guaranteed in cases where the course to be transferred is equivalent to one offered by the receiving institution. Equivalencies are established by the same prefix and last three digits and comparable faculty credentials at both institutions. For example, ENC 1101 is offered at a community college. The same course is offered at a state university as ENC 2101. A student who has successfully completed ENC 1101 at a Florida College System institution is guaranteed to receive transfer credit for ENC 2101 at the state university if the student transfers. The student cannot be required to take ENC 2101 again since ENC 1101 is equivalent to ENC 2101. Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to the native students. It is the prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed that have not been designated as equivalent. NOTE: Credit generated at institutions on the quarter-term system may not transfer the equivalent number of credits to institutions on the semester-term system. For example, 4.0 quarter hours often transfers as 2.67 semester hours.

## AUTHORITY FOR ACCEPTANCE OF EQUIVALENT COURSES

Section 1007.24(7), Florida Statutes, states:
Any student who transfers among postsecondary institutions that are fully accredited by a regional or national accrediting agency recognized by the United States Department of Education and that participate in the statewide course numbering system shall be awarded credit by the receiving institution for courses satisfactorily completed by the student at the previous institutions. Credit shall be awarded if the courses are judged by the appropriate statewide course numbering system faculty committees representing school districts, public postsecondary educational institutions, and participating nonpublic postsecondary educational institutions to be academically equivalent to courses offered at the receiving institution, including equivalency of faculty credentials, regardless of the public or nonpublic control of the previous institution. The Department of Education shall ensure that credits to be accepted by a receiving institution are generated in courses for which the faculty possess credentials that are comparable to those required by the accrediting association of the receiving institution. The award of credit may be limited to courses that are entered in the statewide course numbering system. Credits awarded pursuant to this subsection shall satisfy institutional requirements on the same basis as credits awarded to native students.

## EXCEPTIONS TO THE GENERAL RULE FOR EQUIVALENCY

Since the initial implementation of the SCNS, specific disciplines or types of courses have been excepted from the guarantee of transfer for equivalent courses. These include courses that must be evaluated individually or courses in which the student must be evaluated for mastery of skill and technique. The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution.
A. Courses not offered by the receiving institution.
B. For courses at non-regionally accredited institutions, courses offered prior to the established transfer date of the course in question.
C. Courses in the _900-999 series are not automatically transferable, and must be evaluated individually. These include such courses as Special Topics, Internships, Apprenticeships, Practica, Study Abroad, Theses and Dissertations.
D. Applied academics for adult education courses.
E. Graduate courses.
F. Internships, apprenticeships, practica, clinical experiences and study abroad courses with numbers other than those ranging from 900-999.
G. Applied courses in the performing arts (Art, Dance, Interior Design, Music, and Theatre) and skills courses in Criminal Justice (academy certificate courses) are not guaranteed as transferable. These courses need evidence of achievement (e.g., portfolio, audition, interview, etc.).

## COURSES AT NONREGIONALLY ACCREDITED INSTITUTIONS

The SCNS makes available on its home page (http:/Iscns.fldoe.org) a report entitled "Courses at Nonregionally Accredited Institutions" that contains a comprehensive listing of all nonpublic institution courses in the SCNS inventory, as well as each course's transfer level and transfer effective date. This report is updated monthly.

Questions about the SCNS and appeals regarding course credit transfer decisions should be directed to Dr. Janie Valdes, Assistant Vice President, Undergraduate Education or the Florida Department of Education, Office of Articulation, 1401 Turlington Building, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling the SCNS office at (850) 245-0427 or at http:/lscns.fldoe.org.
Special Course Directory
In addition to the regular courses listed in the catalog*, special courses may be offered using the State Wide Course Numbering System. The following table provides an inventory of course numbers bv course tvpe.

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\text { Underoraduate } \quad \text { Graduate }
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Doctoral
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## ACADEMIC UNITS

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College of Arts, Sciences and Education
    MMC (305) 348-2864
    BBC (305) 919-5859
    Email: casdean@fiu.edu
    http://cas.fiu.edu
    School of Education and Human Development
    MMC (305) 348-3202
    FIU at I-75 (305) 438-8600
    Email: coeadvis@fiu.edu
    http:/leducation.fiu.edu
    School of Environment and Society
    BBC (305) 919-6000
    BBC Email: seas@fiu.edu
    http://casgroup.fiu.edu/seas/
    School of Integrated Science and Humanity
    MMC (305) 348-4232
    Email: sish@fiu.edu
    http://sish.fiu.edu
College of Business
    MMC (305) 348-2751
    BBC (305) 919-5870
    FIU at I-75 (954) 438-8600
    FIU Downtown on Brickell (305) 779-7957
    Email: online@fiu.edu
    http://business.fiu.edu
    Alvah H. Chapman, Jr. Graduate School of
        Business
            MMC (305) 348-3880
            Email: chapman@fiu.edu
            http://business.fiu.edu
            Hollo School of Real Estate
    MMC (305) 779-7898
    Email: msire@fiu.edu
    http:/lbusiness.fiu.edu/realestate/index.cfm
    School of Accounting
    MMC (305) 348-2581
    BBC (305) 919-5780
    Email: soacct@fiu.edu
    http://business.fiu.edu/soa/index.cfm
College of Communication, Architecture + The Arts
    MMC (305) 348-7500
    Email: carta@fiu.edu
    http://carta.fiu.edu
    School of Communication and Journalism
    BBC (305) 919-5625
    Email: sjmc@fiu.edu
    https:/lsimc.fiu.edu
College of Engineering and Computing
    MMC (305) 348-2522
    FIU at I-75 (954) 438-8600
    Email: grad eng@fiu.edu
    http://www.cec.fiu.edu
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School of Computing and Information Sciences
MMC (305) 348-2744
BBC (305) 919-5859
Email: grad-info@cis.fiu.edu
http://www.cis.fiu.edu
OHL School of Construction
MMC (305) 348-3172
Email: cminfo@eng.fiu
http://ohlsc.fiu.edu
College of Law
MMC (305) 348-8006
Email: lawadmit@fiu.edu
https://law.fiu.edul
Herbert Wertheim College of Medicine
MMC (305) 348-0644
Email: med.admissions@fiu.edu
http://medicine.fiu.edu
Nicole Wertheim College of Nursing and Health

## Sciences

MMC (305) 348-7703
BBC (305) 919-4421
http://cnhs.fiu.edu
Robert Stempel College of Public Health and Social Work

MMC (305) 348-7777
Email: ph@fiu.edu
http:/Istempel.fiu.edul
School of Social Work
MMC (305) 348-5880
http://stempel.fiu.edu/academics/social-
work/index.html
Chaplin School of Hospitality and Tourism
Management
BBC (305) 919-4500
Email: hospitality@fiu.edu
http://hospitality.fiu.edu
Steven J. Green School of International and Public Affairs

MMC (305) 348-7266
FIU at I-75 (954) 438-8601
Email: international@fiu.edu
http://sipa.fiu.edu
University Graduate School
MMC (305) 348-2455
Email: ugs@fiu.edu
http://gradschool.fiu.edu

## University Libraries

MMC (305) 348-2451
BBC (305) 919-5718
http://library.fiu.edu
Museums
Jewish Museum of Florida, Miami Beach
(305) 672-5044
http:/ljmof.fiu.edu

The Patricia \& Phillip Frost Art Museum
MMC (305) 348-2890
Email: artinfo@fiu.edu
http://thefrost.fiu.edu
The Wolfsonian, Miami Beach (305) 531-1001

Email: info@thewolf.fiu.edu
http://www.wolfsonian.org/

## CENTERS AND INSTITUTES

Applied Research Center
http://www.arc.fiu.edu
Bayan Research Institute of Dissemination, Grants and Evaluation
http://www.fiu.edu
Biomedical Sciences Institute
http://biomolecular.fiu.edul
Center for Advanced Technology and Education http://www.cate.fiu.edul

Center for Children and Families
http://casgroup.fiu.edu/ccf/
Center for Diversity in Engineering and Computing http://cec.fiu.edu/cdecl

Center for Professionalism and Ethics
https://law.fiu.edu/cpe
Center for Internet Augmented Research and Assessment
http://www.ciara.fiu.edu
Center for Labor Research and Studies
http://labor.fiu.edu
Center for Leadership
http://www.lead.fiu.edu/
Center for the Administration of Justice
http://caj.fiu.edul
Center for the Humanities in an Urban Environment http://humanities.fiu.edu

Center for the Study of Matter at Extreme Conditions http://cesmec.fiu.edul

Center for Research on U.S. Latino HIVIAIDS and Drug Abuse (CRUSADA)
http://crusada.fiu.edu/index.cfm
Cuban Research Institute
http://cri.fiu.edul
Center for Women's and Gender Studies
http://womenstudies.fiu.edul
Cyber Infrastructure Education and Research for Trust and Assurance
http://cyber.cs.fiu.edu/
Engineering Manufacturing Center
http://www.eng.fiu.edu/emc/
English Language Institute
http://www.eli.fiu.edul
Eugenio Pino Global Entrepreneurship Center http://business.fiu.edu/entrepreneurship/pino.cfm

Florida - Caribbean Institute
http://lacc.fiu.edu/academics/financial/
Florida Extreme Events Institute
http://www.fiu.edu
Florida - Mexico Institute http://lacc.fiu.edu/academics/financial/

Florida - STEM Transformation Institute http:/Istem.fiu.edu

High Performance Database Research Center http://hpdrc.cs.fiu.edu

Institute for Hospitality \& Tourism Education \&
Research
http://ihter.fiu.edu
Institute for Public Management and Community
Services
http://www.fiu.edu/-ipmcs/
Institute of Neurolmmune Pharmacology http://medicine.fiu.edu/about-us/departments/basic-
sciences/immunology/inip/index.html
Institute of Water and Environment http://inwe.fiu.edu

International Center for Tropical Botany http://ictb.fiu.edu

International Forensic Research Institute http://lifri.fiu.edu

International Hurricane Research Center http://www.ihrc.fiu.edul

International Media Center
http://imcmiami.com/
Jack D. Gordon Institute for Public Policy \& Citizenship Studies
http://www.fiu.edu/~ippes/
Jerome Bain Real Estate Institute
http://business.fiu.edu/Jerome-bain/index.cfm
Kimberly Green Latin American and Caribbean Center
http://lacc.fiu.edul
Lehman Center for Transportation Research
http://Ictr.eng.fiu.edu
Metropolitan Center
http://metropolitan.fiu.edu/
Ryder Center for Supply Chain Management http://business.fiu.edu/ryder/index.cfm

Sea Level Solutions Center
http://www.fiu.edu

## Southeast Environmental Research Center

 http://sercweb.fiu.edulTelecommunications and Information Technology
Institute
http://www.it2.fiu.edul


## SELECT SUPPORT SERVICES

ACADEMIC INTEGRITY
http://undergrad.fiu.edu/academicintegritylindex.html
MMC (305) 348-1892
ADMISSIONS-GRADUATE
http://gradschool.fiu.edu
MMC (305) 348-7442
ATHLETICS
http://www.fiusports.com
MMC (305) 348-2756
BOOKSTORE
http://fiu.bkstore.com/
MMC (305) 348-2691
BBC (305) 919-5580
BURSAR I CASHIERS
http://finance.fiu.edu/controller/QL_Student.htmI
MMC (305) 348-2126
BBC (305) 919-5540
CAMPUS LIFE http://www.fiu.edu/~camplifel
MMC (305) 348-2138
BBC (305) 919-5804
CAMPUS RECREATION
http://recreation.fiu.edu/
MMC (305) 348-2951
BBC (305) 919-5678
CAREER SERVICES
http://www.fiu.edul~career/
MMC (305) 348-2423
BBC (305) 919-5770
CENTER FOR ACADEMIC SUCCESS
UNIVERSITY LEARNING CENTER
http://learningcenter.fiu.edu
MMC (305) 348-2441
BBC (305) 919-5927
CENTER FOR EXCELLENCE IN WRITING
http://casgroup.fiu.edu/writingcenter/
MMC (305) 348-6634
BBC (305) 919-4036
COUNSELING AND PSYCHOLOGICAL SERVICES
CENTER
http://www2.fiu.edu/~psychserl
MMC (305) 348-2277
BBC (305) 919-5305
FINANCIAL AID http://finaid.fiu.edu
MMC (305) 348-7272
BBC (305) 919-5750

GRADUATION
http://registrar.fiu.edu/index.php?id=85
MMC (305) 348-2341
BBC (305) 919-5750
HOUSING
http://www.housing.fiu.edul
MMC (305) 348-4190
BBC (305) 919-5587
JEWISH MUSEUM OF FLORIDA - FIU http:/limof.fiu.edul (305) 672-5044

LIBRARY
http://library.fiu.edul
MMC (305) 348-2461
BBC (305) 919-5718
FIU at I-75 (954) 438-8600
OFFICE OF RESEARCH AND ECONOMIC
DEVELOPMENT
http://research.fiu.edu/index.htm
MMC (305) 348-2494
ONESTOP ENROLLMENT SERVICES http://onestop.fiu.edu concierge@fiu.edu
MMC (305) 348-7000
PARKING AND TRAFFIC
http:/Iparking.fiu.edu/
MMC (305) 348-3615
BBC (305) 919-5558
PATRICIA AND PHILLIP FROST ART MUSEUM http://thefrost.fiu.edu
MMC (305) 348-2890
PUBLIC SAFETY http://police.fiu.edul MMC (305) 348-2623 BBC (305) 919-5556

REGISTRAR http://onestop.fiu.edul MMC (305) 348-7000 BBC (305) 919-5750
FIU at I-75 (954) 438-8600
RICOH@FIU (copy center, packing, and shipping) https://shop.fiu.edu/retail-services/ricoh/ MMC (305) 348-7426
BBC (305) 919-4444
STUDENT GOVERNMENT ASSOCIATION http://www.fiu.edu/~sga/
MMC (305) 348-2121
BBC (305) 919-5680
STUDENT HEALTH SERVICES
http://www2.fiu.edu/~health/
MMC (305) 348-2401
BBC (305) 919-5620

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UNIVERSITY CREDIT UNION
    http://www.ucumiami.org/
    MMC (786) 425-5000
    BBC (786) 425-5000
UNIVERSITY TESTING CENTER
    http://testing.fiu.edu
    MMC (305) 348-2840
    BBC (305) 919-5927
VETERAN AND MILITARY OFFICE
    http://onestop.fiu.edu/additional-
    information/veteransl
    MMC (305) 348-2838
VICTIM EMPOWERMENT PROGRAM
    http://studentaffairs.fiu.edu/wellness/victim-
    empowerment-programl
    MMC (305) 348-3000
WOLFSONIAN MUSEUM- FIU
    http:/lwww.wolfsonian.org
    1001 Washington Avenue
    Miami Beach, Florida 33139
    (305) 531-1001
WOMEN'S CENTER
    http:/lstudentaffairs.fiu.edu/get-involved/womens-
    centerl
    MMC (305) 348-1506
    BBC (305) 919-5359
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# College of Arts, Sciences and Education 

Dean<br>Associate Dean, Faculty<br>Associate Dean, Undergraduate Studies<br>Associate Dean, Graduate Studies Associate Dean, Research and Engagement<br>Michael R. Heithaus<br>William T. Anderson<br>Maricel Cigales<br>Maureen A. Donnelly<br>Associate Dean, Associate Provost,<br>Office to Advance Women, Equity \& Diversity<br>Assistant Dean, Director of Liberal Studies<br>Michael Maunder<br>Interim Executive Director and Associate<br>Dean, School of Environment, Arts, and Society Evelyn Gaiser<br>Interim Executive Director and Associate<br>Dean, School of Integrated Science<br>and Humanity<br>Walter Van Hamme<br>Interim Executive Director, School of Education and Human<br>Development Laura Dinehart

The College of Arts, Sciences and Education furthers the study of fundamental intellectual disciplines and serves the University's other colleges and schools. The College grants Bachelor's, Master's, and Ph.D. degrees. In addition, the College serves students who need to complete general education and core curriculum requirements and other requirements in order to enroll in specific disciplines or professional programs.

As the heart of a leading public research university, the College of Arts, Sciences and Education play a vital role in the intellectual, cultural and civic life of local, national and international communities. The College provides an educational foundation that prepares FIU students to be successful and engaged citizens in a global society. The College generates extensive scholarship that yields new knowledge, shapes how we teach and learn, and contributes to a more complete understanding of the world.

The College is composed of 8 departments and several interdisciplinary programs.

## Graduate Programs

The College has academic programs leading to Master's degrees in biology, chemistry, creative writing, English, environmental studies, environmental and urban systems (offered jointly with the College of Engineering and Computing), environmental policy and management, forensic science, geosciences, liberal studies, linguistics, mathematical sciences, physics, psychology, and statistics.

The College offers academic programs leading to the Ph.D. in biochemistry, biology, chemistry, earth systems science, physics, and psychology.

## Graduate Admission Requirements

The College's admission requirements as listed below are in addition to the University's graduate admission requirements. These are minimal requirements. Please
consult the specific graduate program, which may have different requirements.

1. A 3.0 or higher GPA during the last two years as an upper division student is required for a master's degree. A 3.0 or higher GPA and submission of an official GRE score are required for the Ph.D. degree. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the IBT TOEFL or 6.3 overall on the IELTS is required.
2. The GRE or GPA stated above are only minimum requirements. All applications are reviewed by each program's Graduate Studies Admission Committee, which makes the final admissions recommendations. Since admission to the program is competitive, the committee's requirements are normally higher than the minimum aforementioned standards.

Note: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Education, or Board of Governors, and the Florida Legislature. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations.

## Interdisciplinary Courses

The College of Arts, Sciences and Education has several interdisciplinary programs which are not based in a specific academic department. The courses offered by these programs, therefore, are not found in the departmental listings in the Catalogs, but are included here.
IDS 5176 Experimental Arts (1-3). The study and creation of Experimental Artworks, involving media/sound, movement, visual art, etc. Students from different disciplines in the Arts have the opportunity to collaborate together and create new works. Prerequisite: Permission of the instructor.
ISS 5166 Sustainable Communities Seminar (3). Explores theories and aspects of sustainable communities, and considers the concept in comparativehistorical, local-global, and critical perspective. Prerequisite: Permission of the instructor.
ISS 5237 Latin American and Caribbean Cultural Expressions (3). This interdisciplinary course develops an interdisciplinary approach to the study of national, cultural, and racial identities, as expressed in cultural productions of the Latin America and the Caribbean.
ISS 5238 The Imaged Body: The Case of the Americas (3). With a team-taught interdisciplinary approach this course explores how identity, power and hierarchy are invoked and represented through the human body and body movement in the region of the Americas.

# School of Education and Human Development 

Dean<br>Delia C. Garcia<br>Associate Dean, Graduate Studies Thomas G. Reio, Jr. Associate Dean, Academic<br>Affairs and Accreditation<br>Kyle Perkins<br>Visiting Assistant Dean, Community<br>Engagement<br>Deborah J. Hasson Ricardo del Valle<br>Assistant Director, Enrollment Management and<br>Special Projects Kaitlyn Schmidbauer Pereyra<br>Director, Advising Center Maria Rosado<br>Director, Clinical Experiences<br>Judith Cohen<br>Director, Technology<br>Pierre Schoepp<br>Kristin Bird<br>Senior Development Officer<br>Assistant Director, Marketing and Public<br>Relations<br>Chrystian Tejedor

The School of Education and Human Development at Florida International University is one in which candidates, faculty, and staff embrace the shared experiences of a diverse, international, professional-learning community. The School, therefore, strives to facilitate diverse learning environments where knowledge becomes the means to foster goal attainment for all those involved in the learning process. This process necessitates the highest ethical standards, while emphasizing inquiry as the means-ends connection to enhancing reflective intelligence in a changing social, political, cultural and technological world.

The School of Education and Human Development is charged to prepare professionals who have the knowledge, abilities, and dispositions to facilitate and enhance learning and development within diverse settings. Consequently, the school promotes and facilitates the discovery, development, documentation, assessment, and dissemination of knowledge related to teaching and learning by developing professional partnerships in the larger community that foster significant educational, social, economic and political change. Our mission supports:

- Programs that reflect curricula that reflect sound theory and best practice.
- Highly qualified and diverse students and graduates.
- Highly qualified and diverse faculty active in teaching, research and service.
- Effective and ethical governance and organizational structure within an environment of open communication among faculty, administrators, staff, students and community.
- Collaborative and mutually beneficial partnerships with schools and other organizations.
- Visibility and impact at local, state, national and international levels.
- Continuous improvement of the School.

The School offers instructional programs at the undergraduate and graduate levels, engages in research and program development activities, and provides field services to the educational community. The conceptual framework guiding education curricula and programs in the School is grounded in three core outcomes central to the vision faculty have of professional educators
graduating from the School's programs: stewards of the discipline, reflective inquirers, and mindful educators The School, housed in the Sanford and Dolores Ziff Education Building (ZEB) at Florida International UniversityModesto A. Maidique Campus, is fully accredited by the National Council for the Accreditation of Teacher Education, the Florida Department of Education, and the State University System.

To support its mission, the School is organized into two separate but related departments:

- Leadership and Professional Studies
- Teaching and Learning

Applicants to the School's programs should carefully examine the choices of major concentrations and program objectives. Because there are occasional revisions to the School of Education and Human Development's curriculum during the academic year, some curriculum changes may not be reflected in the current catalog. Prospective students are advised to contact appropriate advisors to ask for current information regarding specific programs of interest.

Specific program advisement is available by prearranged personal appointment with advisors at all locations. The School of Education and Human Development Office of Graduate Studies (OGS) will direct students to the correct advisor. OGS can be reached by calling (305) 348-2723. Additional information is available on the FIU website at www.fiu.edu or at the School of Education and Human Development website at http://education.fiu.edu or at OGS website at http://education.fiu.edu/ogsl. Once a SOEHM doctoral student is admitted, he/she must log into the SOEHM's online doctoral portal (in Moodle) that provides vital information to SOEHM doctoral students and their advisors (e.g., required forms, candidacy exam procedures, sample dissertations and proposals, links to faculty research interests). Specific directions for logging in can be found at the OGS website.

Note: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review to serve the needs of the University's various publics and to respond to the mandates of the Florida Legislature and the State University System. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations.

All stated admission requirements are to be considered minimum. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that the requirements have been met.

It is recommended that students meet with their advisors throughout the program to assure adequate progress.

All students enrolled in the School of Education and Human Development will be required to subscribe and maintain a TaskStream account throughout their FIU career so that they can generate and maintain a portfolio of their work in the School. TaskStream is web-based electronic portfolio application that allows students to upload and share selected work via the world wide web. TaskStream also has tools which allow students to create standards-based lesson plans, evaluation rubrics, and entire instructional units.

## Master's, Specialist, and Doctoral Degrees

The SOE offer graduate programs at the Masters (MS and MAT), Educational Specialist, (Ed.S.) and Doctoral levels, both Doctorates of Philosophy (Ph.D.) and Doctorates of Education (Ed.D.). All graduate programs include courses and may include seminars, field experiences, research projects, theses, and dissertations, depending upon the student's level and area of emphasis.

## Master of Science Degree Programs

Master of Science degree programs are offered in the following specialties and tracks:
Adult Education and Human Resource Development
Art Education
Counselor Education
School Counseling
Clinical Mental Health Counseling
Rehabilitation Counseling
Curriculum and Instruction
Curriculum Development
Elementary Education
English Education
Learning Technologies
Mathematics Education
Modern Language Education
Physical Education
Science Education
Social Studies Education
Special Education
Early Childhood Education
Educational Leadership
Foreign Language Education
Higher Education Administration
International and Intercultural Education
Physical Education
Sports Science Track
Reading Education (K-12)
Recreation and Sport Management Recreation and Sport Management Track
Recreational Therapy Track
Special Education
Urban Education
Bilingual
Foundations
Instruction in Urban Settings
TESOL
Admission to the various Master's programs differs. Applicants for admission to most Master's of Science programs in Education must hold or qualify for Florida teacher certification in the appropriate area (see specific program area in this catalog for details). In some programs, applicants must also satisfy the following minimum requirements: A GPA of 3.0 in the last 60 semester hours of upper division undergraduate study. Some, but not all programs require taking at least the verbal and quantitative parts of the Graduate Record Examination (GRE). Students should check with the department for specific admissions requirements.

Specific programs may have higher standards for admission. Having a minimum GPA and/or GRE score does not assure admission to a program. Admission is subject to the approval of program faculty.

Prior to formal admission to a graduate program, students may be approved to enroll in up to 12 semester hours of 5000 or higher level graduate credit as nondegree seeking students, 12 of which, if applicable to the major field of study and approved by an advisor, may be applied to the degree program if the grade received is " $B$ " or higher.

Graduate students will complete at least 30 semester hours of study beyond the bachelor's degree to earn a Master of Science degree in Education. However, specific programs may require more than the minimum number of hours. Students may transfer a maximum 6 approved semester hours taken at another accredited college or university toward a master's degree program.

Master's program students must maintain an overall GPA of 3.0 to graduate. No grades of 'C-' or less received in courses that are part of a master's degree program of study will be accepted toward graduation.

Admission requirements include those required of any graduate student in a M.S. level degree program. In addition, students applying into initial certification programs (e.g., MAT, School Counseling Track, School Psychology, Reading Education, and Educational Leadership) must pass all sections of the CLAS, or the General Knowledge Exam, or the Praxis I. Students may substitute scores of 1000 in the GRE for the CLAS.
Note: Students who pass the CLAST prior to July 1, 2002 will be waived from taking the new General Knowledge test. Please see your faculty advisor to be certain all requirements are met.

## Master of Arts in Teaching Degree

Applicants who hold a bachelor's degree in a field other than education and wish to teach may want to pursue the MAT degree. Currently, the SOE has one state approved program leading to State of Florida teacher certification:

- Art Education K-12


## Educational Specialist Degree Programs

Education Specialist degree programs are offered in the following specialties:

- Curriculum and Instruction
- Educational Leadership
- School Psychology

The programs require a minimum of 36 semester hours of course work at the University beyond the Master's degree. However, specific programs may require more than the minimum number of hours and may include six semester hours of thesis if that option is chosen.

Admission requirements and transfer of credit are the same as for the master's programs. Note: Transfer credit policies for the School Psychology are in the process of being revised. Be sure to check with a program advisor.

## Doctoral Programs

The School of Education and Human Development offers Doctor of Education degree programs and a Doctor of Philosophy degree program. Several of the programs have specialties or subplans. Specific information about each of the programs and its requirements and areas of specialty can be found in the department's specific program descriptions.

Advisement for these programs may be obtained by calling the appropriate department office or by contacting the Office of Graduate Studies (ZEB 310) at (305) 3482723. Detailed admission requirements, program descriptions, and graduation requirements may be obtained from doctoral program advisors in specific areas and by examining program descriptions in this catalog.

## Doctor of Education Degree Program Specialties

Doctor of Education degree (Ed.D.) programs are offered in the following specialties and tracks:

- Adult Education and Human Resource Development Entrepreneurship
Hospitality and Tourism Management
International and Intercultural Education Labor Studies
Recreation and Sport Management
Urban Education
- Curriculum and Instruction

Art Education
Early Childhood Education
Elementary Education
English Education
International and Intercultural Development Education
Instructional Leadership
Learning Technologies
Mathematics Education
Modern Language/Bilingual Education
Reading Education
Science Education
Social Studies Education

- Educational Administration and Supervision
- Exceptional Student Education
- Higher Education

Adult Education/Human Resources
International and Intercultural Education

## Doctor of Philosophy Degree Program Specialties

A Doctor of Philosophy degree (Ph.D.) is offered with the following specialties:

- Curriculum and Instruction

Language, Literacy and Culture
Mathematics, Science and Learning Technologies
Curriculum and Instruction

## Student Teaching and Fingerprint Requirements

State of Florida Certification requires all applicants to be fingerprinted and checked by state and local law enforcement agencies. Local public and private schools and systems may also require similar security procedures for field placements, student teaching and/or internships. Students with a CHR (criminal history record) should be prepared to promptly provide documentation of adjudication in order to facilitate review and determination of eligibility for placement in the district or school requested. Details regarding specific district requirements, deadlines and documentation are available in ZEB 230, Office of Clinical Experiences.

## For all Teacher Prep and Counseling Field Experiences

Online information and the student teaching application is available at http://education.fiu.edu. Online submission deadline for Fall placement is due February 1; application for Spring placement is due June 1.

## TaskStream Requirement

All students enrolled in the School of Education and Human Development will be required to subscribe and maintain a TaskStream account throughout their FIU career so that they can generate and maintain a portfolio of their work in the school. Students should discuss with their major professors as to the semesters they will need to have a TaskStream account, as it varies by program.

TaskStream is a web-based electronic portfolio application that allows students to upload and share selected work via the world wide web. TaskStream also has tools which allow students to create standards-based lesson plans, evaluation rubrics, and entire instructional units.

## Dissertation Registration Requirements

A doctoral student may enroll for dissertation credits after completing all coursework, passing the candidacy examination and being advanced to candidacy. Dissertation credits taken before advancement to candidacy will not be counted toward the degree. Candidates must comply with the continuous enrollment policy which is the registration of not less than 3 hours of dissertation credits in every semester, including summer semester, once he or she begins candidacy. Also, the candidate must be enrolled for dissertation credits during the semester in which the doctoral degree is awarded.

## Graduation Requirements

- All degree requirements must be met
- Cumulative GPA of 3.0 or higher
- No grades of "C-" or less received in courses that are part of a Master's program of study will be accepted toward graduation.
- Must be registered the semester in which degree is to be awarded.
All Students graduating from programs that lead to initial certifications (e.g., MS in School Counseling, MS in Reading, Ed.S. in School Psychology, MS in Educational Leadership) must pass all sections of the Florida Teacher Certification Exam (FTCE) or Florida Educational Leadership Exam (FELE) Certification Exam prior to graduation. This includes the Professional Education, Subject Area, and the General Knowledge Exams. All MS in Reading Education students must have ESOL Endorsement or have taken TSL 5361C prior to graduation. In addition, students must demonstrate successful completion of the Florida Educator Accomplished Practices. Students should submit evidence of passing all sections of the FTCE or FELE exams prior to the end of the final week of in the semester in which they are applying for graduation.


## Leadership and Professional Studies

Laura Dinehart, Chair and Associate Professor, Early Childhood Education
Catherine Akens, Assistant Professor (Courtesy Appointment), Higher Education
Cari E. Autry, Clinical Assistant Professor, Recreational Therapy
Benjamin Baez, Professor, Higher Education
Hyejin Bang, Associate Professor, Recreation and Sport Management
Martha Barantovich, Senior Instructor, Social Foundations of Education
Elizabeth M. Bejar, Assistant Professor, Higher Education and Vice President for Academic Affairs
Isaac Burt, Assistant Professor, Counselor Education
Mido Chang, Associate Professor, Educational Research
Peter J. Cistone, Professor, Educational Leadership
Delia C. Garcia, Dean and Associate Professor, Urban Education
Meg Gardinier, Assistant Professor, International and Intercultural Education
Norma Goonen, Clinical Associate Professor, Higher Education
Jennifer G. Hall, Assistant Professor, Counselor Education
Rosa L. Jones, Associate Professor (Courtesy Appointment), Higher Education
Maureen C. Kenny, Professor, Counselor Education
Hilary Landorf, Associate Professor, International/Intercultural Education
Philip J. Lazarus, Associate Professor, School Psychology
Haiying Long, Assistant Professor, Educational Research
Sharon M. López, Visiting Clinical Associate Professor, Educational Research
Maria Lovett, Clinical Assistant Professor, Leadership and Professional Studies
Larry Lunsford, Assistant Professor (Courtesy Appointment), Higher Education
Adriana G. McEachern, Associate Professor, Counselor Education
Alexis McKenney, Associate Professor, Recreational Therapy
Martha Pelaez, Professor, Educational Psychology
Stephen C. Person, Instructor, Recreation and Sport Management
Andy V. Pham, Assistant Professor, School Psychology
Thomas G. Reio, Jr., Associate Dean, Graduate Studies and Professor, Adult Education and Human Resource Development
Tonette S. Rocco, Professor, Adult Education and Human Resource Development
Valerie E.D. Russell, Assistant Professor, Counselor Education
Joanne Sanders-Reio, Senior Instructor, Educational Psychology
Melody Whiddon-Willoughby, Clinical Assistant Professor, Educational Psychology
Robert M. Wolff, Professor, Recreation and Sport Management

## General Information

The Department of Leadership and Professional Studies offers programs and courses for students interested in working in a wide range of organizational, urban/ multicultural/ international contexts of education and training. Academic preparation focuses on such areas as educational leadership, urban education, management, psychology, policy development and analysis, adult education, human resource development, research/evaluation, counselor education, school psychology, higher education administration, recreation therapy and recreation and sport management. In addition, the department provides the core undergraduate and graduate curricula in the historical, cultural, social, philosophical, and psychological foundations of education. The department is substantially directed towards granting master's and doctoral level degrees, but it also offers an undergraduate degree in Recreation and Sport Management. Department faculty are recognized as national/international scholars, exemplify outstanding teaching practices, and are committed to taking a leadership role in the provision of professional services and the process of community engagement. They are worlds ahead in its commitment to serving and maximizing student learning, engaging in the discovery and dissemination of new knowledge, and encouraging a creative and innovative spirit among our students. Community engagement plays a pivotal role in the programs and sponsored-research projects implemented through the department, where critical problems confronting our communities are identified and addressed.

The following pages describe the various graduate offerings in the department and the corresponding requirements. It should be noted that stated admission requirements are to be considered minimal. A student who meets these minimal requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements.

The Department of Leadership and Professional Studies offers the following degree programs:

## Master's Degrees

Adult Education and Human Resource Development
Counselor Education
School Counseling Track
Clinical Mental Health Counseling Track
Rehabilitation Counseling Track
Educational Leadership
Higher Education Administration
International and Intercultural Education
Recreation and Sport Management
Recreation and Sport Management Track
Recreational Therapy Track
Urban Education

## Educational Specialist Degree

Educational Leadership
School Psychology

## Doctor of Education Degrees

Adult Education and Human Resource Development Educational Administration and Supervision
Higher Education

## Graduate Certificate Programs

Academic Advising
Educational Leadership
Teacher Leadership
The department offers courses for persons who possess a baccalaureate or higher degree from an accredited institution of higher education and who seek State of Florida Certification in Adult Education Administration.

## Master of Science in Adult Education and Human Resource Development

The M.S. in Adult Education \& Human Resource Development (AE \& HRD) program is designed for individuals who choose to serve as program coordinators, instructors, directors of non-profit agencies, community school administrators, and outreach professionals in workplace development, community and technical colleges. The program also prepares individuals to be trainers, organizational development specialists, instructional designers, human performance consultants, and/or researchers in human resource development.

This degree meets the requirements for the state certified program in Adult Education Administration (http://www.fldoe.org/edcert/rules/6A-4-008.asp).

This degree also covers the content for the American Society Training and Development "Certified Learning Professional" program.

## Admission Requirements

1. A bachelor's degree from an accredited institution and a minimum GPA of 3.0 or better on a 4.0 scale for the last 60 credits of upper-division undergraduate coursework;
2. A statement of intent, 500 words or less, describing (a) the applicant's personal and professional goals and how the degree program will enable the accomplishment of these goals and (b) the ways in which the applicant will be an asset to the program;
3. Complete and current résumé listing educational and professional preparation and employment background; and
4. Two letters of recommendation from individuals who can knowledgeably assess and describe the applicant's leadership potential and ability to perform graduate-level work. At least one reference must be from an academic source such as a former professor. Official test scores and official transcripts are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199. Letters and other supporting documents are to be uploaded into the on-line application for admission.

## Program of Study

The M.S. in AE \& HRD program consists of 36 hours, with 33 hours of professional emphasis courses in the AE \& HRD program area and 3 hours of research methods.

## Required Program: (36 hours minimum)

ADE 5386 Individual and Adult Education
ADE 6186 Comprehensive Program Evaluation in
AE\&HRD 3
ADE $6195 \quad$ Perspectives on Adults with Disabilities
(cross-listed with LBS 5155)

ADE 6260
ADE 6360
ADE 6945
EDF 5481
ADE 6476
ADE 5383
ADE 6286
ADE 5387

## and

ADE 7571

## or

ADE 6180
3
Note: The GRE is not a requirement for admission into the M.S. in Adult Education and Human Resource Development Program.

## Master of Science in Counselor Education

Applicants are required to submit an on-line application to the Office of Graduate Admissions. All applicants must submit official transcripts, three letters of recommendation (at least one from academic sources and one from work or volunteer experience), an autobiographical statement and a curriculum vitae (resume). Candidates are admitted by recommendation of the Program's Graduate Admissions Committee. Minimum criteria for program acceptance include an undergraduate grade point average of 3.0 for the Rehabilitation Counseling track and 3.2 for the Clinical Mental Health and School Counseling tracks. Applicants with a completed Master's degree or higher, who do not meet the undergraduate GPA, will have their graduate GPA considered, as long as it is a 3.2 or higher. An interview is required for admission into the program.

Students may request to transfer six semester hours earned at another institution into the program provided the course work taken does not exceed a three year time period and meet University's requirements. Transferring in more than 6 hours requires special permission from your advisor and the Dean of the University Graduate School. Students are allowed a maximum of six years from the date of initial enrollment to complete program requirements.

Given the unique nature of the field of counseling requiring mastery of cognitive skills and demonstration of relevant and appropriate interpersonal skills, the faculty retains the right to "counsel out" of the program and/or not recommend for internship placement any student whose level of interpersonal competence is considered incompatible with that required for effective functioning as a practitioner in counseling.

All stated admission requirements are to be considered minimal. A student who meets these minimal requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements. Applications are reviewed upon their completion. Allow 6-8 weeks for application to be processed by the Graduate Admissions Office.

All programs preparing school personnel are approved by the State of Florida, and allow students completing the program to be eligible for certification by the State.

Once admitted, each student is responsible for tracking academic progress throughout the program, and a degree can be revoked if academic dishonesty or fraudulence is discovered.

## Counselor Education Degree/Tracks

The Master of Science in Counselor Education Tracks prepare individuals for professional counseling positions in schools, community mental health settings, and rehabilitation agencies and institutions. These programs emphasize the blending of research and theory with practical applied experience. They also emphasize and reflect the urban and multicultural nature of our community, as well as general trends within specified fields. All programs involve intensive field work with accompanying seminars.

Individuals interested in majoring in Counselor Education can select one of three tracks; School Counseling ( 57 credits), Clinical Mental Health Counseling ( 60 credits), and Rehabilitation Counseling ( 60 credits). The early part of each program is largely generic in nature and is concerned with the development of knowledge and skills in the areas of individual and group counseling, consultation, preventive mental health, educationvocational development, client appraisal, systems intervention, and program organization and evaluation. The latter part of each program is more differentiated towards the practice of school counseling, mental health counseling, or rehabilitation counseling. The prospective student should be advised that a substantial amount of time is spent in field work to meet practicum and internship requirements. The student should plan for this field work to be during the day, rather than during evening hours. Because internship experiences require full time work in the field, students are advised that full time employment is not compatible with successful completion of the program.

The Master of Science in Counselor Education, School Counseling Track, is nationally accredited by the Council for the Accreditation of Counseling and Related Education Programs (CACREP) and is approved by the State of Florida Department of Education, the Florida Board of Regents, and accredited by the National Council for the Accreditation of Teacher Education (NCATE). The Master of Science in Counselor Education, Clinical Mental Health Counseling Track, is nationally accredited by the Council for the Accreditation of Counseling and Related Education Programs (CACREP) and meets all requirements as outlined by the Florida Department of Medical Quality Assurance for licensure as a Mental Health Counselor. The Master of Science in Counselor Education, Rehabilitation Counseling Track, is nationally accredited by the Council on Rehabilitation Education (CORE) and prepares students for certification in Rehabilitation Counseling (CRC).

## Counselor Education: School Counseling Track (57 credits):

All students entering the School Counseling program with an undergraduate degree in an area other than education must enroll for courses in general professional education as required by the Florida State Department of Education in order to meet state certification requirements in Florida. In addition, all students must have passed the CLAST, or the General Knowledge Exam, or the Praxis I. After July 1, 2002, the CLAST exam may be waived for admission
purposes if the student has a score of 1000 and higher on the GRE.

## Professional Studies: (9)

| EDF 6211 | Educational Psychology | 3 |
| :--- | :--- | :--- |
| EDF 5481 | Foundations of Educational Research | 3 |
| EDP 6277 | Human Development Across Lifespan | 3 |

Counseling Core: (21)
MHS $5400 \quad$ Counseling Skills and Techniques 3
MHS 6700 Ethical, Legal, \& Professional Issues in
MHS 6802 Personality Theories 3
MHS $6511 \quad$ Group Counseling 3
MHS 5350 Educational/Vocational Counseling 3
MHS 6428 Cross Cultural Counseling 3
MHS 6200 Measurement and Appraisal in Counseling
Specialization: (15)
$\begin{array}{ll}\text { SDS } 6700 & \text { Organization and Administration of } \\ & \text { School Counseling }\end{array}$
SDS $6411 \quad$ Counseling Children and Adolescents
SDS $5460 \quad$ Crisis Counseling and Interventions 3
SPS $6199 \quad$ Family-School Consultation and Collaboration 3
SDS $5420 \quad$ Counseling Students with Exceptionalities
Clinical Experience: (12)
SDS $6800 \quad$ Advanced Practicum in Counseling and Consultation
SDS 6820 Supervised Field Experience in Counselor Education
Corequisites: Students who do not hold a Florida Teacher's Certificate (or that have not taken these courses as an undergraduate student) must complete an additional 15 credits of professional education courses covering social, historical, and philosophical foundations, classroom management, general methods of teaching, TESOL, and reading. One course in each of the following subject areas must be completed prior to the awarding of the school counseling degree.
Courses that satisfy these requirements include: Social, Philosophical, \& Historical Foundations (choose one):
EDF 3515, EDF 3521 taken as an undergraduate,
EDF 5517, EDF 6608 taken as a graduate student.
Classroom Management (choose one):
EDF 5255 Classroom Management
EEX 5608 Behav. Approach to Classroom Learning and Management
General Methods of Teaching (choose one):
EDG 5414, ESE 6215, EDA 6061, EDE 6205, or EDG 6250

## TESOL:

TSL 5086C TESOL Issues and Methodologies

## Reading (choose one);

EEX 5259 Literacy in Special Education
RED 5339 Subject Related Reading
RED 6336 Reading in the Content Area

## Graduation Requirements

Students entering this program on or after Fall 2001 must:

- Have overall GPA of 3.0
- Successfully demonstrate satisfactorily all Florida Educator Accomplished Practices
- Have a passing score on all sections of the Florida Teacher Certification Exam. Students who hold a Florida certificate received prior to July 1, 2002, are required to pass only the subject area exam. For students who do not hold a valid Florida certificate, are required to pass all sections of the test:


## -Professional Education Exam

-Subject Area Exam in Guidance
Counseling
-General Knowledge Exam

## Field Requirements

Application for school counseling clinical experiences must have faculty advisor approval and must be submitted to the Office of Student Teaching by March 1 for Fall semester placements and July 1 for spring placements.

## Counselor Education: Clinical Mental Health Counseling Track ( 60 credits):

Students seeking admission to the track in Clinical Mental Health Counseling with an "out of field major" are required to successfully complete 9 hours of prerequisite psychology courses prior to acceptance. Out of field majors are students who do not hold a Bachelor's degree in Psychology (or a related field). The student should consult with an advisor with reference to these courses. Required prerequisite courses for "out of field" majors applying for admission to the graduate program in Clinical Mental Health Counseling include:

- An introductory course in Psychology (e.g., PSY 2012 Introduction to Psychology),
- A course in either:
- Educational Psychology (e.g., EDP 3004 Educational Psychology), or
- Abnormal Psychology (e.g., CLP 4146 Abnormal Psychology),
- or Personality Theories (e.g., PPE 3003 Personality Theory), and
- A Research/Statistics course (e.g., STA 2122 Research-Statistics).
NOTE: The course numbers of the above prerequisite courses are those used at FIU. All prerequisite courses must be completed with a minimum grade of a " $C$ " in each course and a cumulative grade point average of 3.0 or higher for all courses taken.
Counseling Core: (27)
EDP 6277 Human Development: Across the Human Development: Across the
Lifespan
Counseling Skills and Techniques
MHS $5400 \quad$ Counseling Skills and Techniques
MHS 6802
Personality Theories
3

Educational Vocational Counseling
MHS 6428
Cross Cultural Counseling
SDS 5460
Crisis Counseling and Interventions
SDS $6411 \quad$ Counseling Children and Adolescents
MHS 6511
Group Counseling
Ethical, Legal, and Professional Issues in Counseling
Measurement and Research: (6)
EDF $5481 \quad$ Foundations of Educational Research 3
MHS 6200 Measurement and Appraisal in Counseling

| Specialization: (15) |  |
| :---: | :---: |
| MHS 6020 | Foundations of Mental Health |
|  | Counseling |
| MHS 6411 | Counseling and Consultation in |
|  | Community Settings |
| MHS 6427 | Adult Psychopathology |
| MHS 6470 | Human Sexuality Counseling |
| MHS 6450C | Substance Abuse Counseling |
| Clinical Experiences: (12) |  |
| MHS 6800 | Advanced Practicum in Counseling and |
|  | Consultation |
| MHS 6820 | Supervised Field Experience |
|  | Counseling |

Note: This program of study is subject to change at any time.

## Field Requirements

Application for clinical experiences for mental health counseling must have faculty advisor approval and be submitted to the Counselor Education Programs Clinical Director by June 15 for a Fall placement, October 1 for a Spring semester placement, or March 1 for a Summer semester placement.

The students in the Clinical Mental Health Counseling track are required to take and pass all sections of the National Board of Certified Counselors, Counseling Preparation Competency Exam (CPCE). The CPCE is a requirement for graduation and is designed to assess counseling students' knowledge of counseling information viewed as important by counselor preparation programs. In the Clinical Mental Health Counseling Track, it is used by the faculty as a capstone experience to be completed by students prior to completing their practicum and before embarking on the internship experience.

## Counselor Education: Rehabilitation Counseling Track ( 60 credits):

Counseling Core: (30)
EDP 6277 Human Development Across the Lifespan
MHS $5400 \quad$ Counseling Skills and Techniques 3
MHS 5350 Educational-Vocational Counseling 3
MHS 6802 Personality Theories 3
MHS $6411 \quad$ Advanced Counseling and Consultation in Community Settings 3
MHS 6700 Ethical, Legal, \& Professional Issues in Counseling
MHS $6428 \quad$ Cross Cultural Counseling 3
MHS $6511 \quad$ Group Counseling 3
MHS $6427 \quad$ Adult Psychopathology 3
MHS $6470 \quad 3$
Measurement and Research: (6)
EDF $5481 \quad$ Foundations of Educational Research 3
$\begin{array}{ll}\text { MHS } 6200 & \begin{array}{l}\text { Measurement and Appraisal in } \\ \text { Counseling }\end{array}\end{array}$
Specialization: (12)
RCS 6031 Rehabilitation Counseling: Principles and Practices
RCS 6625 Service Delivery and Case Management In Rehabilitation Counseling

3
RCS 6245 Psychological/Sociological Aspects of Disability

3
RCS $6080 \quad 3$

## Clinical Studies: (12)

RCS 6801 Advanced Practicum in Rehabilitation Counseling
RCS 6821 Supervised Field Experience in Counseling Rehabilitation Counseling

## Field Requirements

Application for clinical experiences for rehabilitation counseling must have faculty advisor approval and be submitted to the Counselor Education Programs Clinical Director by June 15 for a Fall placement, October 1 for a Spring semester placement, or March 1 for a Summer semester placement.

## Graduation Requirements

The students in the Rehabilitation Counseling track are required to take and pass the Certified Rehabilitation Counseling examination (CRCE). The CRCE is a requirement for graduation and is designed to assess rehabilitation counseling students' knowledge of information viewed as important by rehabilitation counselor preparation programs. This exam provides a national professional credential for the students as well as helps the Counselor Education program meet CORE accreditation program evaluation needs.

## Master of Science in Educational Leadership

The Master of Science (M.S.) degree program in Educational Leadership comprises courses and experiences designed to develop entry level competencies in the practice of educational leadership. The program incorporates coursework that constitutes the "modified Florida program in educational leadership" at Florida International University and addresses the competencies assessed in the Florida Educational Leadership Examination. The program may be used to satisfy part of the requirements of the Florida Department of Education for state certification in Educational Leadership.

## Admission Requirements

Admission to the program is based on the following criteria:

1. A baccalaureate degree and a grade point average of at least 3.25 (on 4.0 scale) in the last 60 semester hours of undergraduate coursework;
2. At least three years of successful full-time teaching experience prior to application for admission to the program;
3. Two letters of recommendation from individuals who can comment on the applicant's leadership potential and qualifications for successfully participating in the program;
4. A current resume (curriculum vitae), including education, professional preparation, and employment history;
5. A brief written statement (approximately 250 words) articulating the applicant's professional career goals and aspirations; and
6. Evidence of having satisfied the ESOL requirements of the State of Florida. (Otherwise, a student will be required to satisfy this requirement prior to completion of the program. This requirement is not for HRD majors)
7. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.

## Program of Study

The program of study ( 13 courses/39 semester hours) is as follows:
EDA 6061 Introduction to Educational Leadership
EDA 6192 Leadership in Education 3
EDA $6195 \quad$ Communication in Educational
Leadership
3
EDA 6232 School Law 3
EDA 6242 School Finance 3
EDA 6271 Administering Educational Technology
EDA 6930 Seminar in Educational Leadership
EDF $5481 \quad$ Foundations of Educational Research
EDS 6115 School Personnel Administration 3
EDF 6608 Social, Philosophical and Historical Foundations of Education 3
EDF $6211 \quad$ Psychological Foundations of Education
EDA 6503 Instructional Leadership 3
EDA 6943 Administrative Internship* 3
*Successful completion of this course requires passing all sub-tests of the Florida Educational Leadership Examination (FELE). Evidence of passing the exam must be provided by the student no later than the last week of the semester in which the student plans to graduate.

In addition to the successful completion of the program's coursework, a student will be required to present evidence of having passed all sub-tests of the FELE and satisfied the ESOL requirements that demonstrate mastery of the four ESOL standards required of school administrators.

## Master of Science in Higher Education Administration

The Master of Science in Higher Education Administration prepares graduates to serve in a variety of roles at colleges and universities and related institutions. The academic program operates as a partnership with FIU's Student Affairs division and integrates class-work with assistantships and practicums for a total learning experience. As a majority-minority institution, FIU is the prototype for universities of the 21st century. Students in the program will have the opportunity to work and study in one of the most diverse higher education environments in the nation.

## Admission Requirements

1. A baccalaureate degree and an undergraduate GPA of 3.0 in the last 60 credit hours of upper-division undergraduate study;
2. Work experience in higher education such as community college or student affairs areas is preferred but not required;
3. Two (2) letters of recommendation;
4. Personal statement;
5. Resume.
6. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.

Note: The GRE is not a requirement for admission into the M.S. in Higher Education Administration program.

Program Requirements: (36 semester hours)
Professional Studies: ( 9 hrs )
EDF $5481 \quad$ Foundations of Educational Research
EDH $6045 \quad$ College Student Development Theory
Choice of:
EDF 6608 Social, Philosophical and Historical Foundations of Education
or
EDF 6636 Intercultural Studies: A Qualitative and Quantitative Analysis

## Required Courses: ( 15 hrs )

EDH 6633 Introduction to Higher Education Administration
EDH 6634 Organization and Administration of Student Affairs
EDH 6404 Legal Issues in Higher Education Administration
EDH 6943 Practicum in Higher Education
Choice of:
EDH $6047 \quad$ College Student Life and Culture or
EDH 6055 Access and Choice in US Higher Education

## Electives: (12 hrs)

Students will select a set of electives to meet their educational and professional interests. Selection of electives can include a concentration in a particular area of higher education as well as provide a breadth of knowledge about the field.

## Required Courses

The required courses reflect the range of basic knowledge common to all higher education professionals. Whatever the job function, it is imperative that university professionals know the law, be aware of current issues, be sensitive to the diversity of student culture and understand the core functions of administration.

## Electives

Electives are designed to allow students to choose a path of study that reflects their immediate career goals, while maintaining program coherence. There are opportunities for electives at the student's discretion, as long as they are graduate level courses (5000 level or above).

## Practicum Experiences

A professional degree in university administration should allow for some guided practical experience. The practicum sections allow students the opportunity to earn credit while gaining valuable hands-on experience in a variety of administrative areas. Practicum sections will include an academic component designed by the Higher Education faculty and the section supervisor.
The graduation requirements include successful completion of the above required program of study.

## Master of Science in International and Intercultural Education

The Master of Science degree in International and Intercultural Education (IIE) at FIU is uniquely designed to provide graduate training to students interested in understanding the processes of globalization, the global environment, and the responsibilities of citizenship in an increasingly interdependent world. The program places emphasis on training in cross-cultural communication and exchange, international development, and educational practice in a global context.

Our program includes face-to-face, hybrid, and fullyonline courses. These courses provide research and analytical skills to enable students to define, gather, analyze and evaluate data for project management and decision-making. Applied courses are designed to provide the professional competencies for academic research, teaching and administration, and employment in foundations, non-governmental organizations, governmental institutions, businesses and corporations. Our students have worked in several countries and regions such as Spain, Andorra, South Korea, the Caribbean, Africa, Latin America, Germany, and the U.S. in a range of capacities including: K-12 social science teachers, ESL teachers in the U.S. and abroad, international education credential experts, and international education study abroad program directors. Some of our Master's students hold graduate assistantships in the School of Education as well as undertake internships across campus in various departments.

## Admission Requirements

To be admitted into the Master's degree program in International and Intercultural Education (IIE), a student must have (a) a bachelor's degree from an accredited U.S. institution or its equivalent for international students, (b) a 3.0 GPA or higher for the last 60 hours of upper-division coursework, (c) three letters of recommendation, and (d) an autobiographical statement. Letters and other supporting documents should be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.

Note: The GRE is not a requirement for admission into the M.S. in International / Intercultural Education program.

## Degree Requirements

The Master's program requires the completion of a minimum of 33 semester hours of course work at the graduate level with a 3.0 GPA. A maximum of six semester hours of graduate work may be transferred to the program from other universities. The 33 semester hours are to be completed in accordance with the program curriculum.

## Required Program: (33 minimum)

The IIE program blends together theoretical foundations and methodological perspectives. Graduate students are exposed to the role of the social, political, economic, scientific and cultural sectors in education worldwide. Research and analytical skills are provided to insure student's ability to define, gather, analyze and evaluate data for project management and decision-making. Applied courses are designed to provide the professional
competencies for academic research, teaching and administration, and employment in foundations, nongovernmental organizations, governmental institutions, businesses and corporations.

Foundations of International and Intercultural Education: (12)
EDF $5481 \quad$ Foundations of Educational Research EDF 6850 International Development Education: Contemporary Planning Models and Techniques

One course on teaching and learning (3):
ADE 5386 Individual Learning and Adult Education 3
TSL 5245 Developing ESOL Language and Literacy

3
SSE 5381 Developing a Global Perspective 3
One course on the Social and Psychological Foundations of Education (3):
EDF 6608 Social, Philosophical and Historical Foundations of Education 3
EDF $6211 \quad$ Psychological Foundations of Education 3
International and Intercultural Education Core: (6)
EDF $6852 \quad$ Educational Development Issues in Context: A Multidisciplinary Perspective 3
EDF 6658 Selected Topics: International
Development Education, Current Policy Issues and Problems

## GeoCultural Area: (3)

The purpose of this requirement is to give the student a foundation in the culture, politics, and history of an area or region. The student will select one course that relates to his/her geo-cultural interest. Any upper level course (5000 level or above) in an area of the world is eligible. Course must be approved by the student's advisor.
Policy: (3)
This course is selected in consultation with the advisor from the School of Education. Possible courses include:
EDH $7401 \quad$ Higher Education and Public Policy
EDA $7288 \quad$ Politics of Education (must be taken with
EDG $7692 \quad$ Politics of Curriculum $\quad 3$
EDF 7656 International Development Education: Innovative Approaches in Educational Planning

## Area of Interest: (9 hours)

Students in IIE go into a number of areas for work and study. Primary among these are Internationalization and Intercultural Studies, International and Comparative Education, and Globalization, Development, and Sustainability. The areas of interest courses are designed to allow students to develop their area of concentration. To complete this requirement, students must choose one area of interest and take three courses selected in consultation with and approved by the advisor. Examples include:

| 1. Internationalization and Intercultural Studies |  |  |
| :---: | :---: | :---: |
| EDF 5851 | Socio/Cultural Conflict in Educational Change | 3 |
| EDF 5880 | Intercultural Education: National and International Perspectives | 3 |
| EDF 6636 | Intercultural Studies: A Qualitative and Quantitative Analysis | 3 |
| EDF 6365 | Cultural Identities and Conflict | 3 |


| EDG 5707 | Cross-Cultural Studies in Education | 3 |
| :--- | :--- | :--- |
| RLG 5106 | Religions, Latinos/as and Immigration | 3 |

2. International and Comparative Education
$\begin{array}{ll}\text { EDF } 5812 & \begin{array}{l}\text { National Educational Systems: A } \\ \text { Comparative Analysis }\end{array}\end{array}$
EDF 5820 Latin American Education 3
EDF 7656 International Development Education: Innovative Approaches in Educational Planning
EDF 6906
Directed Study in International
Development Education
3
ANG 6303 Comparative Feminisms 3
3. Globalization, Development, and Sustainability

EVR $5320 \quad$ Environmental Resource Management 3
INR 5036 Politics of Globalization 3
SYD 6236 International Migration and Refugees 3
EDF $7937 \quad$ Advanced Topics in Social Foundations
of Education
EDF 6766 Education, the Environment, and Sustainable Futures

## Master of Science in Recreation and Sport Management

## Degree Program Hours: 33

The graduate program in Recreation and Sport Management is planned to provide advanced preparation for management and supervisory level positions within a park, recreation, sport management, healthcare or recreational therapy services delivery system. The program includes electives which give flexibility regarding an individual's specific career goals as a future practitioner in parks, recreation, sport management or recreational therapy services. The Recreational Therapy track is designed to prepare direct service and administrative personnel engaged in recreational therapy service delivery.

## Admission Requirements

To enter the program in Recreation and Sport Management, a student must have a 3.0 GPA for the last 60 hours of upper-division courses, career goals and aspirations, and three letters of professional recommendation, possess a bachelor's degree, and have appropriate* undergraduate preparation in parks, recreation, sport management or recreational therapy. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.
*A student who did not complete a Parks, Recreation, Leisure, Sports, or Recreational Therapy oriented internship/field experience during his or her undergraduate degree curriculum will be required to take the following course during the course of study:
LEI 6922 Supervised Field Experience in Parks and Recreation Administration
Degree Program: (33)
Required Core: (12)
LEI 5510
Program Administration in Parks, Recreation and Sport
LEI $5595 \quad$ Seminar in Parks, Recreation, and Sports Management

| LEI 5605 | Philosophical and Social bases of Parks <br> and Recreation <br> or | 3 |
| :--- | :--- | :--- |
| PET 5256 | Sociology of Sport | 3 |
| EDF 5481 | Foundations of Ed. Research | 3 |

*RT students are not required to take LEI 5595
Select from one of the following two tracks:
Recreation and Sport Management Track: (12)

| LEI 5907 | Directed Study in Parks and Recreation |  |
| :--- | :--- | :--- |
|  | Management | 3 |
| PET 5216 | Sports Psychology | 3 |
| Advised Electives | 6 |  |

Recreational Therapy Track: (12)**
$\begin{array}{ll}\text { LEI } 5716 & \begin{array}{l}\text { Program Planning in Recreational } \\ \\ \end{array} \quad 3\end{array}$
LEI 6816 Advanced Recreational Therapy Facilitation Techniques 3
LEI 6726 Trends, Issues, and Managerial Aspects of Recreational Therapy 3
EDF 6472 Research Methods in Education: Introduction to Data Analysis

3
or approved research elective

## Options to complete the degree:

## Thesis Option: (3-6)

LEI 6970 Thesis: Therapeutic Recreation

## Non-Thesis Option: (3-6) <br> Total Hours: <br> 30-36

**Corequisites for the Recreational Therapy Track:
Individuals not currently certified at the professional level (CTRS) by the National Council for Therapeutic Recreation Certification will be required to take the following content courses for completion of the Therapeutic Recreation graduate curriculum:

## Introduction to Recreational Therapy

Client Assessment, Documentation, and Evaluation in
Recreational Therapy
Abnormal Psychology
Human Anatomy \& Physiology
Human Growth and Development

## Master of Science in Recreation and Sport Management (Online)

## Degree Program Hours: 33

The graduate program in Recreation and Sport Management is planned to provide advanced preparation for management and supervisory level positions within a park, recreation, sport management, healthcare or recreational therapy services delivery system. The program includes electives which give flexibility regarding an individual's specific career goals as a future practitioner in parks, recreation, sport management or recreational therapy services. The Recreational Therapy track is designed to prepare direct service and administrative personnel engaged in recreational therapy service delivery.

## Admission Requirements

To enter the program in Recreation and Sport Management, a student must have a 3.0 GPA for the last

60 hours of upper-division courses, career goals and aspirations, and three letters of professional recommendation, possess a bachelor's degree, and have appropriate* undergraduate preparation in parks, recreation, sport management or recreational therapy. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.
*A student who did not complete a Parks, Recreation, Leisure, Sports, or Recreational Therapy oriented internship/field experience during his or her undergraduate degree curriculum will be required to take the following course during the course of study:
LEI 6922 Supervised Field Experience in Parks and Recreation Administration
Degree Program: (33)
Required Core: (12)
$\begin{array}{ll}\text { LEI } 5510 & \text { Program Administration in Parks, } \\ & \text { Recreation and Sport }\end{array}$
LEI 5595 Seminar in Parks, Recreation, and
5 Sports Management 3
LEI 5605 Philosophical and Social bases of Parks and Recreation 3 or
PET 5256 Sociology of Sport 3
EDF $5481 \quad$ Foundations of Ed. Research 3
*RT students are not required to take LEI 5595
Recreational Therapy Track: (15)**

| LEI 5716 | Program Planning in Recreational <br> Therapy | 3 |
| :--- | :--- | :--- |
| LEI 6816 | Advanced Recreational Therapy | 3 |
| LEI 6726 | Facilitation Techniques | Trends, Issues, and Managerial Aspects <br> of Recreational Therapy |

Advised Research Course 3
Advised Elective
Options to complete the degree:
Thesis Option: (3-6)
LEI 6970 Thesis: Therapeutic Recreation 3-6
or
Non-Thesis Option: (3-6)

| LEI 5907 | Directed Study in Parks and Recreation |  |
| :--- | :--- | :--- |
|  | Management |  |
|  | 3-6 |  |

Total Hours:
**Corequisites for the Recreational Therapy Track:
Individuals not currently certified at the professional level (CTRS) by the National Council for Therapeutic Recreation Certification will be required to take the following content courses for completion of the Therapeutic Recreation graduate curriculum:

| LEI 3703 | Introduction to Recreational Therapy |
| :--- | :--- |
| LEI 4711 | Client Assessment, Documentation, and <br>  <br> Evaluation in Recreational Therapy <br> DEP 2000 |
| Human Growth and Development: <br> Introductory Developmental Psychology |  |
| CLP 4146 | Abnormal Psychology |
| ZOO 3731 3731L | Human Anatomy |
| PCB 3703 | Human Anatomy Demonstration |
| APK 3110 | or |
| Exercise Physiology |  |

*Students may transfer in a lower division section of Human Anatomy \& Physiology in place of the above listed Anatomy and Physiology courses.

## Combined BS/MS in Recreation and Sports Management: Recreational Therapy Track

To be considered for admission to the combined Bachelor's/Master's degree program, student must have completed 75-90 credits in the Bachelor's degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the students starts the last 30 credits of the Bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their Bachelor's degree program. Upon conferral of the Bachelor's degree, students will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor's degree program in Recreation and Sports Management, Recreational Therapy Track.
2. Completed at least 90 credits of coursework.
3. Current GPA of 3.2 or higher.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 on the IELTS is required.

## General Requirements

Recreational Therapy Track: (27)
The FIU Bachelor's degree in Recreation and Sports Management, Recreational Therapy Track, must be awarded before the Master's degree.

| Degree Program: (33) |  |
| :---: | :---: |
| Required Core: (*12) |  |
| LEI 5510 | Program Administration in Parks, Recreation and Sport |
| LEI 5605 | Philosophical and Social Bases of Parks and Recreation Planning or |
| PET 5256 | Sociology of Sport |
| EDF 5481 | Foundations of Educational Research |

*RT 4+1 \& MS students are not required to take LEI 5595
Required Courses: (18)
LEI 6726 Trends, Issues, and Managerial Aspects of Recreational Therapy
LEI $5716 \quad$ Program Planning in Recreational
LEI 6816 Therapy 3

LEI 6725 Advanced Recreational Therapy Facilitation Techniques Administrative Aspects of Therapeutic Recreation
$\left.\begin{array}{lll}\text { EDF } 6472 & \begin{array}{l}\text { Research Methods in Education: } \\ \text { Introduction to Data Analysis } \\ \text { or }\end{array} & 3 \\ \text { An approved graduate level research course } \\ \text { Advised Elective }\end{array}\right)$

Nine (9) of the credits (LEI 6726, LEI 5716, LEI 6816) taken during their senior year will be graduate level courses in RT and will transfer into the master's degree program.
*Although the BS/MS 4+1 program is a combined degree track, students accepted into this program may discontinue their education upon completion of the B.S. degree.

## Master of Science in Urban Education

The Master of Science in Urban Education is designed for educators and other professionals who are interested in addressing issues in urban settings and schools and who want to clarify their understanding of theoretical foundations, engage in critical dialogue, and broaden their expertise in action research. This degree emphasizes a social justice theoretical foundation and draws on the belief that students become reflective professionals by developing an understanding of formal and informal education within diverse sociocultural, linguistic, political, and economic contexts. The curriculum requires candidates to produce an Action Research or communitybased research project related to justice-oriented urban education. Students will cultivate knowledge and skills to advocate for children and communities both locally and globally. The Master's program requires the completion of 33 semester hours of course work at the graduate level with a minimum 3.0 GPA. A maximum of six graduate hours may be transferred from another institution, upon approval from an advisor. The program offers instructional and foundational-areas of concentration from which students can select.

## Admission Requirements

A decision on admission to the Master's degree in Urban Education is based on consideration of the following student criteria:

1. Have a 3.0 GPA for the last 60 hours of upper-division coursework;
2. Complete an interview with program faculty;
3. Submit an autobiographical statement;
4. Submit a letter of intent describing why this particular degree is of interest, and;
5. Submit three letters of recommendation from individuals (academic and professional sources) who can assess and describe the applicant's qualifications and ability to perform graduate level work.
6. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.

Note: The GRE is not a requirement for admission into the M.S. in Urban Education program.

## Program of Studies

Urban Education Studies Core: (9)
Required (6):
EDF $6211 \quad$ Psychological Foundations of Education 3
EDF 6608 Social, Philosophical, and Historical Foundations of Education
Choose one of the following (3):
EDF 6636 Intercultural Studie
EDF $6689 \quad$ Contemporary Issues in Urban Education
EDG 5707 Cultural/Cross-Cultural Studies in Education

## Action Research Core: (9)

EDF $5481 \quad$ Foundations of Educational Research 3
EDF 6487 Action Research for Educators 3
EDF 6941 Practicum in Action Research 3
(prerequisite of EDF 6487)
Areas of Concentration: (15)
The Areas of Concentration within the Urban Education degree allow the candidates the opportunity to critically examine and deepen their understanding of related content. These areas are designed to allow students to choose a path of study that reflects their immediate career goals while maintaining program coherence.

## TESOL Concentration

This area of concentration develop the skills of educators to work with linguistically and culturally diverse populations.
EDG 5707 Cultural/Cross-Cultural Studies in Education
TSL 5142
Curriculum Development in TESOL
TSL 5245 Developing ESOL Language and Literacy
TSL 5371
Special Methods of TESOL
TSL 5938
Principles of ESOL Testing

## Bilingual Concentration

This area of concentration equips educators with theoretical background and practical skills to work in teaching environments that promote language development in two or more languages.
Required Courses: (6)

| FLE 5895 | Bilingual Education Teaching Methodologies | 3 |
| :---: | :---: | :---: |
| FLE 6938 | Seminar in Second Language Testing | 3 |
| Electives: (6) |  |  |
| One (1) of the following: |  |  |
| TSL 6348 | Task-Based Language Teaching | 3 |
| TSL 5142 | Curriculum Development in TESOL |  |
| TSL 6925 | Special Topics in Second Language Education (Curriculum Development in the Spanish Language Classroom) and | 3 |

One (1) of the following:
SPN 5736 Spanish as a Heritage Language:
Acquisition and Development

LIN $5625 \quad$ Studies in Bilingualism 3
*For those students interested in the Bilingual Graduate Certificate, course modification may be made with advisor approval.

## Instruction Concentration

This area of concentration emphasizes the deeper development of pedagogical practices that encourages candidates to advocate for children in urban settings.
Required Courses: (6)

| EDG 5325 | Analysis of Teaching |
| :--- | :--- |
| EDG 5707 | Cultural/Cross-Cultural Studies in |
|  | Education |

## Advisor approved content area or elective courses

## Foundations Concentration

This area of concentration allows candidates to explore urban education from a broader theoretical perspective. Candidates can design their program of study in consultation with their advisor.
EDE $5267 \quad$ Education of the Child in Urban Society 3
EDF 5851 Socio/Cultural Conflict in Education 3
EDF 6850 International Development Education: Contemporary Planning Models and Techniques

3
EDF $6852 \quad$ Educational Development Issues in
EDF 6658 Selected Topics in International Development Education: Current Policy Issues and Problems
EDF $6684 \quad$ Building Home School Community Partnerships in a Context of Justice and Civic Engagement
EDF 6689 Contemporary Issues in Urban Education
EDG 6627 Seminar: Issues and Tends in
EME $6405 \quad$ Computers in the Classroom or
Advisor approved courses for this area of concentration

## Educational Specialist in Educational Leadership

The Educational Specialist (Ed.S.) degree program in Educational Leadership is intended to provide professional educators with an opportunity to develop competencies in areas of special needs and interests in the field of Educational Administration/Leadership. Consequently, there are few required courses and each student's program is individually planned in consultation with a faculty advisor. The program may be used to satisfy part of the requirements of the Florida Department of Education for state certification in Educational Leadership.

## Admission Requirements

Admission to the program is based on the following criteria:

1. A master's degree (or equivalent) and a grade point average of at least 3.25 (on 4.0 scale);
2. At least three years of successful full-time teaching experience prior to application for admission to the program;
3. Two letters of recommendation from individuals who can comment on the applicant's leadership potential
and qualifications for successfully participating in the program;
4. A current resume (curriculum vitae), including education, professional preparation, and employment history;
5. A brief written statement (approximately 250 words) articulating the applicant's professional career goals and aspirations; and
6. Evidence of having satisfied the ESOL requirements of the State of Florida. (Otherwise, a student will be required to satisfy this requirement prior to completion of the program.)
7. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.

## Program of Study

The program of study comprises a minimum of 39 semester hours and is planned in consultation with and approved by a faculty advisor. The structure of the program is as follows:
EDA 6061 Introduction to Educational Leadership 3
EDF 6608 Social, Philosophical and Historical Foundations of Education 3
EDF $6211 \quad$ Psychological Foundation of Education 3
Guided electives in Educational Administration/Leadership 24 Guided electives in Research/Statistics/Measurement and Evaluation
In addition to the successful completion of the program's coursework, a student will be required to present evidence of having passed all sub-tests of the FELE and satisfied the ESOL requirements that demonstrate mastery of the ESOL standards required of school administrators.

## Educational Specialist in School Psychology

The program in School Psychology requires a minimum of 70 semester hours and leads to State of Florida certification as a specialist in School Psychology as well as educational requirements for private practice licensure. This program leads to the Educational Specialist Degree. More complete program descriptions may be obtained in the departmental office or call (305) 348-2382.

The competencies to be demonstrated by the student completing this program are derived from the following: behavioral/educational assessment and planning; counseling and home-school consultation and collaboration with teacher, parents, and school staff; crisis intervention; classroom interventions; liaison referral, program development and evaluation; in-service education; and community outreach.

## Admission Requirements

For admission into our program, students will be required to:

1. Submit all transcripts,
2. Have a 3.2 grade-point average in their last 60 semester hours of upper division coursework,
3. Have a minimum of 15 semester hours of credits in psychology,
4. Submit a curriculum vitae/resume,
5. Write an autobiographical sketch (see application packet),
6. Submit a minimum of three letters of recommendation,
7. One of the following:
a) Passing scores on all sections of the Praxis I: Pre-Professional Skills Assessments,
b) Passing scores on all sections of the Florida Teacher Certification General Knowledge Test; students who passed all sections of the CollegeLevel Academic Skills (CLAS) exam prior to July 1, 2002 may submit these scores in lieu of this requirement,
C) Submit official Graduate Record Examination (GRE) scores,
8. Submit a writing sample if deemed necessary, and
9. Participate in an interview with the admissions committee.

Not all candidates who meet these minimum criteria are accepted into the program.

## Degree Hours: (70)

Psychological Foundations: (12)

| SPS 7195 | Child Psychopathology: Assessment <br> and Intervention in the Schools | 3 |
| :--- | :--- | ---: |
| SPS 7705 | Neuropsychological Issues in School |  |
| Esychology |  |  |$\quad 3$| P211 |
| :--- | | Psychological Foundations of Education |
| :--- |
| EDP 6276 | | Human Development: Childhood and |
| :--- |
| Adolescence |

Educational Foundations: (6)
EEX 5259 Literacy in Special Education 3
$\begin{array}{lll}\text { SDS 5420 } & \begin{array}{l}\text { Counseling Students with } \\ \text { Exceptionalities }\end{array}\end{array}$
Professional School Psychology: (3)
SPS $6805 \quad$ Professional Problems in School Psychology

## Assessment: (12)

SPS $6190 \quad$ Academic Assessment and Intervention
SPS $6191 \quad$ Psycho-Educational Assessment I:
SPS 6192 Psycho-Educational Assessment II: Process
SPS $6193 \quad$ Psycho-Educational Assessment III: Behavior
Interventions: (18)
SPS $7407 \quad$ Behavioral Interventions in the Schools 3
MHS $5400 \quad$ Counseling Skills and Techniques 3
SDS 6411 Counseling Children and Adolescents 3
SDS $5460 \quad$ Crisis Counseling and Intervention 3
$\begin{array}{ll}\text { SPS } 6199 & \text { Family-School Consultation and } \\ & \text { Collaboration }\end{array}$
SPS $7176 \quad$ Consultation and Assessment with Culturally and Linguistically Diverse Populations
Research and Measurement Methodology: (6)
EDF 5432 Measurement and Evaluation in Education

3
EDP $7058 \quad$ Behavioral Intervention Research and Evaluation in Education

Supervised Field Experience: (13)
SPS 6941 Supervised Practicum in School Psychology
SPS 6678 Supervised Field Experience in School Psychology
(1200 clock hours)

## Co-requisites for Non-Education Majors:

Students who have an undergraduate degree in an area other than education must complete an additional 9 credits of professional education courses covering classroom management, general methods of teaching, and TESOL. These courses are required to meet certification requirements in the state of Florida. Listed are the recommended courses:

## Classroom Management

EDF 5255 Classroom Management

## General Methods of Teaching

EDG 5414 Instructional Strategies for the Classroom Teacher
TESOL
TSL 5361C TESOL for Secondary Teachers
The student is required to enter an internship in School Psychology under the supervision of a field based school psychologist for a period of 1200 clock hours. This internship is a full-time, eight hour day, five day week involvement and students entering the program should plan for it during the final stage of their training. At least 600 hours of the internship must be in a setting from kindergarten to grade 12 in a public school. Other approved internship experiences may include private state approved educational programs or other appropriate mental health-related programs or settings for the education of children and youth.

For students entering the program with a Master's degree in School Psychology or a related field, the Ed.S. program may accept a maximum of 27 credits, and must be approved by program faculty on an individual basis.

## Graduation Requirements:

1. GPA of at least 3.0
2. Successful demonstration of the Florida Educator Accomplished Practices (FEAPs)
3. Passing the Florida Department of Subject Area Examination in School Psychology
4. Passing all sections of the General Knowledge Test or passing all sections of the CLAS prior to July 1, 2002
5. Passing the Professional Education section of the Florida Teacher Certification Exam

## Doctor of Education Programs

## Common Minimum Admission Requirements

The School of Education has common admission requirements for its doctoral programs regardless of the specialty sought. Applicants to the program must submit the following records and documents to the Office of Graduate Admissions:

1. A completed online application for Graduate Admission with appropriate fees.
2. An official copy of the Graduate Record Exam (GRE) scores.
3. Official transcripts of all higher education institutions attended.
4. Three letters of reference attesting to the applicant's ability to succeed in doctoral study.
5. A current resume/vitae.
6. A statement that sets forth the applicant's career goals and relates these goals to the completion of the doctoral program.
7. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.
No action will be taken on incomplete files. A file is considered incomplete if any of the above is missing.

The application and all supporting documentation are reviewed by program faculty. The criteria applied in reviewing the applicant's file are noted below. Exceptions to one or more of the stated criteria may be granted provided the applicant can provide compelling reasons and evidence.

1. A grade point average (GPA) of at least 3.0 (on a 4.0 scale) in upper level undergraduate work.
2. A 3.25 GPA in all graduate work attempted.
3. A master's degree from an accredited institution, A bachelor's degree from an accredited institution may be accepted for Admission.
4. Official GRE scores.
5. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
Upon completion of the review of the file the applicant will be interviewed by program and departmental faculty which comprise a Faculty Admissions Committee. Final decisions are made by the Faculty Admissions Committee and the Dean of the College. As admission to programs is competitive, meeting minimum admission requirements does not assure admission into the program. A candidate for admission to the program will be judged not only on the basis of quantitative criteria (listed elsewhere in this catalog) but also in relation to prior experience, especially as it relates to future career goals. Additional information is available from the individual program faculty.

## Professional Education Core

$$
\begin{array}{ll}
\text { EDF } 7937 & \begin{array}{l}
\text { Advanced Topics in the Social } \\
\text { Eoundations of Education } \\
\text { EDP 7057 } \\
\\
\text { Educational Psychology: Advanced } \\
\text { Applications }
\end{array}
\end{array}
$$

All doctoral students must enroll in EDF 7937 within their first year of admission.
Research and Statistics Core (9 hours minimum)
A research requirement of nine semester hours, taken in the order listed, is common to all School of Education doctoral programs.

| EDF 6472 | Research Methods in Education: <br> Introduction to Data Analysis | 3 |
| :--- | :--- | :--- |
| EDF 6486 | Advanced Data Analysis in Quantitative <br> Educational Research |  |
|  | 3 |  |
| ${ }^{1}$ Prerequisite: EDF 5481 and EDF 6472. |  |  |

## And one of the following:

$\begin{array}{lll}\text { EDF 7403 } & \begin{array}{l}\text { Quantitative Foundations of Educational } \\ \\ \text { EDF 6475 }\end{array} & \begin{array}{l}\text { Research } \\ \text { or }\end{array} \\ & \begin{array}{l}\text { Qualitative Foundations of Educational } \\ \text { Research }\end{array} & \end{array}$

## Candidacy Examinations and Advancement to Candidacy

The student must complete all coursework, successfully pass both written and oral candidacy examinations covering course work and also submit copies of a dissertation proposal, which has been approved by the supervisory committee, to the Dean of the College and to the Dean of the University Graduate School.
Program Core (24-36 hours minimum)

## Advised Electives

Dissertation: ( $\mathbf{2 4}$ hours minimum)
The student is responsible for a minimum of 24 semester hours of dissertation credits. The dissertation must be an original contribution to knowledge. The doctoral dissertation is the final component of the series of academic experiences that culminate in the awarding of the Ed.D. degree. A successful dissertation is a demonstration of the candidate's ability to use the tools and methods of basic and/or applied research in the field, to organize the findings, and to report them in a literate, logical, and compelling fashion.

The student is expected to complete the dissertation within five (5) years from the date of advancement to candidacy (i.e. successful completion of all written and oral examinations, and favorable recommendations of the supervisory and guidance committee). A minimum of six credit hours of dissertation is to be undertaken each semester while the dissertation is being prepared. Continuous enrollment in dissertation study is required (including summer semesters).

## Adult Education and Human Resource Development (AE/HRD)

The doctoral program in Adult Education and Human Resource Development (AE/HRD) prepares advanced professionals to facilitate individual, organizational, and career development and advancement of adults in the nation and the world. Two cognate options are available within the doctoral program in Adult Education and Human Resource Development. The first option is an open cognate custom designed for the student's research needs. The second option is a directed cognate in one of six areas: (1) International and Intercultural Education, (2) Labor Studies, (3) Urban Education, (4) Entrepreneurship, (5) Hospitality and Tourism Management, and (6) Recreation and Sport Management.

Graduates are equipped to administer, design and facilitate programs for adult clients, employees, volunteers, students, and associates of profit and not-profit organizations. Graduates are professionals who may be engaged in program development and evaluation, planning, policy development and analysis, leadership, instruction and training, counseling and advisement, consultation, and marketing and recruitment activities designed to further the growth and development of adult learners. They may also be engaged in improving
organizational functioning through educationally-related intervention strategies or working with other performance improvement consultants. Graduates are competent researchers and scholars with problem solving and investigative skills in evaluation, qualitative, and quantitative methods.

Participants in the Adult Education and Human Resource Development doctoral program and its affiliated cognates come from diverse backgrounds: business and industry; higher education; public and proprietary schools; health and social services agencies; law enforcement and corrections; the military, government, and nongovernmental agencies; religious organizations; libraries and museums; and civic and professional associations.

The Doctor of Education degree is conferred on the basis of high scholarship and skill in the creation and application of knowledge from theory and research findings to practical problems in adult education and/or human resource development. Applications for admission to the doctoral program are invited from individuals who are highly motivated and intellectually capable of meeting the challenges of a rigorous doctoral degree program.

## Additional Admission Requirements

In addition to the University's and the School of Education's common minimum admission requirements, applicants must possess the following qualifications:

1. Evidence of commitment to a career in the broad field of adult education and human resource development;
2. Successful professional experience in one or more of the above fields;
3. Potential for leadership in the above fields; and
4. A master's degree.
5. Applicants must arrange individual interviews with each faculty member in the program to discuss the applicant's research interests and the faculty member's research.

Candidates for admission to the programs will be judged not only on the basis of quantitative criteria (e.g., GPA, as listed elsewhere in this catalog) but also in terms of prior experience and future career goals.

## Adult Education and Human Resource Development Program of Study

A typical program will require a minimum of 90 semester hours beyond the baccalaureate degree and will involve the categories of courses noted below.

## Adult Education and Human Resource Development

 Program Core: (minimum 18-24 hours)The adult education and human resource development core includes courses in areas such as comprehensive adult education and human resource development planning, program development, instructional design, adult teaching and learning, trends and issues, strategies, and research in the disciplines. For students with a master's in Adult Education or Human Resource Development, the minimum is 18 semester hours. For students whose master's is not in Adult Education or Human Resource Development, the minimum is 24 hours.
ADE $6074 \quad$ Writing for Publication in Adult Education and Human Resource Development
ADE 6186 Comprehensive Program Evaluation in AE/HRD

ADE 6360
ADE 6674
ADE 7920
ADE 7772

| Adult Teaching Methods | 3 |
| :--- | :--- |
| Trends and Issues in AE/HRD | 3 |
| Colloquium in AE/HRD | $1-6$ |
| Review of Research in Adult Education |  |
| and Human Resource Development | 3 |

Will be required only if master's degree is not in Adult Education and Human Resource Development or related filed:
ADE 5386 Individual Learning and Adult Education 3
ADE 5387 Organizational Learning and Human Resource Development
Research and Statistics: (minimum 15 hours)
Although some courses are required for all doctoral participants, others are selected with the guidance of the participant's program of studies supervisory committee.

## Required Courses

| EDF 5481 | Foundations of Educational Research (Required only if not taken in Master's program as prerequisite) | 3 |
| :---: | :---: | :---: |
| EDF 6472 | Research Methods in Education: Introduction to Data Analysis | 3 |
| EDF 6475 | Qualitative Foundations of Educational Research | 3 |
| EDF 6481 | Educational Research Methodology | 3 |
| EDF 6486 | Advanced Data Analysis in Quantitative Educational Research | 3 |
| And either |  |  |
| EDF 7403C | Data Analysis in Multivariate Educational Research or | 3 |
| EDF 6476 | Advanced Methods of Qualitative Educational Research or | 3 |
| EDP 7058 | Behavioral Intervention Research and Evaluation in Education | 3 |

Cognate: (9 semester hours minimum; 18 recommended)
Electives, in the cognate area, vary according to the participants' background and professional goals and are selected with the guidance of the participants' program of studies supervisory committee.

## Two cognate options are available:

1. The first option is an open cognate custom designed by the committee and the student.
2. The second option is a directed cognate in one of six areas: (1) International and Intercultural Education, (2) Labor Studies, (3) Urban Education, (4) Entrepreneurship, (5) Hospitality and Tourism Management, and (6) Recreation and Sport Management.

## International and Intercultural Education Program Cognate (recommended 18-24 credit hours)

Courses include areas such as educational systems, comparative methodology, educational development issues, intercultural \& cross-cultural education, conflict theory and resolution, planning in education, educational technology transfer, knowledge and development, education organizational behavior, international organizations and NGOs, and social, psychological and political contexts of international education.

Labor Studies Program Cognate (recommended 18-24 credit hours)
Courses include areas such as conflict resolutions, labor movements, workers' rights, workplace diversity, economic development, and employment law.

## Urban Education Program Cognate (recommended 1824 credit hours)

Courses include areas such as urban adult education activities, economic development, workforce development, and equitable educational, living, and workplace conditions special urban populations, family literacy, and immigration.

## Entrepreneurship Cognate (recommended 18 credit hours for certificate)

Courses include areas such as product development and innovation, intuition in management, social and non-profit entrepreneurship, and organization in management.

## Hospitality and Tourism Management Cognate (recommended 18-24 credit hours)

Courses include areas such as organizational behavior in the hospitality industry, feasibility studies in the hospitality industry, tourism studies, leadership training for team building, and hospitality management.

## Recreation and Sport Management Cognate (recommended 18-24 credit hours)

Courses include recreational therapy (RT) topic areas such as problems, issues and trends; philosophical and social foundations; assessment, documentation, and evaluation; program planning; law and liability, leisure services; and related core courses in recreation and sports management.
Prospectus and Dissertation: (12 semester hours minimum)
Participants are responsible for a minimum of 12 semester hours of dissertation credits. The dissertation must be an original contribution to knowledge in an area of adult education or human resource development. Students are expected to complete the dissertation within nine years from their date of admission to the Adult Education and Human Resource Development doctoral program. A minimum of three credit hours of dissertation are to be undertaken each term the dissertation is being prepared. Continuous enrollment in dissertation study is required, including summer terms.

## Educational Administration and Supervision

The Doctor of Education (Ed.D.) program in Educational Administration and Supervision is designed for students who wish to pursue leadership roles in educational institutions. The program of studies prepares students for careers as school superintendents, principals, directors and supervisors; administrators in state, federal, and international agencies; professors of Educational Administration; and administrators in institutions of higher education.

The curriculum is designed to enable students to become familiar with and utilize effectively both theoretical and technical knowledge. The program of study is multidisciplinary and integrates broad intellectual perspectives into the study and practice of Educational Administration.

## Additional Admission Requirements

In addition to the common admission requirements for doctoral programs in the School of Education, an applicant must:

1. Provide evidence of at least three years of successful and appropriate professional experience.
2. Engage in an interview with a committee of program faculty.
3. Receive a positive endorsement of the program faculty.

## Program of Study

The program requires the completion of a minimum of 90 semester hours of academic work beyond the baccalaureate degree. Program requirements include the following:

## Educational Administration and Supervision Core:

(24)

EDA 7069 Educational Policy 3
EDA 7103 Theories of Educational Administration 3
EDA 7233 Ethics and Educational Leadership 3
EDA 7288 Politics of Education 3
and
Twelve (12) credit hours in other advisor-approved courses.

## Minor/Cognate Area: (12)

The cognate area requires a minimum of 12 semester hours of coursework. The courses should be chosen with regard to coherence and relevance to the anticipated substantive aspect of the dissertation and in consultation with the student's faculty advisor. The cognate may be used as an extension of expertise in the major and courses may be taken at any academic unit at the university.

| Professional Education Core: (6) |  |
| :---: | :---: |
| EDF 7937 | Advanced Topics in the Social |
|  | Foundations of Education |
| EDP 7057 | Educational Psychology: Advanced Applications |
| Research and Statistics Core: (12) |  |
| EDF 6472 | Research Methods in Education: |
|  | Introduction to Data Analysis |
| EDF 6486 | Advanced Data Analysis in Quantitative |
|  | Educational Research |
| EDF 6475 | Qualitative Foundations of Educational |
|  | Research |
| And one ot | dvisor approved research course |

Note: Evidence of completion of a graduate-level research course (e.g., EDF 5481) or equivalent at FIU or at another accredited institution is required before starting the Research Core.

## Doctoral Dissertation (EDA 7980): $\mathbf{1 2}$ hours minimum

The student is responsible for a minimum of 12 semester hours of dissertation credits. All doctoral students must be continuously enrolled in a minimum of three (3) dissertation credits each term following advancement to candidacy until graduation. A candidate for the doctorate in Educational Administration and Supervision is required to prepare and present for faculty approval a doctoral dissertation that demonstrates a capacity for independent
thought and for the application of the tools and methods of research to educational issues and problems.

## Higher Education

The program culminating in the Doctor of Education in Higher Education is designed to provide the opportunity for students to enhance analytical and research skills for leadership roles in institutions of higher education. Graduates are prepared for academic and administrative positions, as faculty, or as policy analysts in federal, state, or institutional roles. The program is designed to stimulate research related to higher education, particularly in urban settings.

## Admission Requirements

Applicants to the program must submit the following records and documents to the Office of Graduate Admissions:

1. A completed online application for Graduate Admission with appropriate fees;
2. An official copy of the Graduate Record Exam (GRE) scores;
3. Official transcripts of all higher education institutions attended;
4. Three letters of reference attesting to the applicant's ability to succeed in doctoral study;
5. A current résumé/vitae;
6. A statement that sets forth the applicant's career goals and relates these goals to the completion of the doctoral program; and
7. A writing sample illustrating research skills (such as a thesis, journal article, paper submitted for academic credit; etc.).
8. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.
No action will be taken on incomplete files. A file is considered incomplete if any of the above is missing.

The application and all supporting documentation are reviewed by program faculty using the criteria noted below. Exceptions to one or more of the stated criteria may be granted on the basis of other compelling evidence that the applicant is likely to be successful in this doctoral program.

1. A grade point average (GPA) of at least 3.0 (on a 4.0 scale) in upper level undergraduate credits;
2. A 3.25 GPA in all graduate work attempted.
3. A master's degree from an accredited institution, preferably in a related field.
4. Official GRE scores.
5. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
6. The evidence from the writing sample that the applicant can perform doctoral-level work.
7. Professional experience (other than a graduate assistantship) in a college or university is highly preferred.
8. An interview with the Program Admissions Committee.
9. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW 8th Street, PC 230, Miami, FL 33199.
Members of the program's graduate faculty will constitute the Doctoral Admissions Committee. Upon completion of the review of the applicant's file and the interview, the Doctoral Admissions Committee will make recommendations for acceptance or rejection to the Office of Graduate Studies and to the Dean of the College. The ultimate decision lies with the University Graduate School.

As admission to programs is competitive, meeting minimum admission requirements does not assure admission into the program. A candidate for admission to the program will be judged not only on the basis of quantitative criteria (e.g, GRE), but also in relation to prior experience, especially as it relates to future career goals and faculty expertise. Additional information is available from the individual program faculty.

## Program Requirements

The Ed.D. Program in Higher Education requires a minimum of 78 semester hours of coursework. Course work requirements for the degree, while subject to individual variations, consist of the following:
Professional Education Core (6)
EDF 7937 Advanced Topics in Social Foundations 3
EDP 7057 Educational Psychology: Advanced Applications

## Research Core (15)**

| EDF 6472 | Research Methods in Education: <br> Introduction to Data Analysis | 3 |
| :--- | :--- | :--- |
| EDF 6486 | Advanced Data Analysis in Quantitative <br> Educational Research | 3 |
| Two other advisor approved research courses | Qdualitative Foundations of Educational <br> Research | 3 |
|  | 6 |  |

**Proof of completion of a graduate-level research course (e.g., EDF 5481 or some equivalent at FIU or at another accredited institution) is required before starting the Research Core.
Higher Education Policy Core (3)
EDH 7401C Higher Education and Public Policy
Higher Education Core (21)
EDH 7635 Administration of Higher Education
EDH 7040 Advanced Seminar on the College Student
EDH 7065 Higher Education:
Philosophical/Historical Perspectives
Four other advisor approved courses focusing on higher education.

## Cognate or Minor Area (18)

The cognate area requires a minimum of 18 semester hours of course work in a single area. The courses should be chosen with regard to coherence and relevance to the anticipated substantive aspect of the dissertation and in consultation with the student's advisor. The cognate may be taken in the School of Education, and may be used as an extension of expertise in the major. The cognate may also be taken at any college at FIU.

## Guided Cognate or Minor (18)

In lieu of a more traditional, open-ended cognate, the student may opt to take a more focused area of study. The cognates/minors below, and the required courses, are as follows:

## Adult Education/Human Resources (18)

This cognate/minor is designed to give students in the doctoral program in Higher Education preparation to facilitate individual, organizational, and career development and advancement of adults in the nation and the world.

## Required:

ADE 6674 Trends and Issues in AD/HRD and
Five other courses approved by the program leader in AE/HRD and the student's advisor.

## International and Intercultural Education (18)

The cognate/minor is designed to give doctoral students in Higher Education an understanding of the processes of globalization, the global environment, and the responsibilities of citizenship in an increasingly interdependent world.

## Required:

EDF $6812 \quad$ National Education Systems: A Comparative Analysis and
Five other courses approved by the program leader in International and Intercultural Education and the student's advisor.

## Dissertation (12 hours minimum)

EDH 7980 Ed.D. Dissertation
The student is responsible for a minimum of 12 semester hours of dissertation credits. All doctoral students must be continuously enrolled in a minimum of three (3) dissertation credits each term following advancement to candidacy until graduation.

## Program of Study

The Program of Study is the student's plan for coursework in all the required areas of program. The required sections include the professional, research, educational policy, and higher education cores, as well as the cognate or track, the doctoral seminar, and the dissertation hours. The program of study must be approved by the student's Program Advisory Committee (see below). Prior to the candidacy examination (see below), students must complete a program of study, approved by the program committee, to the SOE Office of Graduate Studies.

## Candidacy Examination and Advancement to Candidacy

The student must successfully pass qualifying examinations after substantially completing their nondissertation course work. The qualifying examination consists of both written and oral portions (the latter is called the defense of the candidacy examination). The candidacy examination is written and graded by the students' program advisory committee. The chair of the program advisory committee will forward to the Office of Graduate Studies and to the University Graduate School
the results of the candidacy examination. The University Graduate School admits students to candidacy.

## Program Advisory Committee

After admission, but before the candidacy examination, the student must constitute the program advisory committee. This committee must be made up of three graduate faculty, one of which will be the chair and one of which must include a member of the program's faculty. The committee will approve the student's program of study, and it will develop and grade the candidacy examination. The program advisory committee ends upon the student's completion of the candidacy examination.

## Dissertation Committee

Prior to defending a proposal, the students must select a dissertation committee, made up of at least 4 faculty members, one of which will be the director (or chair) of the dissertation. The chair/director of the dissertation must have Dissertation Advisor Status and all committee members must also be members of the FIU Graduate Faculty. Further information about the dissertation is available from the student's advisor, the Office of Graduate Studies in the School of Education, and the University Graduate School.

## Dissertation Proposal

The students admitted to candidacy must successfully complete and defend a proposal for their dissertation, which constitutes the research plan for the dissertation. More information about the dissertation proposal is available from the student's advisor, the Office of Graduate Studies in the School of Education, and the University Graduate School.

## The Ed.D. Dissertation

The dissertation must be an original contribution to knowledge. The doctoral dissertation is the final component of the series of academic experiences that culminate in the awarding of the Ed.D. degree. A successful dissertation is a demonstration of the candidate's ability to use the tools and methods of basic and/or applied research in the field, to organize the findings, and to report them in a literate, logical, and compelling fashion.

## Transfer Credit

Students may apply up to 12 semester hours of previously-completed graduate credit towards their program of study if taken as part of a completed degree (only six (6) graduate credits may be applied from a noncompleted graduate degree). Exceptions to this rule may only be given with the approval of the program faculty and the University Graduate School. Students may apply courses for which they have obtained a B grade or better from an accredited institution. The transfer credit cannot be used to satisfy more than one-half of the requirements in any section of the program of study.

## Time to Completion

The time to completion, from admission to graduation, is nine (9) years. Students must have completed all coursework and program requirements within that time, including a successful defense of the dissertation. Coursework applied toward completion of program
requirements cannot be more than nine years old at the time of graduation, unless the coursework was transferred from a previously-earned graduate degree.

## Graduation Requirements

The following is required for successful graduation from the program:

1. Successful completion of the program of study, including all course work and comprehensive exams;
2. GPA of 3.00 or better; and
3. Successful completion, defense, and University approval of the dissertation.

## Graduate Certificate in Academic Advising

The graduate certificate program in academic advising is designed for those wishing to enter the field of academic advising or those working in academic advising with a degree in another discipline. The master's degree is typically the entry-level requirements for an advising position at the university level. For those with a graduate degree in another discipline, the certificate can provide a foundation in the theory and practice of advising. For those interested in the field, a certificate can be a concentration within a master's degree in higher education. The advising certificate consists of 15 hours or required courses and electives. This certificate program is open to non-degree-seeking students only.

## Admission Requirements

1. A baccalaureate degree and an undergraduate GPA of 3.0 in the last 60 credit hours of upper-division undergraduate study;
2. Work experience in higher education such as community college or student affairs areas is preferred but not required;
3. Two (2) letters of recommendation;
4. Personal statement;
5. Resume.
6. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.
7. Note: The GRE is not a requirement for admission into the Certificate in Academic Advising program.

## Program Requirements: (15 semester hours)

In consultation with their advisor, the certificate student will select a set of courses that align with their career goals and professional development needs.

| Required Courses |  |  |
| :---: | :---: | :---: |
| EDH 6045 | College Student Development Theory | 3 |
| EDH 6041 | Foundations of Academic Advising | 3 |
| Choose two of the following courses |  |  |
| EDH 6943* | Practicum in Higher Education | 3 |
| MHS 5400 | Counseling Skills and Techniques | 3 |
| MHS $6428{ }^{1}$ | Cross Cultural Counseling | 3 |
| MHS $5350{ }^{1}$ | Educational-Vocational Counseling | 3 |
| EDH 6047 | College Student Life and Culture | 3 |

## Choose one advisor approved elective

*EDH 6943 Practicum in Higher Education is required if the student is not employed in academic advising or a related field.
${ }^{1}$ MHS 5400 is a prerequisite and must be completed prior to enrollment in MHS 6428 and MHS 5350.

## Graduate Certificate in Educational Leadership

The Graduate Certificate Program in Educational Leadership is designed for students who have a master's degree in a subject or field of Education other than Educational Administration/Leadership. The coursework constitutes the "modified Florida program in educational leadership" at Florida International University and addresses the competencies assessed in the Florida Educational Leadership Examination. The program may be used to satisfy part of the requirements of the Florida Department of Education for certification in Educational Leadership. This certificate program is open to non-degree-seeking students only.

## Admission Requirements

Admission to the program based on the following criteria:

1. A master's degree from an accredited institution;
2. A grade point average of at least 3.25 (on a 4.0 scale) in master's degree work;
3. A minimum combined score of 800 on the verbal and quantitative portions of the Graduate Record Examination (General Test);
4. At least three years of successful teaching experience and a regular Florida teaching certificate; and
5. Evidence of having satisfied the ESOL requirements of the State of Florida. (Otherwise, a student will be required to satisfy this requirement prior to completion of the program.)

## Program of Study

The program of study comprises a minimum of 30 semester hours.
EDA 6192 Leadership in Education 3
EDA $6195 \quad$ Communication in Educational Leadership
EDA 6232 School Law 3
EDA 6242 School Finance 3
EDA 6271C Administering Educational Technology 3
EDA 6503 Instructional Leadership 3
EDS 6115 School Personnel Administration 3
EDA 6943 Administrative Internship 3
EDA 6061 Introduction to Educational Leadership 3
Advisor-approved elective in Curriculum and Instruction 3
In addition to the successful completion of the program's coursework, a student will be required to present evidence of having passed all sub-tests of the FELE and satisfied the ESOL requirements that demonstrate mastery of the four ESOL standards required of school administrators.

## Graduate Certificate in Teacher Leadership (Online)

The graduate certificate program in teacher leadership is designed for those wishing to enter the field of educational leadership or those working with a degree in another
discipline. For those with a graduate degree in another discipline, the certificate can provide a foundation in the theory and practice of teacher leadership. The teacher leadership certificate consists of 15 hours of required courses.

## Admission Requirements

1. A baccalaureate degree and an undergraduate GPA of 3.0 in the last 60 credit hours of upper-division undergraduate study;
2. A minimum of three years of teaching experience in PK-12 education is required;
3. Two (2) letters of recommendation;
4. Personal statement;
5. Resume;
6. Letters and any other supporting documents are to be sent to FIU Graduate Admissions Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199
7. Note: The GRE is not a requirement for admission into the Certificate in Teacher Leadership program.

## Program Requirements: ( 15 semester hours)

EDA $6192 \quad 3$
EDA 6503 Instructional Leadership 3
EDA $6195 \quad$ Communication in Educational Leadership 3
EDF $5481 \quad$ Foundations of Educational Research 3
EDA 6943 Administrative Internship 3

## Teaching and Learning

Lynne D. Miller, Chair and Associate Professor, Literacy Education
Patricia Barbetta, Associate Professor, Special Education
Kyle Bennett, Assistant Professor, Special Education
Charles Bleiker, Associate Professor, Early Childhood Education
Eric Brewe, Associate Professor, Science Education
James Burns, Assistant Professor, Curriculum and Instruction
David Y. Chang, Professor, Art Education
Elizabeth Cramer, Associate Professor, Special Education
Charmaine DeFrancesco, Associate Professor, Physical Education
Laura Dinehart, Chair, Leadership and Professional Studies and Associate Professor, Early Childhood Education
Eric Dwyer, Associate Professor, TESOL and Modern Language Education
Maria L. Fernandez, Associate Professor, Mathematics Education
Joyce C. Fine, Associate Professor, Literacy Education
Daniela Fenu Foerch, Instructor, Early Childhood Education
Eva M. Frank, Instructor, Physical Education
Liana Gonzalez, Instructor, Special Education
Gail P. Gregg, Associate Professor, English Education
Zahra Hazari, Associate Professor, Science Education
Flavia Iuspa, Instructor and Director for MSCI Jamaica Program
Barbara King, Assistant Professor, Mathematics Education
Hilary Landorf, Associate Professor, Social Studies/Global Education
Teresa Lucas, Senior Instructor, TESOL and Modern Language Education
Sarah A. Mathews, Assistant Professor, Social Studies Education
Alicia Mendoza, Associate Professor, Elementary Education
George E. O'Brien, Associate Professor, Science Education
Aixa Perez-Prado, Instructor, TESOL and Modern Language Education
Kyle Perkins, Associate Dean of Academic Affairs and Professor, TESOL and Modern Language Education
William M. Ritzi, Senior Instructor, Art Education
Helen Robbins, Senior Instructor, Literacy Education
Angela Salmon, Associate Professor, Early Childhood Education
Patsy Self-Trand, Instructor, Literacy Education
Gwyn Senokossoff, Assistant Professor, Literacy Education
Daniel H. Serravite, Assistant Professor, Physical Education
Linda Spears-Bunton, Associate Professor, English Education
M. O. Thirunarayanan, Associate Professor, Learning Technologies
Maria V. Tsalikis, Instructor, Literacy Education
Lynn Yribarren, Instructor, Literacy Education

## General Information

The Department of Teaching and Learning offers graduate degrees leading toward the Master of Science, Education Specialist, Doctor of Education degrees, and Doctor of Philosophy degrees.

Additionally the department offers a Master of Arts in Teaching (MAT) in Art Education for students who do not hold a bachelor's degree in education. This degree leads to State of Florida teacher certification Art Education.

The department is committed to the generation and application of knowledge through research and service to the community.

## Master of Arts in Teaching <br> Art Education (K-12)

## Master of Science Programs

Art Education
Curriculum and Instruction
Specializations in:

- Curriculum Development
- Elementary Education
- English Education
- Modern Language Education
- Learning Technologies
- Mathematics Education
- Physical Education
- Science Education
- Social Studies Education
- Special Education

Early Childhood Education
Foreign Language Education - TESOL Track

Physical Education

- Sport Science Track

Reading Education (K-12)
Special Education

## Educational Specialist Program

Curriculum and Instruction
Specializations in:

- Art Education
- Early Childhood Education
- Elementary Education
- English Education
- Instructional Leadership
- Learning Technologies
- Mathematics Education
- Modern Language/Bilingual Education
- Reading Education
- Science Education
- Social Studies Education


## Doctor of Education in Curriculum and Instruction <br> Specializations in:

- Art Education
- Early Childhood Education
- Elementary Education
- English Education
- International and Intercultural Development Education
- Instructional Leadership
- Learning Technologies
- Mathematics Education
- Modern Language/Bilingual Education
- Reading Education
- Science Education
- Social Studies Education


## Doctor of Education in Exceptional Student Education

## Doctor of Philosophy in Curriculum and Instruction

Specializations in:

- Language, Literacy and Culture
- Mathematics, Science and Learning Technologies
- Curriculum and Instruction


## Graduate Certificate Programs

Grades K-5 Mathematics Teaching
Grades 6-8 Mathematics Teaching
Grades K-5 Science Teaching
Grades 6-8 Science Teaching
Professional Spanish/English Bilingual Education TESOL

All stated admission requirements are to be considered minimum. A student who meets these minimum requirements is not automatically assured admission.

## Other Programs:

Education Minor and Alternative Certification (not a degree program)

## Master of Arts in Teaching

The Master of Arts in Teaching is offered in Art Education and is for candidates without a certification in teaching. This degree is no less rigorous than the advanced master degree program, but includes courses which provide the necessary background in professional education.

## Master of Arts in Teaching Art Education (K-12)

## Degree Program Hours: (54)

## Admission Requirements

1. BFA or a Bachelor's degree or a strong minor (30 hours with a 3.0 GPA or higher) in Fine Arts and a minimum of 3.0 cumulative GPA or higher for the last 60 hours of upper division coursework.
2. Passing scores on all sections of the General Knowledge Exam (GK) or CLAS or GRE (considered on an individual basis). Note: GRE is NOT required, but can be used in place of GK. However, GK is recommended as it is an exit requirement.
3. In addition the applicant must submit two (2) letters of recommendation, a résumé, a statement of personal philosophy/professional goals consistent with the objectives of the masters program. Letters and any other supporting documents are to be sent to FIU

Graduate Admissions Office, 11200 SW 8 $^{\text {th }}$ Street, PC 230, Miami, FL 33199.
4. After submission of application, applicants must schedule a portfolio interview with the Graduate Program Director. The Portfolio should contain fifteen (15) pieces of artwork including at least three (3) drawings.

## Required Courses: (54)

EDF 5443 Measurement and Evaluation in the Classroom

3
EDF 5517 Education in American History 3
EDG 5414 Instructional Strategies in Teaching 3
EDP 5053 Educational Psychology: Principles and Applications
EEX $6051 \quad$ Educational Needs of Students with Exceptionalities
ESE 5344C Secondary Classroom Management 3
RED 5339 Subject Related Reading 3
TSL 5361C TESOL for Secondary Teachers 3
ARE 4316 Special Teaching Lab: Art K-5 3
ARE 4341 Special Teaching Lab: Art 6-12 3
ARE $5945 \quad$ Practicum in Art Education 6
ARE $6140 \quad$ Curriculum and Instruction in Art 3
ARE 6xxx Art Education Workshop 9
ARE 6262 Organization and Coordination of Art 3
ARE 6746 Seminar in Art Education 3
Applications to student teaching are due in the office of the Director of Student Teaching by July 1 for Spring semester placement and by March 1 for Fall semester placement. Check with the program leader early in program enrollment to determine Fall placement availability.

## Graduation Requirements

1. An overall GPA of at least 3.0
2. Successful demonstration of all of the Florida Educator Accomplished Practices at the Preprofessional level
3. Passing score on all three sections of the Florida Teacher Certification Examination and official evidence provided.
4. Upload all required course and program artifacts into Taskstream account.

Note: If CLAST is passed prior to July 1, 2002, the new General Knowledge subtest may be waived.

## Advanced Master of Science Degree Programs

Applicants for admission to advanced Master's programs in Education must hold or qualify for teacher certification in the appropriate area. Early Childhood Education applicants must hold or qualify for certification or equivalent in elementary, special or early childhood education (including practical teaching experience requirement). All applicants must also satisfy Board of Education admission requirements: a Bachelor's Degree or pass State of Florida Certification Exams, a GPA of 3.0 or higher for the last 60 hours of upper division coursework. Some programs require 3 letters of recommendation, an autobiography, and GRE scores. Applicants admitted with a pending GRE score must submit test score within one semester to be fully admitted or become a candidate for graduation.

NOTE: Several MS programs have different admissions requirements. Review specific degree requirements in this catalog and consult with Program Director for further information.

## Master of Science in Art Education

## Degree Program Hours: (36)

## Admission Requirements

Applicants for admission into the Master of Science in Art Education program must meet the minimum University Graduate School admission criteria. Admission to the masters program will be based on the following criteria:

1. Applicants for admission to the MS-Art Education program must hold or qualify for the Florida teacher certification in art. All applicants must also satisfy the Board of Education admission requirements. A GPA of 3.0 or higher in the last 60 semester hours of upper division undergraduate study.
2. Application materials must include two (2) letters of recommendation, a résumé, a statement of personal philosophy/professional goals consistent with the objectives of the masters program.
3. After submission of application, applicants must schedule a portfolio interview with the Graduate Program Director. The Portfolio should contain fifteen (15) pieces of artwork including at least three (3) drawings.

## Transfer of Credit

Students may be allowed to apply up to six semester hours of course work taken at accredited institutions to the masters program requirements with the following stipulations:

- The student received a grade of 3.0 or better on a 4.0 scale.
- The course was relevant, as judged by the Admissions Committee.
- The course is listed on an official transcript received by the Graduate Admissions Office.
- The course will be no older than 6 years at the time of graduation with a master's degree.
- The course meets all University requirements.


## Education, including Art <br> Professional Studies: (6)

EDF $5481 \quad$ Foundations of Educational Research
Select one of the following:

| EDE 6205 | Curriculum Design for Childhood <br> Education <br> or | 3 |
| :--- | :--- | :--- |
| ESE 6215 | Secondary School Teaching Field <br> or | 3 |
| EEX 6051 | Education of Students with <br> Exceptionalities | 3 |
| EDS 6050 | or | Supervision and Staff Development |
| EDF 5955 | or | 3 |
|  | Field Study Abroad <br> or | 3 |

EDF 6211 Psychological Foundations of Education 3
Art/Art Education: (30)
ARE 6140 Curriculum and Instruction in Art

ARE 6262 Organization and Coordination of School and Community Art Programs 3
ARE 6746 Seminar in Art Education: Contemporary Issues and Research
ARE 6925-29 Workshop in Art Education 6
Art History 3

Studio Art (Three semester hours credit for each studio course)

## Master of Science in Curriculum and Instruction

The Master of Science in Curriculum and Instruction program requires 36 semester hours beyond the bachelors degree. Up to 6 semester hours of graduate credit may be transferred into the masters program. The Master of Science in Curriculum and Instruction program includes five required components:

1. Curriculum and Instruction Core (9 semester hours)
2. Curriculum and Instruction Elective (3 semester hours)
3. Research Core ( 6 semester hours)
4. Content Specializations (18 semester hours)
5. Professional Conference (Exhibition)

## Admission Requirements

Applicants for admission into the Master of Science in Curriculum and Instruction program must meet the minimum University Graduate School admission criteria. Admission to the masters program will be based on the following criteria:

1. Hold or qualify for teacher certification in an appropriate area. For the Elementary Education specialization, applicants must hold or qualify for Florida certification or equivalent in elementary education, early childhood education, or special education (including practical teaching experience).
2. A bachelor's degree in an appropriate area from an accredited institution.
3. A GPA of 3.0 in the last 60 semester hours of upper division undergraduate study.
4. Two (2) letters of recommendation to support the application. Letters and any other supporting documents are to be sent to FIU Graduate Admission Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.
5. A statement of personal philosophy/professional goals consistent with the objectives of the master's program.
6. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the IBT TOEFL or 6.5 overall on the IELTS is required. (Exceptions: Students who completed an undergraduate or graduate program from a U.S. institution or accredited higher education institution in other English-speaking countries).

## Transfer of Credit

Students may be allowed to apply up to six semester hours of course work taken at accredited institutions to the masters program requirements with the following stipulations:

1. The student received a grade of 3.0 or better on a 4.0 scale.
2. The course was relevant, as judged by the Admissions Committee.
3. The course is listed on an official transcript received by the Graduate Admissions Office.
4. The course will be no older than 6 years at the time of graduation with a master's degree.
5. The course(s) meets all University requirements.

## Admission Procedures

In order to begin the masters program, a student must be accepted into the University Graduate School and the program in Curriculum and Instruction. Admission procedures are as follows:

1. Complete the online graduate admission application available at http://gradschool.fiu.edu. Official transcripts of all prior college work must be sent to the Graduate Admissions Office at Florida International University, PO Box 659004, Miami, Florida, 33265 to complete the application for admissions. Omission of any one of these items will delay the processing of the application.
2. Two letters of recommendation must be sent. Letters are to be from those who have knowledge of the applicant's prior professional experience (e.g. a supervisor) or of the applicant's ability to perform graduate work (e.g., a professor) and should attest to the applicant's intellectual ability, motivation, maturity, and potential. Letters and any other supporting documents are to be sent to FIU Graduate Admission Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.
3. Once the University application procedures are completed, the Graduate Admissions Office forwards the applicant's materials to the Department of Teaching and Learning. The file is then forwarded to the program faculty for review. On the basis of its review, the program faculty will (1) recommend admission, (2) withhold a decision and request additional information from the applicant, or (3) deny admission.
4. Admission to the program is determined by the program faculty on the basis of its evaluation of the applicant's academic and professional credentials.
5. Meeting the minimum admission requirements does not guarantee admission into the program.

## Program of Study

Curriculum and Instruction Core: (9 semester hours)

| EDG 6250 | Curriculum Development |
| :--- | :--- |
| EDG 6627 | Seminar: Trends and Issues in |
|  | Curriculum and Instruction |

Special Methods of Teaching
Choose one of the following:
EDE $5267 \quad$ Education of the Child in Urban Society (Required for Elementary, Special Education, and Curriculum Development Specializations) 3
EME 5315 Instructional Media 3
FLE 6336 Methods of Teaching Modern Language 3
LAE 6339 Teaching English in the Secondary School

3
MAE 6336 Teaching Mathematics in the Secondary School 3

PET 5716

SCE 6366
SSE 6633
TSL 6350

Analysis and Observation of Teaching in Phys. Ed.
Teaching Science in the Secondary School
Teaching Social Studies in the Secondary School
Troublesome English: Grammar for ESOL Teachers

## Curriculum and Instruction Elective (3 semester

 hours)Advisor approved elective in Curriculum and Instruction

## Research Core: (6 semester hours)

EDF $5481 \quad$ Foundations of Educational Research 3
EDF 6487 Action Research for Educators

Content Specialization (18 semester hours)
Choose from one of the following specializations:

1. Curriculum Development
2. Elementary Education
3. English Education
4. Learning Technologies
5. Mathematics Education
6. Modern Language Education
7. Science Education
8. Social Studies Education
9. Special Education
10. Physical Education

## Professional Conference (Exhibition)

## Content Specializations

## 1. Elementary Education ( $\mathbf{1 8}$ semester hours)

Select 4 graduate courses (with Advisor approval) from the following areas in the School of Education and Human Development (no more than 6 semester hours from any one area):

- Art Education
- Early Childhood Education
- Mathematics Education
- Reading
- TESOL
- Science Education
- Social Studies Education
- Special Education

Select 2 graduate courses (with Advisor approval) from the following areas in the College of Arts, Sciences and Education:

- Linguistics
- Psychology
- Sociology


## 2. English Education (18 semester hours)

Select (with Advisor approval) 6 graduate level courses in English/English Education.
3. Learning Technologies ( 18 semester hours)

EME 6408 Microcomputers as Teaching Tools 3
EME 5602 Multimedia in the Classroom 3
EME $6412 \quad$ Educational Courseware Evaluation and Development 3
Computer Programming Concepts 3
Programming for the Web
Directed Study: Computer Education

## 4. Mathematics Education (18 semester hours)

Select (with Advisor approval) 6 graduate level courses in Mathematics/Mathematics Education.
5. Modern Language Education (18 semester hours)

Grammar/Composition/Syntax (Specialize in language when possible)
Culture/Civilization (Specialize in culture of target language when possible)
inguistics (Specialize in lang
in phonology or phonetics preferred)
Literature (in the target language)
Applied Linguistics 3
TSL 5245 Developing Language and Literacy 3
TSL 6908 Field Component 3
FLE 6925 Special Topics in Second Language Education

## 6. Science Education ( 18 semester hours)

Select (with Advisor approval) 6 graduate level courses in the Sciences/Science Education.

## 7. Social Studies Education (18 semester hours)

Select (with Advisor approval) 6 graduate level courses in the Social Sciences/Social Studies Education or Area Studies: African-New World Studies, Asian Studies, Latin American and Caribbean Studies, European Studies. Students are encouraged to take courses with a global/international perspective.

| 8. Physical Education (18 semester hours) |  |  |
| :--- | :--- | :--- |
| PET 5216 | Sports Psychology | 3 |
| PET 5052 | Motor Learning for Sport Perf. | 3 |
| PET 5256 | Sociology of Sport | 3 |
| PET 5426 | Curriculum in Physical Education | 3 |
|  | or |  |
| PET 5436 | Physical Education Curriculum: K-8 | 3 |
| PET 5948 | Practicum in Physical Education | 3 |
| PET 6597 | Survey of Research in Phys. Ed. | 3 |


| 9. Special Education (18 semester hours) |  |  |
| :--- | :--- | :--- |
| EEX 5075 | Teaching Students with Disabilities in |  |
| EEX 5068 | Inclusive Settings* | 3 |
| Instructional Practices ESE I | 3 |  |
| EEX 5608 | Behavioral Approaches to Classroom <br> Learning Management | 3 |
| EEX 5766 | Instructional and Assistive Technology <br> in Special Education | 3 |
| EEX 6225 | Assessment of Students with | 3 |
| EEX 6106 | Exceptionalities | 3 |
|  | Acquisition of Speech and Language <br> Skills | 3 |

*If students have already taken EEX 3070 at the undergraduate level, then they will instead take EEX 6051 Education of Students with Exceptionalities.
10. Curriculum Development ( 18 semester hours)

EDG 5417 Learning Styles Applications
EDE 6205 Curriculum Design in Childhood Education
ESE 6215 Secondary School Curriculum 3
EDG 6286 Curriculum Evaluation 3
$\begin{array}{ll}\text { EDG } 6920 & \begin{array}{l}\text { Colloquium in Curriculum and } \\ \text { Instruction }\end{array}\end{array}$
EDG $7692 \quad$ Politics of Curriculum 3

## Master of Science in Early Childhood Education

## Degree Program Hours: (36)

The Master of Science degree in Early Childhood Education provides graduate training in the understanding and teaching of children from birth to eight. The program provides students with a foundation in curriculum and instruction and specialization in learning and development during early childhood.

## Admissions Requirements

Applicants must meet the minimum University Graduate School admissions requirements. Specific requirements for admissions into the M.S. degree in Early Childhood Education are as follows:

1. A Bachelor's Degree from an accredited institution in education, psychology, human development, or related field with a 3.0 GPA on a 4.0 scale in the last 60 hours of undergraduate work.
2. Two (2) letters of recommendation to support the applicant. At least one (1) letter must be from an individual working in early childhood education. Letters and any other supporting documents are to be sent to FIU Graduate Admission Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.
3. A statement of intent describing the applicant's personal and professional goals in relation to (a) how the program will help the applicant reach these goals and (b) how the applicant's goals are consistent with the program's mission.
4. A current resume/curriculum vitae that includes, at a minimum, educational history (with relevant courses listed), employment background, and relevant/related experiences.

## Program Requirements

The M.S. in Early Childhood Education program requires all students to take 15 hours of foundation courses in curriculum and instruction and in methods/statistics. Students take an additional 18 hours within early childhood education/development, and 3 hours of education-related electives.

## A. General Courses: (15 hours)

## 1. Foundations ( 9 hours)

EDF $6211 \quad$ Psychological Foundations of Education 3
EEC 6261 Education Programs for Younger Children
Choose one (1) course in social, philosophical, and/or historical foundations of education, such as EDF 6608 or equivalent special topic (EEC 5926) course.

## 2. Research Methods \& Data Analysis (6 hours)

EDF $5481 \quad$ Foundations Educational Research 3
EDF $6472 \quad$ Research Methods in Ed: Introduction to Data Analysis

$$
3
$$

```
B. Early Childhood Education/Development (18 hours)
1. Required Courses ( 6 hours)
EEC 6678 Research in Early Childhood Education 3
EEC 6705 Typical and Atypical Child Development 3
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2. Early Education Elective Courses (12 hours) Select four (4) advisor-approved electives in Early Childhood Education, such as
EEC 6932 Seminar in Early Childhood Education 3
LAE 5415 Children's Literature 3
MAE 6305 Instruction in Early Childhood Mathematics 3
SCE 6306 Instruction in Early Childhood Science 3 RED 6305 Instruction in Early Childhood Reading 3

## C. Elective Course OR Thesis (3 hours)

Select one (1) advisor approved elective in education, psychology, human development, or related field. Students may opt to complete a thesis instead of taking an elective course.

## Graduation Requirements

Students must meet all Department, College, Graduate School, and University graduation requirements. No grades of "C-" or less received in courses that are part of a masters program of study will be accepted toward graduation.

## Master of Science in Foreign Language Education

The Master of Science in Foreign Language is designed to provide specialized training and content knowledge for teachers of all levels of foreign language, K through 12, adult education, and community college education.

## Degree Program Hours: (33)

## Admission Requirements

To be admitted into the Master's degree program, a student must:

1. Hold a bachelor's degree from an accredited university or college;
2. Have a 'B' (3.0) average or higher in all junior and senior year course work for the bachelor's degree;
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
4. Two (2) letters of recommendation to support the applicant.
5. A statement of intent describing the applicant's personal and professional goals in relation to (a) how the program will help the applicant reach these goals and (b) how the applicant's goals are consistent with the program's mission.
6. A current resume/curriculum vitae that includes, at a minimum, educational history (with relevant courses listed), employment background, and relevant/related experiences.

## Prerequisites

One course in general linguistics or the successful completion of LIN 3010 or LIN 3013.

## Professional Education: (9)

EDF $5481 \quad$ Foundations of Educational Research 3
EDF 6211 Psychological Foundations of Education 3
EDF 6608 Social, Philosophical, and Historical Foundations of Education

## Program Courses: (6)

FLE 6336 Methods of Teaching Modern Language 3
FLE 6938 Seminar in Second Language Testing 3
Teaching Field: Modern Language (15)
Grammar/Composition/Syntax (Specialize in target
language when possible)
Culture/Civilization (Specialize in culture of target language when possible)
Linguistics (Specialize in target language when possible) 3
Literature in the target language
Applied Linguistics
Field Component: (3)
FLE 5908 Directed Study Foreign Language Education

FLE 6925 Special Topics in Second Language Education
Graduation Requirements: Students must meet all Department, College, Graduate School, and University graduation requirements. Students must have a 3.0 GPA to graduate from the program. No grades of "C-" or less received in courses that are part of a master's program of study will be accepted toward graduation.
Thesis Option: Students may opt to extend the MS program (3 to 6 additional thesis credit hours) by request.

## Master of Science in Foreign Language Education: TESOL Track

The Master of Science in Foreign Language: TESOL Track is designed to provide specialized training and content knowledge for teachers of all levels of foreign language, K through 12, adult education, and community college education. Student who are state certified teachers may include the five courses required for the Add-on ESOL Endorsement as part of the Master's program.
Degree Program Hours: (36)

## Admission Requirements

To be admitted into the Master's degree program, a student must:

1. Hold a bachelor's degree from an accredited university or college;
2. Have a ' $B$ ' (3.0) average or higher in all junior and senior year course work for the bachelor's degree;
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
4. Two (2) letters of recommendation to support the applicant.
5. A statement of intent describing the applicant's personal and professional goals in relation to (a) how the program will help the applicant reach these goals and (b) how the applicant's goals are consistent with the program's mission.
6. A current resume/curriculum vitae that includes, at a minimum, educational history (with relevant courses listed), employment background, and relevant/related experiences.

## Degree Requirements

The Master of Science degree consists of 36 semester hours. A maximum of six semester hours may be transferred into the program from outside the University, subject to the approval of the major advisor. A maximum of six semester hours of graduate level courses taken as an undergraduate may be included in the program provided they have not been used to satisfy degree requirements for an undergraduate program.

## Prerequisites

Introduction to Linguistics is the prerequisite for the Linguistics courses in the program. It may be satisfied with LIN 3010, LIN 3013, or LIN 5018.
Professional Education: (9)
EDF $5481 \quad$ Foundations of Educational Research
EDF 6608 Social, Philosophical, and Historical Foundations of Education
EDF $6211 \quad$ Psychological Foundations of Education 3
Program Courses: (18)
TSL 5245
Developing ESOL Language and Literacy
TSL 5371 Special Methods of TESOL 3
TSL 5938 Principles of ESOL Testing 3
TSL 6908 Field Component 3
LIN 5211 Applied Phonetics 3
LIN 5501 English Syntax 3

## Electives: (9)

Students will choose nine semester hours according to their needs, with the approval of the advisor. To meet state ESOL requirements, certified teachers (K-12) need to include in their electives the following courses:
TSL $5142 \quad \begin{aligned} & \text { Curriculum Development in English as a } \\ & \\ & \text { Second Language }\end{aligned}$
EDG $5707 \quad$ Cultural and Cross-Cultural Studies 3

## Graduation Requirements

To receive the Master of Science degree in TESOL, the student must complete the required 36 semester hours of course work with a minimum ' $B$ ' or 3.0 grade point average and no grades of "C-" or less received in courses that are part of a master's program of study will be accepted toward graduation.

## Master of Science in Physical Education

The Master of Science degree program in Physical Education is designed to provide advanced preparation for teachers of physical education. Applicants must have a 3.0 GPA for the last 60 hours of upper-division coursework, and include an autobiographical statement, their career goals and aspirations, and three letters of professional recommendation accompanying the application. Letters and any other supporting documents are to be sent to FIU Graduate Admission Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.

## Degree Hours: (33)

Professional Education: (9)
EDF $5481 \quad$ Analysis and Application of Educational Research
EDF 6608 Sociological, Philosophical, and Historical Foundations of Education 3
EDF 6211 Educational Psychology: Foundations And Application3

PET 5206
Youth Sport 3

PET 5216
PET 5052C
PET 5256
PET 5426

PET 5436
PET 5948
PET 6597
Electives
Sports Psychology
Motor Learning
Sociology of Sport
Curriculum in Physical Education
or
Physical Education Curriculum 3
Practicum in Physical Education
Survey of Research in Physical Education and Sports

## Master of Science in Physical Education: Sport Science Track

The purpose of this track is to provide an option for persons seeking a master's degree in an allied (nonteaching) career in physical education. This degree program would primarily be of interest to persons who do not presently hold Florida teaching certification credentials. This degree does not provide teacher certification for the degree recipients. Examples of potential student clientele would include all foreign and American college graduates with bachelor's degrees in sports science, education, business, recreation, the social sciences, and other areas.

## Admission Requirements

Students must hold a bachelor's degree from an accredited university and have a 3.0 GPA for the last 60 hours of upper-division coursework, and include an autobiographical statement, their career goals and aspirations, and three letters of professional recommendation accompanying the application. The published university requirements for admission into the master's degree programs must be met. Students who do not have an undergraduate major in physical education or a related area are responsible for meeting the prerequisites for any course listed in the program's curriculum. A program advisor must be consulted regarding completion of degree requirements.

## Degree Hours: (33)

EDF $5481 \quad$ Foundations of Ed. Research 3
PET 5216 Sports Psychology 3
PET 5256 Sociology of Sport 3
APK 5111 Advanced Exercise Physiology 3
PET 6944 Supervised Field Experience 3
PET $6597 \quad \begin{aligned} & \text { Survey of Research in Physical } \\ & \text { Education and Sports }\end{aligned}$
PET 5206 Youth Sports 3
PET 5368 Exercise, Diet and Weight Management 3
PET 5693 Exercise Testing and Prescription of Special Populations

## Advisor approved electives: (6)

Please consult with an advisor for appropriate courses.

## Master of Science in Reading Education

The Master of Science in Reading Education develops competencies in diagnosis and remediation, teaching of reading K to 12 , and administration and supervision of remedial, corrective, developmental, and content area reading programs. The graduate is competent to take
leadership in improving reading instruction and preventing reading failure in schools or clinics.

Requirements for admission to the Master's program in Reading Education are a Bachelor's Degree in Education and possess or be eligible for State of Florida professional teaching certificate, pass State of Florida Certification exams, and a 3.0 GPA or higher for the last 60 hours of upper-division coursework.

This master's track is designed to meet the needs of students interested in reading assessment and instruction. This track leads to state certification.

## Degree Program Hours: (36)

## Required sequence of courses:

RED 6314 Theory and Instruction in Literacy 3
LAE 6319 Integrated Language Arts 3
LAE 5415 Children's Literature 3
EDF $6211 \quad$ Psychological Foundations of Education 3
RED 6336 Content Area Reading 3
EDF $5481 \quad$ Foundations of Educational Research 3
RED 6546 Diagnosis of Reading Difficulties 3
RED 6515 Programs of Remediation in Reading 3
RED 6747 Research in Reading 3
RED 6540 Reading Assessment 3
RED 6805 Practicum in Reading 3
RED 6247 Organization and Supervision in Reading

## Entry to Program

Students are encouraged to meet all admission requirements prior to beginning the program; however, students may take a maximum of twelve (12) semester hours of course work applicable to the program prior to admission. Only courses with a grade of "B" or better taken prior to admission can be included.

## Graduation Requirements

Students must have a 3.0 GPA to graduate from the program. No grades of "C-" or less received in courses that are part of a Master's program of study will be accepted toward graduation. All candidates must pass all sections of the Florida Teacher Certification Exam (FTCE), which includes the General Knowledge (GK), Professional Education and the Reading Subject Area Exams. All MS in Reading Education students must have ESOL Endorsement or have taken TSL 5361C prior to graduation. Also, students must demonstrate successful completion of the Florida Educator Accomplished practices. Students must submit evidence of passing all sections of the FTCE exam prior to the end of the final week of the semester in which they are applying for graduation.
Thesis Option: Students may opt to extend the MS program ( 6 additional thesis credit hours) by request.

## Master of Science Degree in Special Education

The major competencies in the Master's Degree program in Special Education are an extension and refinement of those developed by the student in the undergraduate special education curriculum.

Program applicants are required to submit an on-line application to the Office of Graduate Admissions, three
letters of recommendation (at least one from academic sources and one from work or volunteer experience), and an autobiographical statement. Candidates are admitted by action of the Department's Graduate Admissions Committee. Criteria for program acceptance include undergraduate grade point average of 3.0 or higher for the last 60 hours of upper division coursework, work and volunteer experience, quality and source of letters of recommendation, and the candidate's career aspirations and goals. Applicants with less than a 3.0 GPA may be granted conditional admittance. These applicants must take 12 graduate credits and earn a 3.25 GPA to be considered for full admittance. Applicants who do not hold a valid Florida Teaching Certificate must complete all requirements for certification in addition to degree requirements. There are some variations in entrance requirements for in-field vs. out-of-field majors. See specifics under each description that follows. Letters and any other supporting documents are to be sent to FIU Graduate Admission Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.

## In-Field Majors

The following master's program of study is for the student who holds Florida certification in the field of special education. To qualify for admission to the program, students must have the following:

1. An undergraduate GPA of 3.0 or higher in the last 60 credit hours of undergraduate study.
2. A valid Florida teaching certificate in special education. If the applicant does not hold a valid Florida teaching certificate, all certification requirements must be met.
3. Three letters of recommendation with at least one from an academic source and one from work or volunteer experiences.
4. A well written autobiographical statement.

Degree Program Hours: (36)

## Required Core For All Students: (24)

EDF $5481 \quad$ Foundations of Educational Research 3
EEX $6848 \quad \begin{aligned} & \text { Seminar in Special Education: Issues } \\ & \text { and Trends }\end{aligned}$
EEX $6535 \quad \begin{aligned} & \text { Seminar in Special Education: } \\ & \text { Supervision and Leadership }\end{aligned}$
EEX $6912 \quad \begin{aligned} & \text { Advanced Theory and Research in } \\ & \text { Special Education }\end{aligned}$
EEX 6765 Instructional Technology 3
EEX 6228 Integration of Assessment, Curriculum and Instruction
EEX $6796 \quad$ Culturally and Linguistically Diverse
EEX 6756 Working with Families of Students with Disabilities through Collaborative Approaches

## Area of Concentration: (12)

Area of concentration may be selected from an endorsement such as Autism or Early Childhood Special Education, or other areas as planned and approved by student and advisor.
*EEX 6912 is a prerequisite for EEX 6228

## Master of Science Degree in Special Education: Autism Endorsement Specialization - Fully Online

The online Master of Science in Special Education is completed in one year and consists of six accelerated eight-week terms. Students enroll in 4 courses (12 credits) each semester and complete two courses each 8 -week term in the semester. A total of 36 credit hours (12 courses) is necessary to complete the program. The area of specialization for this degree is Autism Endorsement.

## Degree Program Hours: (36)

Required Core Courses: (24)
EEX 6912 Advanced Theory and Research in Special Education
EEX $6796 \quad$ Culturally and Linguistically Diverse
EDF $5481 \quad$ Exceptional Learners
EEX 6765 Foundations of Educational Research Instructional Technology Integration of Assessment, Curriculum and Instruction
EEX $6848 \quad$ Seminar in Special Education: Issues and Trends
EEX $6535 \quad$ Seminar in Special Education: Supervision and Leadership
EEX $6756 \quad$ Working with Families of Students with Disabilities through Collaborative Approaches

Autism Courses: (12)

| EEX 5210 | Assessment and Strategies for Students with Autism Spectrum Disorders |
| :---: | :---: |
| EEX 5767 | Assistive and Instructional Technology and Alternate/Augmentative Systems for |
|  | Students with Autism 3 |
| EEX 5619 | Behavioral Management and Positive |
|  | Behavioral Supports for Students with |
|  | Autism Spectrum Disorders 3 |
| EEX 5095 | Nature and Needs of Students with |
|  | Autism Spectrum Disorders |

## Educational Specialist in Curriculum and Instruction

## Degree Program Hours: (36)

The Educational Specialist Degree (Ed.S.) in Curriculum and Instruction is offered for teachers and other professional educators who are seeking an advanced graduate degree. The program introduces professional educators to the theoretical basis of curriculum and instruction and provides opportunities for students to connect theory with practice. The following areas of specialization are offered: Art Education, Early Childhood Education, Elementary Education, English Education, Instructional Leadership, Learning Technologies, Mathematics Education, Modern Language/Bilingual Education, Reading Education, Science Education, and Social Studies Education. The program requires a minimum of 36 semester hours beyond the masters. Ed.S. coursework may not necessarily be applicable to the doctoral program.

## Admission Requirements

Admission to the specialist program will be based on the following criteria:

1. A master's degree in Education or related areas from an accredited institution.
2. A satisfactory grade point average (at least 3.25) in all prior graduate work and a satisfactory grade point average (at least 3.0 ) in the last 60 semester-hours of undergraduate work
or
Official Graduate Record Examination (GRE) scores. In any case, the GRE score must be submitted.
3. Two (2) letters of recommendation to support the application. Letters and any other supporting documents are to be sent to FIU Graduate Admission Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.
4. A statement of career goals in professional education consistent with the objectives of an advanced graduate program.
5. A personal interview with a committee of program faculty.
6. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the IBT TOEFL or 6.5 overall on the IELTS is required.

Curriculum and Instruction Core: (12 Hours)
EDG 6250 Curriculum Development 3
EDG 6286 Curriculum Evaluation and Improvement in Urban School Systems
EDG 7222 Curriculum: Theory and Research 3
EDG 7362 Instruction: Theory and Research 3

## Content Specialization: (12-18 Hours)

Art Education
Early Childhood Education
Elementary Education
English Education
Instructional Leadership
Learning Technologies
Mathematics Education
Modern Language/Bilingual Education
Reading Education
Science Education
Social Studies Education

| Research Core: (6 hours) |  |  |
| :--- | :--- | :--- |
| EDF 6472 | Research Methods in Education: <br> Introduction to Data Analysis | 3 |
|  | (Prerequisite: EDF 5481) |  |
| EDF 6475 | Qualitative Foundations of Educational |  |
|  | Research <br> (Prerequisite: EDF 5481) | 3 |

Action Research Option: (3 Hours)
EDF 6487 Action Research for Educators 3
Student identifies, designs, conducts, and defends a classroom action research project.
or
Thesis Option: (6 hours)
EDG 6971
6
Student identifies, designs, conducts, and defends an original research in an appropriate area of curriculum and
instruction. This option is strongly recommended for students who plan to enroll in a doctoral program in the future.

## Transfer of Credit

Students may be allowed to apply up to six semester hours of course work taken at an accredited institution to the Specialist program requirements with the following stipulations:

1. The student received a grade of 3.0 or better on a 4.0 scale
2. The course was relevant, as judged by the Admissions Committee
3. The course is listed on an official transcript received by the Graduate Admissions Office
4. The course will be no older than 6 years at the time of graduation

## Doctor of Education in Curriculum and Instruction

## Common Admission Requirements

The School of Education and Human Development has common admission requirements for its Doctoral Programs regardless of the specialty sought. Applicants to the program must submit the following records and documents to the Graduate Admissions Office:

1. A completed Application for Graduate Admission with appropriate fees.
2. An official copy of the Graduate Record Exam (GRE) scores.
3. Official transcripts of all higher education institutions attended.

Additionally, applicants must submit the following to the Office of Research and Graduate Studies (OGS) in the School of Education and Human Development.

1. Three letters of reference attesting to the applicant's ability to succeed in doctoral study. Letters and any other supporting documents are to be sent to FIU Graduate Admission Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.
2. A current resume/vitae.
3. A statement that sets forth the applicant's career goals and relates these goals to the completion of the doctoral program.
No action will be taken on incomplete files. A file is considered incomplete if any of the above is missing.
The application and all supporting documentation are reviewed by program faculty. The criteria applied in reviewing the applicant's file are noted below. Exceptions to one or more of the stated criteria may be granted provided the applicant can provide compelling reasons and evidence.
4. A grade point average (GPA) of at least 3.0 (on a 4.0 scale) in upper level undergraduate work.
5. A 3.25 GPA in all graduate work attempted.
6. A master's degree from an accredited institution.
7. Official GRE scores.
8. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (ALTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the ALTS is required.

Upon completion of the review of the file the applicant will be interviewed by program and departmental faculty which comprise a Faculty Admissions Committee. Final decisions are made by the Faculty Admissions Committee, the Dean of the College, and the Dean of the University Graduate School. As admission to programs is competitive, meeting minimum admission requirements does not assure admission into the program. A candidate for admission to the program will be judged not only on the basis of quantitative criteria, but also in relation to prior experience, especially as it relates to future career goals. Additional information is available from the Coordinator of Doctoral Programs or Program Faculty.
Curriculum and Instruction Core Courses: ( 15 credits Required)
EDG 7222 Curriculum: Theory and Research 3 EDG 7362 Instruction: Theory and Research 3 EDG 7923C Doctoral Seminar in Curriculum Studies 6 (3 credit hours per semester Fall/Summer)
Select one from the following:

| EDG 7665 | Seminar in Curriculum | 3 |
| :--- | :--- | ---: |
| EDG 7667C | Advanced Topics in Curriculum Studies | 3 |
| EDG 7692C | Politics of Curriculum | 3 |


| Research Core Courses: (12 credits Required) |  |
| :---: | :---: |
| EDF 5481 prerequisit | undations of Educational Research is a ll Research Core courses. |
| EDF 6472 | Research Methods in Education: Introduction to Data Analysis |
| EDF 6481 | Educational Research Methodology 3 |
| EDF 6486 | Advanced Data Analysis in Quantitative Educational Research |
| EDF 6475 | Qualitative Foundations of Educational Research |

Students, in consultation with an Advisor, may take one or both of the following courses in addition to the above required courses:

| EDF 7403 | Data Analysis in Multivariate |  |
| :--- | :--- | :--- |
|  | Educational Research <br> EDF 6476 | Advanced Methods of Qualitative <br> Educational Research |
|  | Ed |  |

Professional Education Core Courses: ( 6 credits Required)
EDF 7937 Advanced Topics in Social Foundations
EDP 7057 Educational Psychology Advanced Application

## Specialization Area: (30)

The specialty areas include art education, early childhood education, elementary education, English education, international/intercultural development education, instructional leadership, learning technologies, mathematics education, modern language education/bilingual education, reading education, science education, and social studies education.

## Cognate Area: (9)

The cognate area requires a minimum of 9 semester hours of course work in a single area of study related to the specialty. The courses should be chosen with regard to coherence and relevance to the anticipated substantive aspect of the dissertation and in consultation with the
advisor. The cognate area may be taken in the School of Education and Human Development, in the College of Arts, Sciences and Education, or any other area offering courses relevant to the student's program.

## Candidacy Examinations and Advancement to Candidacy

The student must successfully pass candidacy examinations covering course work and also submit copies of a dissertation proposal, which has been approved by the supervisory committee, to the Dean of the College and to the Dean of the University Graduate School.

## Dissertation: (12)

The student is responsible for a minimum 12 semester hours of dissertation credits. The dissertation must be an original contribution to knowledge in an area of early childhood education, elementary education, secondary education, one of the K-12 areas, or in instructional leadership.

The student is expected to complete the dissertation within 5 years from the date of advancement to candidacy (i.e. successful completion of all written and oral examinations, favorable recommendations of the supervisory and guidance committee, and an approved dissertation proposal). A minimum of 3 credit hours of dissertation are taken each semester the dissertation is being prepared. Continuous enrollment in dissertation study (including Summer semester) is required. EDG 7980 Ed.D.Dissertation

## Curriculum and Instruction: Art Education (30)

Consult Program Advisor
Curriculum and Instruction: Early Childhood Education (30)
Consult Program Advisor

## Curriculum and Instruction: Elementary Education (30) <br> Consult Program Advisor

## Curriculum and Instruction: English Education (30) <br> Consult Program Advisor

Curriculum and Instruction: International and Intercultural Development Education
Consult Program Advisor
Curriculum and Instruction: Instructional
Leadership (30)
Consult Program Advisor
Curriculum and Instruction: Learning
Technologies (30)
Consult Program Advisor

## Curriculum and Instruction: Mathematics Education (30) <br> Consult Program Advisor

Curriculum and Instruction: Modern Language I Bilingual Education (30)
Consult Program Advisor

Curriculum and Instruction: Reading Education (30)<br>Consult Program Advisor

Curriculum and Instruction: Science Education (30)<br>Consult Program Advisor

## Curriculum and Instruction: Social Studies Education (30) <br> Consult Program Advisor

## Doctor of Education in Exceptional Student Education

The Doctoral Program in Exceptional Student Education prepares leadership personnel capable of advancing educational opportunities available to students with disabilities and the professional who serves them. The program prepares professionals for a broad view of leadership, capable of assuming roles as administrator, curriculum specialist, researcher, advocate, in-service and preservice trainer and others. Graduates take on leadership positions in schools, state government, private non-profit agencies, professional organizations, and other institutions of higher education.

## Admission Requirements

Applicants to the program must submit an on-line Application for the Graduate Admissions Office with appropriate fees (http://gradschool.fiu.edu). Applicants must:

1. Hold a master's degree from an accredited institution;
2. Have a grade point average (GPA) of at least 3.0 (on a 4.0 scale) in upper level undergraduate work;
3. Have a 3.25 GPA in all graduate work attempted;
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or overall 6.5 on the IELTS is required.
In addition, applicants must submit:
5. Official copy of Graduate Record Exam (GRE) scores;
6. Official transcripts of all higher education institutions attended.
7. Three letters of reference attesting to the applicant's ability to succeed in doctoral study; and
8. A current resume/vitae.

It is recommended that interested applicants contact a special education advisor at (305) 348-2003 to discuss the program in detail. No action will be taken on incomplete files. A file is considered incomplete if any of the above is missing.

The application and all supporting documentation are reviewed by program faculty. An on-site interview by program and departmental faculty which comprise a Faculty Admissions Committee will be scheduled for viable candidates. Final admission recommendations are made by the Faculty Admissions Committee and the Dean of the College.

As admission to programs is competitive, meeting minimum admission requirements does not assure admission into the program. A candidate for admission to the program will be judged not only on the basis of quantitative criteria (listed elsewhere in this catalog) but also in relation to prior experience, especially as it relates to future career goals. Exceptions to one or more of the stated criteria may be granted provided the applicant can provide a compelling justification and evidence.

## Degree Requirements

The Ed.D. in Exceptional Student Education requires a minimum 75 semester hours beyond the master's degree.
Professional Studies Core: (6)
EDP 7057 Educational Psychology: Advanced Applications
EDF 7937 Advanced Topics in Social Foundations of Education
Special Education Core: (18-24)

| EEX 7795 | Advanced Issues in the Education of <br> Culturally and Linguistically Diverse |  |
| :--- | :--- | :--- |
| EEX 7933 | Students with Exceptionalities <br> Advanced Topics in Special Education <br> (repeated 3 times) | 3 |
| EEX 6863 | Supervised Field Experience in Special <br> Education | 9 |
| EEX 7977 | Research and Evaluation in Special <br> Education | $3-9$ |
| Research Methods and Statistics: (18) |  |  |
| EDF 6472 | Research Methods in Education: <br> Introduction to Data Analysis | 3 |
| EDF 6486 | Advanced Data Analysis in Quantitative <br> Educational Research | 3 |
| EDP 7058 | Behavioral Intervention Research and <br> Evaluation in Education | 3 |
| EDF 7403C | Data Analysis in Multivariate <br> Educational Research | 3 |
| EDF 6475 | Qualitative Foundations of Educational <br> Research <br> Advanced Methods of Qualitative <br> Educational Research | 3 |

## Cognate or Minor Area of Study: (9-12)

Students design a cognate or minor area with their Program of Study Committee.

## Dissertation Study: (24)

EEX 7980 Ed.D. Dissertation
Other Requirements
Leadership competency activities, candidacy research, candidacy examination, dissertation proposal, dissertation, oral defense of dissertation.

## Ph.D. Program in Curriculum and Instruction

The Department of Teaching and Learning offers the Ph.D. program in Curriculum and Instruction with concentration in Language, Literacy, and Culture; Science, Mathematics, and Learning Technologies; and Curriculum and Instruction. The program is offered to prospective students who will become scholars engaged in studies within broad historical, social, political, economic, linguistic, and intellectual contexts in the country and abroad. The program seeks to produce research scholars who are well-equipped for empirical and systematic examinations of educational theories, strategies, principles, and practices related to the content and organization of curriculum and to the process and outcome of instruction. The Ph.D. program in Curriculum and Instruction enables highly select students of demonstrated ability, industry, and motivation to serve as apprentices to mentors who are established scholars in their fields of study. Under the supervision of a faculty mentor, the students engage in a period of extensive study and investigation that culminates in the demonstrations of expertise, creativity and originality by means of independent research.

## Admission Requirements

Minimum admissions requirements for the Ph.D. Program in Curriculum and Instruction are as follows:

1. A Bachelor's Degree from an accredited institution in an appropriate area with a 3.0 GPA on a 4.0 scale on the last 60 hours of undergraduate work or a 3.25 GPA in a completed Master's Degree from an accredited program.
2. Official GRE scores.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
4. Three letters of recommendation addressing the applicant's academic abilities. Letters and any other supporting documents are to be sent to FIU Graduate Admission Office, 11200 SW $8^{\text {th }}$ Street, PC 230, Miami, FL 33199.
5. A letter of intent.
6. An admissions interview by the Curriculum \& Instruction Admissions Committee.
The Curriculum \& Instruction Admissions Committee will review, interview, and make admissions recommendation for each applicant. The GPA and GRE scores stated above are minimum requirements. Meeting the minimum requirements does not guarantee admission.
The Ph.D. Degree requires 93 semester hours beyond the bachelor's degree. Students with a master's degree directly related to the area of concentration must complete a minimum of 45 semester hours at FIU beyond their master's degree. At least 36 semester hours in the approved program of study, excluding the 24 hours of Independent Research and Dissertation, must be taken at FIU. Up to 9 semester hours of graduate credit may be transferred into the doctoral program. Each candidate must also register for a minimum of 24 semester hours of credit in independent research and dissertation directed by
a qualified graduate faculty dissertation chair in the appropriate area of Language, Literacy and Culture, Science, Mathematics, and Learning Technologies, and Curriculum and Instruction.
The Ph.D. program of study includes seven required components:
7. Doctoral Core ( 15 semester hours)
8. Research Inquiry and Analysis (18 semester hours)
9. Cognate Study (9 semester hours)
10. Doctoral Internship (6 semester hours)
11. Major Area of Concentration ( 21 semester hours)
12. Independent Research and Dissertation ( 24 semester hours minimum)
13. The Doctoral Core includes a coherent sequence of courses and experiences required of all students. The Doctoral Core is divided into two areas: Curriculum \& Instruction Core, Professional Education Core.
C \& I Core: (15 semester hours)

| EDG 7222 | Curriculum: Theory and Research | 3 |
| :--- | :--- | :--- |
| EDG 7362 | Instruction: Theory and Research | 3 |
| Choose from | one of the following: |  |
| EDG 7665 | Seminar in Curriculum | 3 |
| EDG 7667 | Advanced Topics in Curriculum | 3 |
| EDG 7692 | Politics of Curriculum | 3 |
| EDG 7923 | Doctoral Seminar in Curriculum | 3 |
| (can be repeated |  |  |
| EDepending on topic) $7 x x x$ | Curriculum and Instruction in the Global |  |
|  | Setting | 3 |

Professional Education Core: (6 semester hours)
EDF 7937 Advanced Topics in the Social Foundations of Education
EDP 7057 Educational Psychology: Advanced Applications
2. Research Inquiry and Analysis: (18 semester hours)

At least 18 semester hours of advanced course work to include specialization in analytic methods related to dissertation and the comprehensive exam component on research.
EDF $5481 \quad$ Foundations of Educational Research 3
EDF 6472
EDF 6481 Educational Research Methodology 3
EDF $6486 \quad$ Advanced Data Analysis in Quantitative
EDF 6475 Qualitative Foundations of Educational
Research 3
$\begin{array}{lll}\text { EDF } 7403 & \text { Data Analysis in Multivariate } \\ & \text { Educational Research }\end{array}$
EDF 6476 Advanced Methods of Qualitative Educational Research

## 3. Cognate Study: (9 Semester Hours)

The cognate area of study broadens the students' understanding of the conceptual base and issues underlying their declared major area of concentration. Courses in the cognate area are drawn from outside of the Department or from outside of the College and have a clear link to the anticipated dissertation efforts.

## 4. Doctoral Internship: (6 semester hours)

Six hours of doctoral internships are required in the areas of research and teaching/curriculum development. Each of the internships is assigned (1-6) credits for a total of six semester hours. The internship assignments will be a
supervised apprenticeship completed with a faculty mentor.
EDG 6943 Supervised Field Experience 6
5. Major Area of Specialization: ( 21 semester hours)
(Select up to 21 semester hours in consultation with Major Professor/Committee)
Specialization I: Language, Literacy, and Culture
FLE 6938 Seminar in Second Language Testing
FLE 7938 Doctoral Seminar in Multicultural Education 3
Seminar in English Education 3
Doctoral Seminar in Reading Education 3
Social Studies in Other Nations 3
Seminar: Research in Social Studies 3
Composition Research: Issues and
Trends 3
Doctoral Seminar in English Education 3
Research in Reading 3
Seminar in Reading Education 3
Doctoral Directed Study in Reading 3
Seminar in Social Studies Education 3
Doctoral Seminar in Social Studies Education

3
EDE 6930 Seminar in Elementary Education 3
EDE 6488 Research in Elementary Education 3
$\begin{array}{ll}\text { EDE } 7935 & \begin{array}{l}\text { Doctoral Seminar in Elementary } \\ \text { Education }\end{array}\end{array}$
SPS $7176 \quad$ Consultation and Assessment with
Culturally and Linguistically Diverse
Populations
3
EEC 6678
EEC 6932
Research in Early Childhood Education 3
Seminar in Early Childhood Education 3
Doctoral Seminar in Early Childhood
Education
3
Specialization II: Mathematics, Science, and Learning Technologies
EME 6507 Advanced Interactive Multimedia 3
EME 7936 Special Topics in Learning Technologies3
EME $7938 \quad$ Advanced Seminar in Learning Technologies

3
EME $7457 \quad$ Teaching and Learning at a Distance 3
$\begin{array}{lll}\text { MAE } 7165 & \text { Curriculum Development in } \\ & \text { Mathematics Education }\end{array}$
Mathematics 18
SCE 6933 Seminar in Science Education 3
SCE 7145 Curriculum Development in Science Education

3
SCE $7761 \quad$ Research in Science Education 3
SCE 7938 Doctoral Seminar in Science Education 3
Specialization III: Curriculum and Instruction
EDG $6250 \quad$ General Curriculum Development 3
EDG 6286 Curriculum Evaluation 3
$\begin{array}{ll}\text { EDG } 6920 & \begin{array}{l}\text { Colloquium in Curriculum and } \\ \text { Instruction }\end{array}\end{array}$
ESE 6215 Secondary School Curriculum 3
Candidacy Examination and Admission to Candidacy
To be admitted to candidacy, a student must complete all coursework. The student must also successfully pass the candidacy examinations covering course work approved by the Program of Study Committee. Candidates then submit copies of a dissertation proposal, which has been approved by the research committee, to the Dean of the

School of Education and Human Development and to the Dean of the University Graduate School.
6. Independent Research and Dissertation: (24 Semester Hours Minimum)
The dissertation will demonstrate the student's ability to conduct research of substantial rigor and contribute to advancing the knowledge base and scholarship in an area within the field of Curriculum \& Instruction
EDG 7980 Doctoral Dissertation

## Add-on Endorsement in ESOL

Individuals who currently hold or are working toward teacher certification in Elementary, English, Foreign Language Education, or Special Education, may be eligible to receive the Add-on Endorsement in ESOL by completing the following set of courses:

## Required Courses

EDG $5707 \quad$ Cultural and Cross-Cultural Studies 3
TSL 5142 Curriculum Development in ESOL 3
TSL 5245 Developing ESOL Language and Literacy
TSL 5371
Special Methods of TESOL
TSL $5938 \quad$ Principles of ESOL Testing

## Graduate Certificate Program in Grades K-5 Mathematics Teaching

The K-5 Mathematics Teaching Certificate Program enables teachers to extend their competence in teaching mathematics in elementary school. It will enhance their understanding of mathematics content, problem solving and reasoning and their knowledge of ways of teaching mathematics to students from diverse and minority backgrounds. Completion of the certificate will better prepare individuals for teaching in elementary schools that have departmentalization by subjects in elementary grades. Entrance requirements are Bachelor's degree and a 3.0 GPA in the last two years of college work. This certificate program is open to non-degree-seeking students only.

## Required Courses

MAE $5348 \quad$ Numbers and Operations for Teaching in Grades K-5 3
MAE 6357 Elements of Algebra and Data Analysis for Teaching in Grades K-5
MAE 6358 Elements of Geometry and Measurement for Teaching in Grades K-5 3
MAE 6318 Instruction in Elementary Mathematics 3
MAE 5945 Practicum: Mathematics Education 3
With the approval of the Graduate Program Director, up to 12 graduate credits taken in the graduate certificate may be transferred into a master's degree program. If a certificate student is admitted to a master's degree program before the student has completed more than 12 graduate credits, all the credits earned in a graduate certificate program may be used toward fulfilling the requirements of the master's degree program.

## Graduate Certificate Program in Grades 6-8 Mathematics Teaching

The 6-8 Mathematics Teaching Certificate Program enables teachers to extend their competence in teaching middle grades mathematics. It will enhance their understanding of mathematics content, problem solving and reasoning and their knowledge of ways of teaching mathematics to middle grades students from diverse and minority backgrounds. Completion of the certificate will better prepare individuals for teaching mathematics in middle schools. Entrance requirements are Bachelor's degree and a 3.0 GPA in the last two years of college work. This certificate program is open to non-degreeseeking students only.

## Required Courses

| MAE 5382 | Number Systems, Rational Numbers, <br> and Operations for Teaching in |  |
| :--- | :--- | :--- |
| MAE 6337 | Secondary School <br> Algebra, Statistics and Probability for | 3 |
| MAE 6381 | Teaching in Secondary School | 3 |
|  | Proportional Reasoning, Geometry and <br> Measurement for Teaching in |  |
| MAE 6336 | Secondary School |  |
|  | Teaching Mathematics in the Secondary |  |
| MAE 5chool |  |  |

With the approval of the Graduate Program Director, up to 12 graduate credits taken in the graduate certificate may be transferred into a master's degree program. If a certificate student is admitted to a master's degree program before the student has completed more than 12 graduate credits, all the credits earned in a graduate certificate program may be used toward fulfilling the requirements of the master's degree program.

## Graduate Certificate Program in Grades K-5 Science Teaching

The K-5 Science Teaching Certificate Program enables teachers to extend their competence in teaching science in elementary school. It will enhance their understanding of science content, inquiry and problem solving and their knowledge of science curriculum and ways of teaching mathematics to students from diverse and minority backgrounds. Additionally, completion of the certificate will better prepare individuals for teaching in elementary schools that are departmentalized by subjects in elementary grades. Entrance requirements are Bachelor's degree and a 3.0 GPA in the last two years of college work. This certificate program is open to non-degreeseeking students only.

## Required Courses

| SCE 6315 | Instruction in Elementary Science | 3 |
| :--- | :--- | :--- |
| SCE 6931 | Special Topics in Science Education | 3 |
| SCE 5314 | Teaching and Learning in Elementary |  |
|  | Science Education | 3 |
| SCE 6317 | Teaching and Learning Interdisciplinary |  |
|  | Approaches in Elementary Science |  |
| SCE 5905 | Education | 3 |
|  | Directed Study in Science Education | 3 |

With the approval of the Graduate Program Director, up to 12 graduate credits taken in the graduate certificate may
be transferred into a master's degree program. If a certificate student is admitted to a master's degree program before the student has completed more than 12 graduate credits, all the credits earned in a graduate certificate program may be used toward fulfilling the requirements of the master's degree program.

## Graduate Certificate Program in Grades 6-8 Science Teaching

The 6-8 Science Teaching Certificate Program enables teachers to extend their competence in teaching middle grades science. It will enhance their understanding of science content, inquiry and problem solving and their knowledge of science curriculum and ways of teaching science to middle grades students from diverse and minority backgrounds. Completion of the certificate will better prepare individuals for teaching science in middle schools. Entrance requirements are Bachelor's degree and a 3.0 GPA in the last two years of college work. This certificate program is open to non-degree-seeking students only.

## Required Courses

| SCE 6325 | Instruction in Middle School Science | 3 |
| :--- | :--- | :--- |
| SCE 6925 | Workshop in Science Education | 3 |
| SCE 6926 | Workshop in Science Education | 3 |
| SCE 5937 | Special Topics in Grades 6-8 Science |  |
|  | Education | 3 |
| SCE 5905 | Directed Study in Science Education | 3 |

With the approval of the Graduate Program Director, up to 12 graduate credits taken in the graduate certificate may be transferred into a master's degree program. If a certificate student is admitted to a master's degree program before the student has completed more than 12 graduate credits, all the credits earned in a graduate certificate program may be used toward fulfilling the requirements of the master's degree program.

## Professional Graduate Certificate in Spanish/English Bilingual Education

Entrance requirements are Bachelor's degree and a 3.0 GPA in the 60 credit hours of upper-division coursework or graduate coursework. This certificate program is open to non-degree-seeking students only.

## Required Courses ( 15 credits)

## Core Courses ( 9 credits)

FLE $5895 \quad$ Bilingual Education Teaching Methodologies

3
FLE 6938 Seminar in Second Language Testing 3
EDG 5707 Cultural and Cross-Cultural Studies 3
Teaching Methods (3 credits)
Students choose one of the following courses:
FLE 6336 Methods of Teaching Modern Language 3
FOL $5943 \quad$ Foreign Language Teaching Methodology
TSL 5142 Curriculum Development in English as a
Second Language
TSL 6348 Task-Based Language Teaching 3
Studies in Bilingualism (3 credits)
Students choose one of the following courses:
LIN 5625
Studies in Bilingualism

SPN $5736 \quad \begin{aligned} & \text { Spanish as a Heritage Language: } \\ & \text { Acquisition and Development }\end{aligned}$
FLE $6925 \quad$ Special Topics in Second Language Education

## Graduate Certificate Program in TESOL (Teaching English to Speakers of Other Languages)

The TESOL Certificate Program enables teachers to extend their competence in teaching foreign languages, particularly English. Completion of the TESOL Certificate Program qualifies the candidate to receive a Florida State Endorsement in Teaching English to non-Speakers, grades K-12. The program also assists prospective teachers to receive a professional credential that may assist them in successful employment in other countries. Entrance requirements are Bachelor's degree and a 3.0 GPA in the last two years of college work. This certificate program is open to non-degree-seeking students only.

## Required Courses

TSL 5371 Special Methods of TESOL 3
TSL 5245 Developing ESOL Language and Literacy
TSL $5142 \quad$ Curriculum Development in ESOL 3
TSL $5938 \quad$ Principles of ESOL Testing 3
EDG 5707 Cross-cultural Studies 3
Additionally, one other course may be chosen from the following list:

LIN 5501
LIN 5211
LIN 6085
LIN 5107
LIN 5431
LIN 5574
LIN 5601
LIN 5625
LIN 5715
LIN 5733
LIN 5825
LIN 6323
LIN 6562
LIN 6805
RED 5925
EEX 6051
EDF 5255
RED 6336
LAE 5426

TSL 6908 Field Component

## Other Program

## Education Minor

Students with arts and sciences majors in the following areas, Art, English, Math, Modern Languages, Music, Sciences, and Social Studies can also complete a 18-21 credit minor in education or an alternative certification program that follows the curriculum below:

## Education Core: ( 15 credits)

| EDF 4604 | Cultural and Social Foundations of |
| :--- | :--- |
|  | Education |

EDP 3004/5053 Educational Psychology ..... 3
EDG 3321/5414 Instructional Decision Making ..... 3
ESE 4343C/5344 Secondary Classroom Management ..... 3
RED 5147 Developmental Reading ..... 3

## Special Methods:

Subject Area Specific (3-6 credits)

## English 6-12/TESOL

LAE 4335/5336C Special Teaching Lab: English 3

| Mathematics |  |  |
| :--- | :--- | :--- |
| MAE 4330 | Teaching and Learning Secondary |  |
|  | Mathematics | 3 |

Physics/Chemistry/Biology
SCE 4330 Secondary Science Teaching Methods 3
Social Studies
SSE 4384 Special Teaching Lab: Social Studies 3
French/Spanish
FLE 4314/5142 Methods of Teaching Modern
Languages in Elementary School 3
FLE 4375/5371 Methods of Teaching Modern Languages at the Secondary Level 3

## Art Education

ARE 4316 Special Teaching Lab: Art K-5 3
ARE 4341 Special Teaching Lab: Art 6-12 3
Music Education
MUE 3340 Elementary Music Methods 3
MUE 4341 Secondary Music Methods 3

## Course Descriptions

## Definition of Prefixes

ADE - Adult Education/Human Resource Development; AFA - African-New World Studies; ARE - Art Education; CGS - Computer Applications; CHD - Child Development; EAP - English as a Second Language for Academic Purposes; EBD - Education: Emotional/Behavioral Disorders; ECT - Education: Career/Technical; ECW Education: Career/Workforce; EDA - Education: Educational Leadership; EDE - Education: Elementary; EDF - Education: Foundations; EDG - Education: General; EDH - Education - Higher; EDP - Education: Psychology; EDS - Education: Supervision; EEC - Education: Early Childhood; EEX - Education: Exceptional Child, Core Competencies; EGI - Education: Exceptional Child, Gifted; EIA - Education: Technology; ELD - Education: Specific Learning Disabilities; EME - Education: Technology and Media; EMR - Education: Mental Retardation; ESE Education Secondary; ETE - Education: Technology Education; EVT - Education: Vocational/Technical; FAD Family Development; FLE - Foreign Language Education; HEE - Home Economics Education; HHD - Housing; HLP Health, Leisure, and Physical Education; HME - Home Management Equipment; HOE - Health Occupations Education; HSC - Health Sciences; LAE - Language Arts and English Education; LBS-Labor Studies; LEI - Leisure; MAE - Mathematics Education; MHS - Mental Health Services; MUE - Music Education; PEL - Physical Education; PEM - Physical Education Activities; PEO Physical Education Activities; PEP - Physical Education Activities; PET - Physical Education Therapy; RED Reading Education; SCE - Science Education; SDS Student Development Services; SPM - Sports Management; SPS - School Psychology; SSE - Social Studies Education; TSL - TESOL.
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering; ALT-alternate years; AR-as required.

ADE 5383 Instructional Analysis and Design (3). This course includes analyzing models for instructional analysis and design. Identifying the target population, instructional needs, job and task analysis. Developing learning objectives and related design. Prerequisites: ADE 5386, or ADE 5387, or permission of the instructor. (F)
ADE 5386 Individual Learning and Adult Education (3). Students differentiate learning theories related to teaching adults, contrast characteristics of adults relative to youth, and evaluate the implications of these relative adult learning situations. (F)
ADE 5387 Organizational Learning and Human Resource Development (3). Developing rationale and philosophy of human resource development and understanding theories of workplace and organizational learning. Understanding and applying models of organizational learning. (S)
ADE 6074 Writing for Publication in Adult Education and Human Resource Development (3). Students develop an understanding of the scholarly writing process and produce scholarly work for submission. Topics include topic selection and manuscript organization, preparation, and review. (SS)

ADE 6180 Organizational and Community Processes in AE/HRD (3). This course analyzes human resource and community development programs, the processes and implemental strategies; needs assessment objectives, curricula, recruitment, implementation, and evaluation. (SS)
ADE 6186 Comprehensive Program Evaluation in AE/HRD (3). This course incorporates development of a comprehensive strategy for evaluating complex educational, training, human resource and organizational development programs. (F)
ADE 6195 Perspectives on Adults with Disabilities (3). In this course the student will distinguish the various perspectives of the employment, inclusion, and education of adults with disabilities; analyze forces that inhibit solutions; and develop programs, curricula, materials, recruitment strategies, and evaluation designs.
ADE 6260 Management of AE/HRD Programs (3). This course is composed of analyzing regulations affecting adult education/human resource development, selecting and training staff; selecting organizational patterns; executing managerial responsibilities; administering supportive services; relating training to organization development. (F)
ADE 6286 Instructional Development and Implementation (3). The course includes the following: 1. a systematic approach to developing instructional materials and strategies appropriate to adult and organizational needs and 2. implementation strategies including instructional delivery skills for adult learning. Prerequisite: ADE 5383 or permission of the instructor. (S)
ADE 6360 Adult Teaching Methods (3). Students explore adult teaching philosophy and methods and prepare to teach in a variety of adult learning environments such as higher education, community education, ABE, TESOL and adult literacy. Prerequisites: ADE 5386 or permission of instructor. (S)
ADE 6476 Computer Based Training (3). This is a basic course in computer based instruction and training which includes the application of instructional design to CBT, and proficiency in an authoring software. Prerequisites: ADE 5383 and working knowledge of personal computers are recommended. (S)
ADE 6674 Trends and Issues in AE/HRD (3). This course is comprised of presentation and analysis of state-of-art trends impacting development of human resources in specific organizations including educational agencies/business \& industry/public sector and commerce. Prerequisites: ADE 6180 or equivalent. (F/Odd years)
ADE 6906 Directed Study in Adult Education and Human Resource Development (1-3). This is a course of specialized intensive study in areas of interest to the student. Prerequisite: Permission of the instructor. (AR)
ADE 6925 Workshop in Adult Education and Human Resource Department (1-6). The course includes intensive development of selected competencies related to instructional, curricular and/or administrative skills of special interest to students in adult education/human resource development. (AR)

ADE 6930 Seminar in Adult Education and Human Resource Development (1-3). This course consists of intensive study of instructional, curricular, and/or administrative principles and practices for the solution of problems of special interest to students in adult education and human resource development. (AR)
ADE 6935 Special Topics in Adult Education and Human Resource Development (1-3). These are 'Minicourses' which provide for an examination of special facets of adult education and human resource development. (AR)

ADE 6945 Internship in Adult Education or Human Resource Development (3 or 6). This course is required in both masters programs. Internship in organizations are according to students' needs \& interests. Supervisory visits \& conferences are periodically conducted. Prerequisites: ADE 6180, ADE 6260, ADE 6286 or permission of the instructor. (F)
ADE 6946 Teaching Practicum (3). With faculty supervision, students deliver instruction to acquire teaching experience in an adult education environment such as higher education, community education, ABE, TESOL or adult literacy. Prerequisites: Permission of the instructor. (AR)

ADE 7475 Comparative Systems, Strategies and Materials for Adult Education/HRD (3). This course is a review and critique of the prevailing inventory of packaged systems on the market. Examination of assumptions and problems surrounding their actual usage in local and national organizations will be addressed. Prerequisites: ADE 6180, ADE 5383. (SS/Odd years)
ADE 7571 Consulting as an Adult Education/HRD Process (3). This course includes examination of use of internal/external consultation in organizations and strategies for making entry diagnoses interventions achieving internalization of processes outcomes. (SS/Even Years)
ADE 7772 Review of Research in Adult Education and Human Resource Development (3). This course is required in the doctoral program and is composed of a review and synthesis of research \& development activities in Adult Education/HRD; Examination of resources/practices/designs \& justifications; and assessment of the status of research in this field. Prerequisites: At least six doctoral research credit hours. (S)

ADE 7920 Colloquium in AE/HRD (1-6). Lectures \& discussions are given by distinguished educators/social scientists/organizational executives/graduate faculty and students. The colloquia present specific topics related to issues/trends/designs and applications.
ADE 7964 Comprehensive Doctoral Examination, Adult Education/HRD (0). This course is the comprehensive doctoral examination in the Adult Education/Human Resource Development. Prerequisite: Permission of Major Professor. (F,S,SS)

ADE 7980 Ed.D. Dissertation (1-12). This course focuses on research for doctoral dissertation for those students approved for candidacy in the Adult Education/Human Resource Development Program. Prerequisites:

Permission of Major Professor and Doctoral Candidacy. (F,S,SS)

ADE 7985 Dissertation Defense (0). This course is the defense of dissertation. Prerequisites: Permission of Major Professor and ADE 7980. (F,S,SS)
AFA 6325 Pedagogy in the African Diaspora: Literacy, Culture, Race and Gender (3). This course explores pedagogy broadly throughout the African Diaspora through critical examinations of race, culture, gender and praxis. The course provides opportunities for research in schooling, teacher preparation and gender/class/race based literacy at home and abroad.
APK 5111 Advanced Exercise Physiology (3). This course provides a detailed examination of the acute and chronic responses to exercise and training. Particular attention is given to responses at the systems and cellular levels. Prerequisite: APK 3110.
APK 5931 Special Topics in Exercise Physiology (1-3). This course presents contemporary issues and practices in exercise physiology. Prerequisite: APK 3110. (AR)
APK 6118C Rehabilitation Techniques in Athletic Training with Lab (4). Introduction to basic principles of rehabilitation of athletic injuries, including range of motion, pain control, balance, proprioception, strengthening, and endurance. Prerequisite: PET 4642C. Corequisite: PET 5678.

ARE 5251 Art for Exceptional Children (3). Development of instructional art skills, techniques, and strategies as related to the exceptional child. Observation and field participation required.
ARE 5457C Introduction to Computer Art (3). Exploration of the color computer, peripherals and selected software as tools for creating expressive art. Individual imaging projects, lesson plans, readings and presentations required. (AR)
ARE 5553 Introduction to Art Therapy (3). An overview of art therapy as a verbal and nonverbal means of communication with special emphasis on psychodynamic fundamentals inherent to the process for the purpose of diagnosis, treatment, and intervention for people with special needs. (AR)
ARE 5555C Advanced Art Therapy (3). Examination of strategies, techniques and current theoretical approaches in art therapy. Delineation and application of an individual field experience is required. Prerequisite: ARE 5553. (AR)
ARE 5905 Directed Study in Art Education (1-6). Individual investigation and research in one or more areas of art education. Prerequisite: Consent of professor. (F,S,SS)
ARE 5945 Supervised Teaching: Art Education (6). Supervised teaching in a junior or senior high school. Prerequisites: Admission to the Alternate Track Program and completion of prerequisite course work in education and subject matter area. Supervised teaching in an elementary or secondary school. (S)

ARE 6140 Curriculum and Instruction in Art (3). Examination of theoretical bases of curriculum development in art education. Analysis of objectives, content, methods, and materials for art instruction in the elementary, junior, and senior high school. (S)

ARE 6262 Organization and Coordination of School and Community Art (3). Procedures for the organization, coordination and evaluation of school, community, and inservice art programs, with particular attention to the urban multicultural setting. (F)
ARE 6304 Instruction in Early Childhood Art (3). Elective in masters program in Early Childhood Education. Refines skills related to program development, methods of teaching, selection of materials, and review of research, for preschool, kindergarten and primary grades teachers. Lab fees required. (F,S,SS)
ARE 6315 Instruction in Elementary Art (3). Elective in masters program in elementary education. Refines skills related to program development, methods of teaching, selection of art materials, and review of research, for elementary teachers. (AR) Lab fees required.
ARE 6746 Seminar in Art Education: Contemporary Issues and Research (3). Examination of current issues and review of research in art education literature. Delineation and application of an individual research problem. Prerequisite: EDF 5481. (SS)
ARE 6925-29 Workshop in Art Education (3). Production and application of materials and techniques in art education, in a laboratory or field setting. Lab fee required. (SS)
ARE 7938 Doctoral Seminar in Art Education (3). Advanced doctoral study in current theories and research related to art education. Prerequisites: ARE 6746 and EDF 6486. (F,S,SS)

CHD 5266 Advanced Studies in Child Development (3). Survey of current literature on selected areas, analysis of trends and issues, and investigation of recent research in Child Development. Prerequisites: CHD 3220, CHD 4210 or equivalent. (AR)
CGS 5410 Logo for Educators (3). Aspects of Logo as used by educators. Creative aspects, the language, philosophy, structure, and application. Prerequisites: Computers in Classroom or equivalent. (AR)
CGS 5413 PILOT for Educators (3). Authoring language PILOT for teachers. Designed to develop language and its application to all levels of education. Prerequisites: EME 6405 or equivalent. (AR)
EAP 5835 English Communication and Pedagogy for International Teaching Assistants (3). Course to assist international teaching assistants in developing intelligibility, intercultural competence, and classroom management skills for U.S. university classroom instruction.
EBD 5225 Strategies for Students with Emotional Handicaps (3). Instructional strategies and specialized approaches for teaching students with emotional handicaps. Extensive field work required. Prerequisites: EDG 5414 and Lab, EEX 6051, EEX 6227, EEX 5608. (S)
EBD 6226 Advanced Theory and Practice: Emotional Handicaps (3). Major theories in the area of behavior disorders, and skills in the application of these theories to education. (S,SS)
ECT 5078 Technical Education in American Society (3). This course will provide students with knowledge of the basic role and current status of technical education in
an industrial democracy. It is designed for students interested in post-secondary education. (S)
ECT 5386 Vocational Educational Media (3). This course provides students with knowledge and skill in selecting, developing, and utilizing vocational instructional media forms to communicate or demonstrate concepts. (S)

ECT 5769 Evaluation in Vocational and Technical Education (3). This course provides students with knowledge and skill in the development of criteria, tests, measurements, and analysis of data to assess teaching, learning, and objectives. (F)
ECT 5905 Directed Study in Vocational/Technical Education (1-3). This course includes identification, research, and reporting on a special problem of interest to the student. Subject to approval of program advisor. (F,S,SS)
ECT 5925 Special Topics in Vocational Education (16). This course includes selected competencies related to instructional and technical areas. (AR)
ECT 5927 Special Topics in Health Occupations Education (1-3). This course includes selected topics related to instructional and technical areas. (AR)
ECT 6790 Program Evaluation in Vocational Technical Education (3). Competency: Knowledge and skill needed to conduct a systematic evaluation of vocational-technical education programs.
ECT 6925 Special Topics in Vocational Education (16). This course consists of selected topics related to professional and program areas. (AR)
ECT 6930 Seminar in Vocational Education (3). This course includes discussion of special instructional, curricular and/or administrative and supervisory problems and issues in vocational education. Prerequisite: Graduate standing. (F)
ECT 6946 Supervised Field Experience (3-6). This course is an application and refinement of competencies in either classroom, laboratory, or administration and supervision, via school-based field experiences. Placement is subject to approval of program leader. (AR)
ECT 6947 Internship in Vocational Education (3). This course provides students with knowledge and skill in a new leadership setting, relative to the student's selected area of emphasis. (AR)
ECT 7964 Comprehensive Doctoral Examination, Vocational and Technical Education Leadership (0). This is the Comprehensive Doctoral Examination in Vocational and Technical Education Leadership. Prerequisite: Permission of major professor. (F,S,SS)

ECT 7980 Ed.D. Dissertation (1-12). This course consists of research for doctoral dissertation for those students approved for candidacy in the Vocational and Technical Education Leadership Program. Prerequisites: Permission of Major Professor and Doctoral Candidacy. (F,S,SS)
ECT 7985 Dissertation Defense (0). This is the defense of Dissertation. Prerequisites: Permission of major professor and ECT 7980. (F,S,SS)

ECW 5008 Cooperative Vocational Education Programs (3). This course will provide students with
knowledge and skill in the basic philosophy, principles, processes, and procedures of the cooperative method in vocational and technical education. (F)
ECW 5168 Curriculum Development in Vocational Education (3). This course provides students with knowledge and skill in analyzing, planning, and developing curriculum in an area of specialization. (S)
ECW 5196 International Comparative Vocational Education (3). This course provides students with knowledge in comparison of vocational education in the United States in terms of purposes, systems, and problems with those of selected foreign countries. (S)
ECW 5206 Supervision and Coordination of Vocational Education Programs (3). This course provides students with knowledge and skill in the supervision of personnel and the coordination of work to achieve institutional goals. (F)

ECW 5315 Improvement of Teaching Strategies in Health Occupations and Nursing Education (3). This course is the first in series of graduate courses designed to prepare qualified health professionals holding bachelor's degrees with professional education skills necessary to become competent teachers. It is approved for "special methods of teaching health occupations education." (AR)
ECW 5665 Trends and Issues in Vocational Education (3). This course provides students with knowledge of the basic philosophical and curricular trends and issues in vocational technical education at the international, national, state, and local levels. (F)
ECW 5695 Community Relations and Resources for Vocational Education (3). This course provides students with knowledge and skill in utilizing community resources and establishing public relations procedures and practices to implement vocational education programs. (SS)
ECW 6007 Theory of Work and Careers in Vocational and Technical Education (3). This course provides students with knowledge of concepts and principles of work, careers, and technology and related individual, social, and economic benefits with implications for vocational and technical education. Prerequisite: Graduate standing. (F)
ECW 6105 Program Planning in Vocational Education (3). Competency: Knowledge and skill necessary to determine vocational program feasibility and implementation of new programs. Prerequisite: Graduate standing.

ECW 6205 Administration of Vocational Education Programs (3). This course provides students with knowledge of the principles, practices, functions, and roles of administration in the operation of vocational education programs. (S)
ECW 6318 Current Issues in Health Occupations and Nursing Education (3). This course is designed to focus qualified health professionals holding a bachelor's degree with professional education skills necessary to identify and conduct research on current issues related to teaching in health occupations education. (AR)

ECW 6596 Vocational Education in a Multicultural Setting (3). This course provides students with knowledge
and skill in developing and modifying vocational education programs, materials, and practices for a multicultural setting. (SS)
EDA 6061 Introduction to Educational Leadership (3). This course is an Introduction to Educational Administration/Leadership as a field of both study and practice. Emphasis is placed on the social, economic, and political context of contemporary educational administration; the organization, governance, and control of American education; and Educational Administration/ Leadership as a profession and career. (F,S,SS)
EDA 6063 Administration of Independent Schools (3). This is a survey course that examines the administration of private schools. (AR)
EDA 6192 Leadership in Education (3). This course includes a review, analysis and application of concepts and theories of leadership with emphasis on organizational and environmental factors, group dynamics, and change processes in education. ( $F, S, S S$ )
EDA 6195 Communication in Educational Leadership (3). This course consists of analysis of principles, processes, and techniques of effective communication, public relations in educational leadership, and schoolcommunity relations. (F,S,SS)
EDA 6225 Labor Relations in Education (3). This course examines relations between the school board and its employees. (AR)
EDA 6232 School Law (3). This is a basic course in school law. (F,S,SS)
EDA 6242 School Finance (3). This course describes and analyzes current and emerging school finance plans; the influence of the courts and federal and state legislation on those plans; the Florida Education Finance Plan; and the budget responsibilities of the school principal. (F,S,SS)
EDA 6271C Administering Educational Technology (3). This course is designed to provide pre-service and inservice administrators with the theoretical and practical knowledge necessary for planning and implementing technology in schools. Students will develop a knowledge base of technology applications essential for educational administrators. (F,S,SS)
EDA 6503 Instructional Leadership (3). This course focuses on the role of instructional leadership in schools and the role of school administrators in promoting and sustaining instructional leadership. (F,S,SS)
EDA 6530 Secondary School Administration (3). Development of competencies required to function as the principal of a secondary school, with particular attention to the urban setting.
EDA 6905 Directed Study in Educational Leadership (1-3). This course is for advanced graduate students wishing to engage in independent study under the direction of a faculty member. Prerequisites: Admission to master's program and permission of instructor. (F, S,SS)
EDA 6925 Workshop in Educational Administration and Supervision (1-6). This course offers an opportunity for experienced school personnel to participate in a problem-solving workshop. (AR)

EDA 6928 Special Topics: School Improvement (1-6). This course offers an opportunity for experienced school personnel to participate in a school improvement workshop. (AR)
EDA 6930 Seminar in Educational Leadership (3). This course is a review of selected concepts and competencies in the field of educational leadership. (AR)
EDA 6941 Practicum in Educational Leadership (3). This course consists of application of theory and research to field-based problems in educational administration/ leadership. Prerequisite: Permission of the instructor. (AR)
EDA 6943 Administrative Internship (1-6). This course will provide supervised field experience appropriate to the student's interests and professional goals. Prerequisite: Permission of the instructor. (F,S,SS)
EDA 6945 Colloquium in Educational Administration (3). This course examines selected contemporary policy and practice issues in educational administration and supervision. It is repeatable with permission of the instructor. (AR)
EDA 7069 Educational Policy (3). This course is a review, analysis, and synthesis of various concepts and models of educational policy formation and implementation. It is for doctoral students only.
EDA 7103 Theories of Educational Administration (3). This course is an examination of theoretical constructs and models related to the organization and administration of educational institutions. Prerequisite: Admission to doctoral program. Doctoral students only.
EDA 7233 Ethics and Educational Leadership (3). This course is an exploration of ethical concepts and issues in educational administration and leadership that emphasizes the enhancement of personal and professional skills of ethical reasoning and reflection in decision-making situations. (AR)
EDA 7288 Politics of Education (3). This course is an analysis of the political dynamics of educational governance and the political dimension of educational administration. Doctoral students only. (F)
EDA 7905 Directed Study in Educational Administration and Supervision (1-6). This course is for advanced graduate students wishing to engage in independent study under the direction of a faculty member. Prerequisite: Permission of the instructor. (F,S,SS)
EDA 7930 Seminar in Educational Administration and Supervision (3). This course considers critical issues and problems in the administration of educational institutions. (AR)
EDA 7943 Field Projects (1-6). This course includes participation by advanced graduate students in field projects and studies. Prerequisite: Permission of the instructor. The course may be repeated with permission of the instructor (AR)
EDA 7961 Dissertation Research Seminar (3). This course is designed to provide advanced doctoral students with a knowledge and understanding of the process of dissertation research and writing and of the dissertation defense. Prerequisite: Advanced doctoral standing. (AR)

EDA 7964 Comprehensive Doctoral Examination, Educational Administration and Supervision (0). This is the comprehensive doctoral examination in Educational Administration and Supervision. Prerequisite: permission of major professor. (F,S,SS)

EDA 7980 Ed.D. Dissertation (1-12). This course consists of research for doctoral dissertation. Prerequisite: Permission of major professor and doctoral candidacy. (F,S,SS)
EDA 7985 Dissertation Defense (0). This is the defense of doctoral dissertation. Prerequisite: Permission of the major professor and EDA 7980. (F,S,SS)
EDE 5041 Issues in Elementary Education (3). Provides understanding, skills, and dispositions needed to build an initial knowledge base as to issues that impact elementary education from the historical, philosophical, sociological, psychological, international and contemporary perspectives. The course serves as an introduction to the field of elementary education. Corequisite: EDE 5XXX.
EDE 5267 Education of the Child in Urban Society (3). For students desiring advanced study in the schooling of inner-city pupils in K-6. Prerequisites: EDF 3723, EDG 3321, EDG 3322. (AR)
EDE 5905 Directed Study in Elementary Education (13). Available to graduate elementary majors. Provides for individual investigation in the area of elementary education. Permission of the instructor required. (F,S,SS)
EDE 5925 Special Topics in Elementary Education (3). Available to undergraduate and graduate elementary majors. Provides opportunities to develop skills and knowledge under the guidance of a specialist in a selected area. Permission of the instructor required. (AR)
EDE 6205 Curriculum Design for Childhood Education (3). Required in masters programs in elementary education. A study of curriculum theory, research, construction and evaluation related to elementary schools. (AR)
EDE 6225 Problems in Curriculum and Instruction: Elementary (3). Investigation of current problems and solutions to essential curricular and instructional issues in elementary education. Prerequisites: EDE 6205 or equivalent. (SS)
EDE 6482 Field Research for Educators (3). The first part of a two semester sequence providing the knowledge and skills necessary for conducting research in schools and classrooms by teachers and administrators; using the results of this research to inform practice. Prerequisite: EDF 5481.
EDE 6488 Research in Elementary Education (3). Elective in masters program in elementary education. Required for students in doctoral program. Research in elementary education and the paradigms associated with this research. Prerequisite: EDF 5481. (AR)
EDE 6930 Seminar in Elementary Education (3). Required in masters program in elementary education. Required for students in doctoral program. Advanced study of critical issues and problems in elementary education. Prerequisite: EDE 6488. (AR)
EDE 6948 Graduate Internship in Elementary Education (1-6). Field based experiences in elementary
education provided. Required in modified masters track Repeatable.

EDE 6971 Thesis in Elementary Education (6). Elective in masters program in elementary education. Design and preparation of an original scholarly investigation in elementary education. Prerequisites: EDF 5481, EDE 6488, and consent of instructor. Corequisite: EDE 6930. (F,S,SS)
EDE 7935 Doctoral Seminar in Elementary Education (3). Required for students in doctoral program. Advanced doctoral study of current theories and research related to elementary education. Prerequisites: EDE 6488 and EDE 6930. (AR)

EDF 5216 Effective Learning in the Classroom (3). A behavioral approach to effective teaching techniques, including theoretical background, behavioral definitions, writing effective objectives, and evaluation of effective learning in the classroom. A field experience will be included. (AR)
EDF 5255 Classroom Management (3). Provides teachers' understandings, skills, and dispositions for successful classroom management. Prerequisite: EDP 5053. Corequisite: EDG 5414.

EDF 5432 Measurement and Evaluation in Education (3). Competencies required for the design, construction or selection, and evaluation of measuring instruments. Prerequisite: EDF 5481. (F,S,SS)
EDF 5443 Measurement and Evaluation in the Classroom (3). Basic concept in educational measurement, utilizing measurements in instruction, construction of teacher-made tests and other classroom assessments, portfolio and performance assessment, interpretation of standardized test scores.
EDF 5481 Foundations of Educational Research (3). Competencies required for critical understanding, evaluation, and use of published educational research: Understanding quantitative and qualitative methods; sampling; measurement; data collection and analysis; and inference process. (F,S,SS)

EDF 5517 History of Education in the Changing Social and Philosophical Context of the American Republic (3). This course is an historical examination of formal education in the changing social and philosophical context of the American republic. Special focus is on school/society relationship. (F,SS)
EDF 5820 Latin American Education: An Historic and Contemporary Overview (3). Historical and current development of Latin American education, and analysis of principal forces shaping this development. (AR)
EDF 5821 African Educational Systems: A Comparative Approach (3). Contemporary trends and issues of education in selected independent African countries, with historical analysis of colonial educational policies and practices. (AR)
EDF 5851 Social/Cultural Conflict in Educational Change (3). This course explores radical interpretations of the relationship of education to development in the Third World. Emphasis will be placed on the problem of values conflict and on the use of appropriate educational technologies. (AR)

EDF 5880 Intercultural Education: National and International Perspectives (3). Analysis of concepts and programs of intercultural and international education. Consideration of the role of education in fostering intercultural understanding both nationally and internationally. (F)
EDF 5881 Foundations of Bilingual Education (3). Fundamental theories and models of bilingual education, and information about the historical, philosophical, theoretical and legal background for bilingual multicultural programs in the United States. (AR)
EDF 5905 Directed Study in Education (1-3). The student plans and carries out an independent study project under direction. Topics are to directly relate to content of education courses. Independent study may not substitute for regular course offerings. Prerequisites: Written permission of the chairman of the Division and the approval of the instructor. (F,S,SS)

EDF 5942 Multicultural Seminar and Practicum in Urban Education (3). This course includes effective methods of educating immigrant and other minority children. Prerequisite: Current Florida Teaching Certificate. (AR)
EDF 5955 Field Study Abroad (3-6). Development of international and cross-cultural understandings of educational philosophies and systems through planned travel and study abroad. (SS)
EDF 6211 Psychological Foundations of Education (3). An intermediate course designed to apply theories and principles of learning and development to teaching and student learning in career areas related to education. Challenges of diversity and teacher effectiveness are emphasized. Prerequisites: EDP 3004 or equivalent. (F,S,SS)
EDF 6212 Research Problems in Educational Psychology (3). Critical analysis of research trends and topics in educational psychology with specific relevance to counseling, school psychology, or special education. Students prepare a prospectus for thesis. (AR)
EDF 6301 Cognitive Psychology in Education (3). Review of psychological research and theory pertaining to cognitive development and processes. Applications to education including cognitive strategy training and enhancement or attention and memory. Prerequisites: EDP 6211 or equivalent. (AR)

EDF 6365 Cultural Identities and Conflict (3). This course provides students with an opportunity to conduct research on the construction of cultural identities. It emphasizes the analysis of the role played by cultural identity symbols in conflict situations.

EDF 6366 Conflict Resolution: Negotiation-Based Perspectives (3). This course introduces students to negotiation-based perspectives on conflict resolution. It provides opportunities to learn problem-solving strategies to move from confrontation to collaboration.
EDF 6367 Interactive Conflict Resolution: A ThirdParty Perspective (3). This is an overview of the field of interactive conflict resolution or third-party perspective. It provides opportunities to conduct research and acquire preliminary skill as third-party facilitators.

EDF 6472 Research Methods in Education: Introduction to Data Analysis (3). This course will provide an introduction to the analysis and interpretation of quantitative data in education and the helping professions. Prerequisite: EDF 5481.

EDF 6475 Qualitative Foundations of Educational Research (3). Methods and procedures of qualitative research in education: Philosophical issues, conceptualizing research questions, choosing appropriate research designs, collecting data, manual and computerized data analysis, and drawing inferences. Prerequisites: EDF 5481. (AR)
EDF 6476 Advanced Methods of Qualitative Educational Research (3). Advanced design, data collection, and data analysis issues in qualitative research, applied data analysis using text analysis computer programs, making inferences, and effective dissemination of the results. Corequisites: EDF 6481 and EDF 6475.
EDF 6481 Educational Research Methodology (3). This course is designed to provide doctoral students with an indepth analysis of the methods and procedures of research in education. Topics will include conceptualizing educational research, writing research proposals, constructing measurement instruments, collecting and analyzing qualitative and quantitative data, and drawing inferences. Prerequisites: EDF 5481 and EDF 6472.
EDF 6482 Application of Measurement and Assessment in Educational Research (3). The course is to provide key concepts and theories in measurement and guide researchers and practitioners to apply these concepts and theories in their research practice. Prerequisites: EDF 6472, EDF 5481, or permission of the instructor.
EDF 6486 Advanced Data Analysis in Quantitative Educational Research (3). This is the second of a twosemester in quantitative data analysis. It provides the competencies required for data analysis in complex educational research designs. Prerequisite: EDF 6472 (AR)
EDF 6487 Action Research for Educators (3). The first part of a two semester sequence providing the knowledge and skills necessary for conducting research in schools and classrooms by teachers and administrators; using the results of this research to inform practice. Prerequisite: EDF 5481.

EDF 6602 Social and Philosophical Foundation of Education: An Urban Perspective (3). Conceptualization and development of education by development of social analysis and ethical decision making. Prerequisite: Admission to Focus/Masters program. (AR)
EDF 6608 Social, Philosophical and Historical Foundations of Education (3). This course is required of students seeking a regular Masters degree in Education. It will assist students in examining and explaining the differing social context of schooling, the diverse value orientation represented in formal and informal education and the major historical forces shaping schooling in America. (F,S,SS)
EDF 6621 Economic Principles of Education (3). This course covers the linkages between education and the economy. Higher education, corporate interest, and
privatization are examined in light of market forces. Emerging trends in the knowledge economy, labor/skill demand also discussed.
EDF 6636 Intercultural Studies: A Qualitative and Quantitative Analysis (3). This course is a study of interrelationship between race, class, gender, ethnicity, and national origin and their influence in learning. Prerequisite: EDF 5481. (AR)

EDF 6654 Macro- and Micro-Planning in Education (3). This course is designed to study the theoretical and methodological foundations of educational planning in the U.S. and other countries. (F)

EDF 6658 Selected Topics in International Development Education: Current Policy Issues and Problems (3). This course is dedicated to the study of contemporary problems and issues in the fields of educational policy, planning, management, implementation, and research in developing societies. (AR)
EDF 6684 Building Home School Community Partnerships in a Context of Justice and Civic Engagement (3). Students study communities involved in the education of their children, especially marginalized children and families, exploring why and how these communities partner and the implications for teachers.
EDF 6689 Contemporary Issues in Urban Education (3). This course examines the state of urban education and contemporary urban life in America. Prerequisite: Admission to Masters program. (AR)
EDF 6766 Education, the Environment, and Sustainable Futures (3). This course presents an overview of issues in sustainable development, education and the modern school. Efforts will be made to explore the roles that education and culture play in environmental degradation.
EDF 6812 National Educational Systems: A Comparative Analysis (3). Examination of educational structures and guiding educational objectives in a limited number of both developed and developing countries. Analysis of responses of national educational systems to common educational issues. (S)
EDF 6850 International Development Education: Contemporary Planning Models and Techniques (3). This course is designed to explore the relationship between education and the modernization/development process. Special emphasis on historic/contemporary educational planning models and techniques. Prerequisite: EDF 5481. (S)
EDF 6852 Educational Development Issues in Context: A Multidisciplinary Perspective (3). This course is a critical analysis of educational reforms of the past and the present, drawing on social science research and policy issues in the Third World. Prerequisite: EDF 6850. (S)
EDF 6906 Directed Study in International Development Education (3). This course is a specialized intensive study in areas of interest to International Development Education majors. Prerequisite: Approval of program advisor and instructor. (F,S,SS)
EDF 6925 Special Topics in Urban Education (1-5). This is an opportunity for school personnel to develop
special competencies in teaching in an urban environment. Prerequisite: Permission of the instructor. (AR)
EDF 6941 Practicum in Action Research (3). This course develops the skills of researchers who engage in the process of action research in areas associated with urban education. Prerequisite: EDF 6487. (AR)
EDF 6972 Thesis in International Development Education (3-9). A thesis is required of students in International Development Education which demonstrates the application of their analytical, conceptual, and technical skills to a specific educational development problem. Prerequisite: Final semester standing in the International Development Education Master's degree program. (F,S,SS)
EDF 7215 Application of Learning Theory to Instruction (3). Analysis of selected learning theories and application of these theories to an instructional system. Prerequisite: EDF 6211. (AR)
EDF 7403C Data Analysis in Multivariate Educational Research (3). Design of multivariate research projects in education. This course focuses on applications of multivariate data analysis to educational research using a non-matrix approach. Prerequisite: EDF 6486. (AR)
EDF 7412C Structural Equation Modeling for Educational Research (3). The course focuses on conceptual understanding of covariance structure models and practical experiences of conducting a research project using structural equation models in educational fields. Prerequisites: EDF 6472, EDF 6486, or permission of the instructor.

EDF 7419C Applied Regression Analysis for Educational Research (3). It is designed for graduate students who prepare for educational research using applied regression, aiming at hands-on experiences using computer software and practices on research presentation. Prerequisites: EDF 6472, EDF 6486, or permission of the instructor.
EDF 7437 Advanced Measurement (3). This course is designed to introduce measurement theory and advanced applications in educational measurement. Prerequisite: EDF 6432.

EDF 7442 Instrument Construction for Research and Evaluation (3). Course covers data collection procedures such as surveys, interviews, observation, content analysis, and performance assessments. Prerequisites: EDF 5481 or equivalent and an introductory measurement course.
EDF 7483 Seminar in Mixed Methodology (3). Utilization of mixed (Qualitative + Quantitative) methods in research, including critical evaluation of worldviews, typology, research questions, data collection/analysis, and meta inferences. Prerequisites: EDF 6475, EDF 6481, and EDF 6486.

EDF 7489 Hierarchical Linear Modeling for Educational Research (3). The course is to provide key concepts and knowledge of HLM and guide educational researchers to practically apply HLM for the analysis of grouped or longitudinal data in educational research settings. Prerequisites: EDF 6472, EDF 6486, or permission of the instructor.

EDF 7492 Educational Program Evaluation (3). Design, development and implementation of program evaluation studies in education, interpretation and dissemination of the findings. Prerequisites: EDF 6475, EDF 6481, EDF 6486.

EDF 7493 Transcultural/Transnational Research and Evaluation Methodology (3). This course is an in-depth examination and discussion of the issues, dilemmas, and specific design requirements in conducting transcultural and transnational research and evaluation. Prerequisites: EDF 7492 and EDP 7504.
EDF 7656 International Development Education: Innovative Approaches in Educational Planning (3). Introduction to educational planning approaches which stress decentralization. It focuses on new and innovative perspectives which emphasize strategic aspects of educational planning. (AR)
EDF 7934 Seminar in the Social Foundations of Education (3). This course provides a social and philosophical frame of reference reflecting the society in which education occurs and the resulting implications for the functioning of schools. Prerequisites: M.S. or equivalent and at least one graduate course in history, philosophy or sociology, or equivalent. (AR)
EDF 7937 Advanced Topics in the Social Foundations of Education (3). This course is an in-depth, advanced exploration of a specific area, issue, or practice in relation to the evolving social, philosophical and historical context of American schooling. Prerequisite: Doctoral students only. (F,S,SS)
EDF 7941 Supervised Practicum in Educational Research and Evaluation (3). Completion of research or program evaluation project under the supervision of a faculty member. The product of this practicum is a publishable research report. Prerequisites: EDF 6481 and EDF 6486.
EDG 5049 Public Diplomacy and Education: Engaging the Arab and Muslim World (3). Examination of education and public diplomacy, from different national perspectives, engagement in dialogue about global issues with virtual classmates, and grant proposal writing.
EDG 5325 Analysis of Teaching (3). Examination of the research on instruction in teaching, and the development of skills in the observation and analysis of teacher behavior. (AR)
EDG 5414 Instructional Strategies for the Classroom Teacher (3). This course is specifically designed for the Modified Master's Program in Education. Focus is on generic teaching strategies suitable for teaching in South Florida. Special emphasis will be placed on the development of competence and knowledge supportive of a reflective practitioner. Prerequisite: Permission of the instructor. Corequisite: EDG 5414L. Field experience required. (F,SS)
EDG 5414L Instructional Strategies Lab (3). Applies basic knowledge and skills necessary for teaching. Required of all in modified masters programs. Corequisite: EDG 5414. (F,SS)
EDG 5417 Learning Styles Applications (3). Designed to help educators use learning styles information to change instruction and improve student achievement.

Prerequisite: Tentative admission to Master's program. (AR)
EDG 5707 Cultural and Cross-Cultural Studies (3). This is an overview of immigration patterns in U.S., discussions of theories of ethnicity, acculturation, intercultural communication. Development of teaching strategies for multicultural classrooms. Multicultural issues in elementary, secondary, adult, vocational, and special education will also be addressed. (F,S,SS)
EDG 5941 Practicum: Urban Secondary Schools (3). Developing teacher competencies in urban secondary schools. (AR)
EDG 6250 Curriculum Development (3). Development of basic technical constructs of curriculum. Planning of reality-based educational programs at all levels of schooling.
EDG 6286 Curriculum Evaluation and Improvement in Urban School Systems (3). Development of skills in curriculum evaluation and strategies for improvement of on-going curriculum.
EDG 6608 Multicultural Education: Defining the Field (3). Multicultural education and its impact on teaching and the profession. Prerequisite: Admission to Urban masters program. (AR)
EDG 6627 Seminar: Issues and Trends in Curriculum and Instruction (3). A review of current issues and trends in Curriculum and Instruction. Prerequisite: EDG 6250.
EDG 6920 Colloquium in Curriculum and Instruction (1-6). Selected readings, presentations and discussions on topics related to curriculum and instruction. Colloquia considers specific topics related to issues, trends and applications in the broad field of education. Prerequisite: Masters Degree. (SS)
EDG 6925, 6926, 6927, 6928, 6929 Special Topics in General Professional Education (1-3). Offers an opportunity for school personnel to participate in a problem-oriented workshop in one of the fields of general professional education. (AR)
EDG 6943 Supervised Field Experience (1-5). Students are provided an opportunity to perform supervisory duties appropriate to the students' professional goals. Only advanced graduate students are permitted to enroll. (AR)
EDG 6971 Thesis in Curriculum and Instruction (1-3). An individually supervised research project demonstrating the application of analytical, conceptual and technical skill to a specific curriculum and instruction problem. Prerequisites: EDF 5481 and permission of major advisor.
EDG 7222 Curriculum: Theory and Research (3). Theories of curriculum organization and a survey of curriculum research and historical patterns of curriculum development. Prerequisite: EDG 6250.
EDG 7362 Instruction: Theory and Research (3). Theories of instruction and research in the learning process, creativity, the thought process, human relations and group dynamics and other fields related to the development of instructional theory and practice. Prerequisites: EDG 6250 or Psychology of Learning.
EDG 7391 Seminar in Instructional Leadership (3). Review theories of change and organizational
development applicable to education. Discussion of rules and functions of supervisors, curriculum developers and other leaders in the instructional process. Prerequisites: EDS 6115 or EDS 6050.

EDG 7665 Seminar in Curriculum (3). Provides advanced doctoral students the opportunity to participate in a high level seminar focused on identifying the forces which shape curriculum theory and practice. Prerequisite: EDG 7222.
EDG 7667C Advanced Topics in Curriculum Studies (3). Advanced study of current topics and research issues in curriculum studies.
EDG 7692C Politics of Curriculum (3). Advanced study of theories, research, and processes of curriculum decision-making.
EDG 7923C Doctoral Seminar in Curriculum Studies (3). Advanced study of professional development activities and current research topics in Curriculum Studies.
EDG 7938 Doctoral Seminar in Instructional Leadership (3). Advanced doctoral studies in current theories and research related to instructional leadership. Prerequisite: EDG 7391. (F)
EDG 7964 Comprehensive Doctoral Examination (0). Prerequisite: Permission of Major Professor.
EDG 7980 Ed.D. Dissertation (1-12). Original contribution to knowledge in major field. Prerequisite: Permission of Major Professor and Doctoral Candidacy. (F,S,SS)
EDG 7985 Dissertation Defense (0). Defense of dissertation. Prerequisites: Permission of Major Professor and EDG 7980.

EDH 6041 Foundations of Academic Advising (3). This course provides overview of developmental advising theories and current research on academic advising, cultural issues related to advising, and delivery systems for advising.
EDH 6045 College Student Development Theory (3). This course is an overview of the most commonly used theories of student development in higher education including the research on which they are based and their application to practice with diverse student populations, issues, and settings.
EDH 6047 College Student Life and Culture (3). This course examines college students in the US from a sociocultural perspective. Compares student life across historical contexts, various student types, and current issues related to student development.
EDH 6050C Women and Higher Education (3). This course focuses on the history of women in higher education and provides a gender analysis of current higher education issues.
EDH 6051C Leadership in Higher Education (3). This course consists of an analysis and comparison of leadership theories, followership, leadership and management, ethics of leadership, and power and gender issues in higher education.
EDH 6055 Access and Choice in US Higher Education (3). This course examines who goes to college, how they choose, how they pay. Issues include college choice
models, types of institutions, equality of access to college, financial aid, rankings, and affirmative action.

EDH 6066 Contemporary Issues in Higher Education (3). Study of contemporary issues confronting higher education. Emphasis is on the identification, definition, and study of issues and how they might be addressed by educational leaders and policy makers.

EDH 6404 Legal Issues in Higher Education Administration (3). This course offers a survey of legal issues of interest to practitioners in the field of higher education, including student rights, employment rights, due process, free speech, tort liability.

EDH 6633 Introduction to Higher Education Administration (3). This course is an overview of higher education administration through a review of its history, theoretical foundations, functional areas, administrative structures, and current and future issues.
EDH 6634 Organization and Administration of Student Affairs (3). This course is an exploration of organizational and administrative issues in Student Affairs including relationship to other executive areas, interrelationship of units, research, leadership and case studies.
EDH 6637 Crisis Management in Higher Education (3). This course studies the theories and practical approaches to managing crises in institutions of higher education. Students learn how institutions plan for crises and respond to crises effectively.
EDH 6905 Directed Study in Higher Education (1-6). Specialized intensive study in higher education and/or community college is in areas of interest to the student and is subject to approval of program advisor. Prerequisite: Permission of the instructor. (F,S,SS)
EDH 6925 Special Topics in Higher Education (1-3). This course is an intensive development of selected competencies related to staff development and/or administrative skills of special interest to students in higher education. ( $F, S, S S$ )
EDH 6935 Special Topics in Higher Education (3). This course provides for the examination of a particular academic topic of interest to students in higher education. (F,S,SS)
EDH 6943 Practicum in Higher Education Administration (3-6). Supervised practice in Higher Education offices/agencies to gain understanding of office/agency functions and role(s) of employees. Prerequisites: Fully admitted and completion of one semester.

EDH 6970 Master's Thesis (1-3). An individually supervised research project demonstrating the application of analytical, conceptual and technical skill to a specific higher education problem. Prerequisites: EDF 5481 and permission of major advisor.

EDH 7040 Advanced Seminar on the College Student
(3). This seminar provides a critical understanding of the research on the college student by examining the demographic, psychological, sociological, and interpretive literature.

EDH 7052 Student and Support Services (3). This is a comprehensive introduction and overview of student affairs in higher education including history, evaluation and
growth, philosophical underpinnings, educational significance, administrative aspects and understanding of individual student service areas. (F)
EDH 7053 Higher Education: Community College (3). This course examines the structure of the community college including: curriculum; administration and legal aspects; the community college concept; technical and career programs and current issues and problems. (S)
EDH 7058 International Comparative Higher Education (3). The course provides a broad survey of international comparative higher education, including a cross-cultural perspective on historical and contemporary issues related to the structure and governance of higher education systems in various world regions and individual countries.
EDH 7065 Higher Education: Philosophical/Historical Perspectives (3). This course examines basic philosophical positions in higher education; and the history of American higher education. A contemporary philosophical position is then developed. (F)
EDH 7225 Higher Education: Developmental Programs (3). This course examines the spectrum of developmental programs in higher education. Special attention is given to program structure, academic support systems and curricula designed to increase student achievement. (F)

EDH 7307 Higher Education: Instructional Methods (3). This course will develop knowledge of and skill in the use of higher education instructional methods, such as lecture, discussion, demonstration, TV instruction, and computer assisted instruction. (SS)

EDH 7308 Higher Education: Occupational Programs (3). This is a core course in the doctoral program in higher education: Instruction. It is designed to help students develop an in-depth knowledge of occupational programs in higher education and the students it serves. Prerequisite: Graduate standing. (S)
EDH 7401C Higher Education and Public Policy (3). This course examines the general topic of the relationship between the federal government and higher education is developed. Major attention is given to developments since WWII.
EDH 7402C State Policy and Higher Education (3). The general topic of this course is the relationship developed between the state government and higher education. Major attention is given to developments since WWII.
EDH 7405 Advanced Seminar on Law and Higher Education (3). This course offers students advanced study, research and writing on legal issues, including governance, faculty, and regulation by all levels of governments. Prerequisite: EDH 6404 (or equivalent). (AR)

EDH 7505 Higher Education: Finance (3). This is an intermediate course in Higher Education. Presents the economic and financial issues of Higher Education providing base for administrators and practitioners.
EDH 7635 Administration of Higher Education (3). Analysis of colleges and universities as social organizations with special emphasis on issues of administration, organization, and governance in higher education. (AR)

EDH 7937 Special Research Topics in Higher Education Administration (3). This doctoral seminar is devoted to the in-depth treatment of selected theories and research topics in the field of higher education. (AR)
EDH 7964 Comprehensive Doctoral Examination (0). Prerequisite: Permission of Major Professor. (F,S,SS)
EDH 7980 Ed.D. Dissertation (1-12). This course consists of research for doctoral dissertation. Prerequisites: Permission of Major Professor and Doctoral Candidacy. Course may be repeated as needed. ( $\mathrm{F}, \mathrm{S}, \mathrm{SS}$ )
EDH 7981 Doctoral Seminar (3). This course offers doctoral students understanding of doctoral study, including skills necessary for successfully completing dissertation. Admission into doctoral program in Higher Education necessary. Prerequisite: Admission into the doctoral program in Higher Education.
EDH 7985 Dissertation Defense (0). This course is the defense of dissertation. Prerequisites: Permission of Major Professor and EDH 7980. (F,S,SS)
EDM 6256 Problems in Curriculum and Instruction: Middle School (3). Investigation of current problems and solutions to essential curricular and instructional issues in Middle School education. Prerequisites: ESE 6215 or equivalent. (SS)
EDP 5053 Educational Psychology: Principles and Applications (3). Theories, empirical bases and principles of development and individual differences, learning environments, and assessment applied to teaching at all educational levels. Challenges of diversity are emphasized. Required of Modified Masters programs. (SS)
EDP 6276 Human Development: Childhood and Adolescence (3). Advanced survey of principles of human development in biopsychosocial terms; in-depth study of infancy, childhood, adolescence, emphasizes applications to broad range of educational processes. Prerequisites: EDP 3004 and DEP 2000. (F)
EDP 6277 Human Development: Across the Life Span (3). Advanced survey of life span human development. Demographic, physiological, sociological factors contributing to optimal functioning through adulthood and aging. Applications to counseling and education. (S)
EDP 7057 Educational Psychology: Advanced Applications (3). Advanced doctoral level seminar. Reviews and applies educational psychology theories and empirical evidence to educational research, program development and policy making at all educational levels. Prerequisite: School of Education doctorate students. (AR)
EDP 7058 Behavioral Intervention Research and Evaluation in Education (3). Design and analysis of observational and behavioral studies in education. Includes single subject research studies, structured observation systems, and behavioral interventions. Prerequisite: EDF 5481. (S)
EDP 7214 Psychological Problem Solving in Education (3). Discussion of psychological problem solving literature and development of problem solving tasks grounded in the educational psychology literature. Prerequisite: EDP 6301.

EDP 7265 Supervised Teaching of Educational Psychology (3). Independent teaching of an educational psychology or educational research and evaluation course under the supervision of assigned faculty member(s). Prerequisites: Doctoral candidacy in the related area. Course may be repeated as needed.
EDP 7504 Educational Psychology in Cross-Cultural Contexts (3). Discussion of empirical and theoretical cross-cultural research in intelligence, problem solving, and language that impact teaching, learning, and achievement in the US and around the world. Prerequisite: EDP 7057

EDP 7980 Education Doctoral Dissertation (1-12). Research for doctoral dissertation students approved for candidacy in Educational Research and Measurement and in Educational Psychology. Prerequisite: Advancement to candidacy in doctoral program.
EDS 5051 Supervision and Professional Laboratory Experience (3). The content of this course includes performance standards at the preservice teacher preparation level, Clinical Educator training, mentoring, and classroom strategies that result in improved student performance.
EDS 6050 Supervision and Staff Development (3). This course consists of the study of competencies in supervision and staff development.
EDS 6115 School Personnel Administration (3). This course provides the knowledge and skills essential for exercising effective leadership in school personnel recruitment, selection, orientation, assessment, and professional development. (F,S,SS)
EEC 5906 Directed Study in Early Childhood Education (1-3). Available to undergraduate and graduate students studying early childhood education. Provides for individual investigation in the area of early childhood education. Permission of the instructor required.
EEC 5926 Special Topics in Early Childhood Education (3). Available to undergraduate and graduate students studying early childhood education. Provides opportunities to develop skills and knowledge under the guidance of a specialist in a selected area. Permission of the instructor required.
EEC 6261 Education Programs for Younger Children (3). Required in masters program in early childhood education. Programs developed for young children; curriculum trends based on contemporary psychological, educational, and sociological research.
EEC 6273 Programming for Young Handicapped Children: Birth to Five Years (3). Acquaint students with developmentally appropriate curricula, methods, materials, intervention strategies, and teaming approaches for infants, toddlers, preschool, handicapped, and at risk children. Prerequisites: EEX 6017; EEX 3010 or EEX 6051 recommended.
EEC 6678 Research in Early Childhood Education (3). Elective in masters program in early childhood education. Required for students in doctoral program. Research in early childhood education and the paradigms associated with this research. Prerequisite: EDF 5481.

EEC 6705 Typical and Atypical Child Development: Birth to Five Years (3). Explore research on normal and atypical child development from birth to five years in physical, intellectual, social, and emotional domains. Field observation required. Prerequisites: none; EEX 3010 or EEX 6051 recommended.
EEC 6932 Seminar in Early Childhood Education (3). Elective in masters program in early childhood education. Required for students in doctoral program. Advanced study of critical issues and problems in preschool and early childhood education. Prerequisite: EEC 6678.
EEC 6948 Supervised Experience in Early Childhood Education (3-9). Available to graduate early childhood education majors. Provides field work in educational institutions and organizations involved in childcare and early childhood education. Prerequisite: Permission of the instructor.
EEC 6971 Thesis in Early Childhood Education (6). Design and preparation of an original scholarly investigation in early childhood education. Prerequisites: EDF 5481, EEC 6678, and consent of instructor. Corequisite: EEC 6932.
EEC 7932 Doctoral Seminar in Early Childhood Education (3). Required for students in doctoral program. Advanced doctoral study of current theories and research related to early childhood education. Topics may vary and may include: social, cognitive, affective and language development. Prerequisites: EEC 6678, EEC 6932. (AR)
EEX 5060 Nature and Needs of Students with Mild Disabilities (3). Curriculum models, approaches and significant concepts and skills needed for educational planning and programming for students with mild disabilities. Prerequisites: EEX 5481, EEX 6912. (S)
EEX 5068 Instructional Practice in Exceptional Student Education I (3). This course includes the theoretical basis and principles of appropriate instructional practices and techniques for students with mild disabilities, IEP planning, and curriculum development. Prerequisites: EEX 6051, EEX 6225, EEX 6106.
EEX 5069 Instructional Practices in Exceptional Student Education II (3). This course includes the principles of effective instructional practices and strategies for students with mild disabilities, and requires implementation of these strategies in the field. Prerequisites: EEX 6051, EEX 6225, EEX 6106, EEX 5068.

EEX 5075 Teaching Students with Exceptionalities in Inclusive Settings (3). To develop understandings, skills and dispositions necessary to instruct students with disabilities in inclusive settings, and to collaborate with professionals and parents. 10 field hours required.

EEX 5095 Nature and Needs of Students with Autism Spectrum Disorders (3). Students will develop knowledge and skills related to the nature and needs of students with autism including characteristics, learning goals, teaching approaches, and environmental arrangements.
EEX 5210 Assessment and Strategies for Students with Autism Spectrum Disorders (3). Students will become familiar with current formal and informal assessments used in diagnosis and instructional planning.

Students will also become familiar with specific educational strategies for students with autism spectrum disorders.
EEX 5259 Literacy in Special Education (3). Provides teachers with knowledge of specific developmental, remedial reading and language arts strategies, assessment and implementation models that can be used for students with exceptionalities.

EEX 5282 Introduction to Audiology and Auditory Training for Students Who are Deaf and Hard of Hearing (3). The purpose of this course is to provide the opportunity to study the physical dimensions of sound, the psychoacoustic aspects of sound, and the relationship between these. The etiologies, characteristics, and the diagnostic evaluation, treatment and rehabilitation associated will be discussed. Prerequisites: EHD 5110 and EHD 5344.
EEX 5608 Behavioral Approaches to Learning and Classroom Management (3). Application of behavioral principles to children and youth in educational and community settings. Required for special education modified masters' and out-of-field certification majors. Prerequisite: EEX 6051.
EEX 5619 Behavioral Management and Positive Behavioral Supports for Students with Autism Spectrum Disorders (3). Students will develop and implement positive behavior plans and design behavior management techniques for students with Autism Spectrum Disorders.
EEX 5755 Working with Families and Communities of Young Children with Disabilities (3). This course includes strategies for effective communication and collaboration with families of young children with disabilities and related agencies.

EEX 5766 Instructional and Assistive Technology in Special Education (3). Provides teachers of students with disabilities instructional and assistive technology skills that enhance student learning and increase access to the general education curriculum. Prerequisite: EEX 6051.
EEX 5767 Assistive and Instructional Technology and Alternate/Augmentative Systems for Students with Autism (3). Students will develop skills in strategies used in integrating instructional and assistive technology in the classroom for students with autism and the use of appropriate AAC systems.

EEX 5771 Personal Foundations and Transitional Services for Individuals with Disabilities (3). Explores personal living skills, employability and transitional skills for adulthood in relation to persons with mental, sensory and physical disabilities. (SS)
EEX 5841 Graduate Practicum in Special Education (1). The Graduate Practicum in Special Education provides opportunities for intensive and integrated teaching experiences in the classroom under the close supervision of master teachers and university supervisors. Prerequisites: Completion of professional studies and core courses. Corequisites: EED 5225, ELD 5145, EMR 5215.
EEX 6019 Autism (3). Presents the nature of autism, personal characteristics, patterns of development, and assessment and intervention strategies. Requires field activity. (AR)

EEX 6017 Typical and Atypical Child Development: Birth to Five Years (3). Explore research on normal and atypical child development from birth to five years in physical, intellectual, social, and emotional domains. Field observation required. Prerequisites: EEX 3010 or EEX 6051. (F)

EEX 6051 Education of Students with Exceptionalities (3). Significant concepts in relation to the educational needs of students with exceptionalities. (AR)
EEX 6065 Educational Programs for Secondary Level Students with Exceptionalities (3). Considers philosophies and models of secondary programs for students with mild disabilities. Emphasis is given to instructional methods in skills and content areas and identification of transition resources. Prerequisites: MAE 6336, RED 6336. (AR)
EEX 6072 Inclusion of Students with Exceptionalities (3). Awareness of issues underlying the movement to include students with disabilities in general education settings. Techniques and procedures for effective mainstreaming of these students. (SS)
EEX 6096 Characteristics of Individuals with Severe Disabilities (3). Characteristics of individuals with physically impaired, health impaired, and profound communication disorders and behavior disorders, including autism. Medical etiology, assessment techniques, program planning for student and family. Prerequisite: Graduate level status. (AR)
EEX 6106 Acquisition of Speech and Language Skills (3). Development of normal speech and language, and knowledge of speech and language delays and disorders. (S)

EEX 6211 Assessment of Learning and Behavior (3). Presents a model for assessing the skills and abilities of students with exceptionalities. Emphasis is on administration, scoring and interpretation of a variety of standardized tests, and communication of results in written reports and oral staffings. Prerequisites: EEX 3221 or EEX 6227 or equivalent. Lab fee required. (AR)
EEX 6213 Assessment and Interventions for Young Children with Disabilities (3). Presents an ecological approach to assessment of young children. Formal/Informal assessment including naturalistic observations and the development of an IFSP and IEP required. Prerequisites: EEX 6017, EEX 3012 or EEX 6051. Corequisite: EEX 6455. Lab fee required. (S)

EEX 6225 Educational Assessment of Students with Exceptionalities (3). Presents a model for assessing the academic skills of students with exceptionalities. Emphasis is on use of standardized tests and development of curriculum-based assessments. Lab fee required. (F,S)
EEX 6228 Integration of Curriculum, Assessment and Instruction (3). This course constitutes the culminating experience in the Masters Program by establishing the link between curriculum, assessment, and instruction. Prerequisite: Completion of required Masters course work. (S)

EEX 6417 Guidance and Counseling of Gifted Students (3). Affective development, parental
involvement, counseling theories, underachieving gifted. (SS)

EEX 6455 Programming for Young Children with Disabilities (3). Acquaint students with developmentally appropriate curricula, methods, materials, intervention strategies, and teaming approaches for infants, toddlers, preschool age children with disabilities as well as children at risk. Prerequisites: EEX 6017, EEX 3010 or EEX 6051. Corequisite: EEX 6213. (S)
EEX 6535 Seminar in Special Ed.: Supervision and Leadership (3). Problems in school administration and pattern of curriculum organization as they relate to people with disabilities. Focus on conceptual framework, change factors and future trends in special education. (F)
EEX 6756 Working with Families of Students with Disabilities through Collaborative Approaches (3). This course familiarizes students with the skills needed to work in effective partnerships with families of children with disabilities and related school personnel.
EEX 6765 Instructional Technology for Special Education (3). Provides teachers of students with special needs current knowledge in instructional technology, appropriate to enhance student learning. (F,SS)
EEX 6796 Culturally and Linguistically Diverse Exceptional Learners (3). The course will focus on evidence-based practices for working with culturally and linguistically diverse students with disabilities with a particular focus on urban schools and related issues.
EEX 6848 Seminar in Special Education: Issues and Trends (3). A forum to discuss, analyze, and evaluate current issues and trends in special education. Individual issues and trends will be planned and executed by students. (S)
EEX 6862 Student Teaching (6). Culminating field experience in a program for students with Exceptionalities, demonstrating competencies learned throughout the program. Prerequisite: successful completion of all program requirements. (F,S)
EEX 6863 Supervised Field Experience in Special Education (3-9). Demonstration in a field site of the full range of competencies in diagnostic teaching learned throughout the program. Placements include a variety of field settings. (F,S,SS)
EEX 6906 Directed Study in Special Education (1-6). Concepts or competencies contracted for by graduate students with a faculty member. ( $F, S, S S$ )
EEX 6912 Advanced Theory and Research in Special Education (3). Required by graduate students in the Masters or Doctoral programs. Investigation of advanced work in social and psychological research applied to persons with handicaps, mental retardation, learning disabilities, and emotional disturbances. Prerequisites: Certificate in Special Education and/or competence in Special Education. (F,S)
EEX 6927 Special Topics in Special Education (1-6). Selected competencies in special education, developed in short-term, intensive workshops. (F,S,SS)
EEX 6971 Thesis in Special Education (3). Elective in Masters Program in special education. Design and implementation of original scholarly investigation in special
education. Prerequisites: EEX 6912, EDF 5481, consent of instructor. (AR)
EEX 7795 Advanced Issues in the Education of Culturally and Linguistically Diverse Students with Exceptionalities (3). The course will focus on highly effective educators, minority students in special education, critical issues such as inclusion and assessment, and teacher preparation and support in urban districts.
EEX 7930 Professional Seminar in Special Education (1). Required 6 semester seminar for new and continuing doctoral students in leadership and professional development issues facing doctoral professionals. Prerequisite: Doctoral standing. (F,S,SS)
EEX 7933 Advanced Topics in Special Education (3). In-depth study and analysis of topics affecting special education practice. Course can be repeated for credit. Prerequisite: Admission to doctoral program in ESE.
EEX 7937 Dissertation Seminar in Special Education (3, repeatable to 9). Designed to take doctoral students through the steps of completing a dissertation. Requires identification and development of a research problem. Prerequisites: Completion of special education core and research and statistics component. (F,S,SS)

EEX 7977 Candidacy Research and Evaluation in Educational Psychology and Special Education (3). Research activities required for Doctoral students in special education prior to candidacy and dissertation. Serves as a bridge between courses and the comprehensive examination. Prerequisite: Doctoral standing. (F,S,SS)
EEX 7980 Ed.D. Dissertation (1-12). Original contribution to knowledge in major field. Prerequisites: Permission of Major Professor and Doctoral Candidacy. (F,S,SS)
EGI 5051 Nature and Needs of the Gifted (3). Identification and placement procedures, history of the field, and psychological factors affecting development of the gifted-talented. (F)
EGI 5232 Educational Procedures and Curriculum for Gifted (3). Basic curriculum models in education of the gifted. Relation of models to planning, implementation in traditional classrooms, resource rooms, and special classes. (S)

EGI 6305 Theory and Development in Creativity for Gifted (3). Required for graduate students seeking endorsement in Gifted Education. Knowledge and practice in theory and process of creative thinking and production of creative work. Prerequisite: Graduate level only. (F)

EGI 6405 Special Gifted Populations (3). Required for graduate students seeking endorsement in Gifted Education. Knowledge and theory in cultural, psychological, and educational principles applied to gifted minorities, including the handicapped. Prerequisite: Graduate level only. (SS)
EHD 5110 Nature and Needs of Students Who are Deaf and Hard of Hearing (3). Identification and placement procedures, history of the field, and psychological factors affecting the development of students who are deaf and hard of hearing.

EHD 5246 Teaching Reading to Students Who are Deaf and Hard of Hearing (3). Knowledge and skills in
teaching reading to students who are deaf or hard of hearing. Techniques and strategies in the primary grades, intermediate grades and content areas will be discussed as well as the exploration, creation and evaluation of basic reading materials. Prerequisites: EHD 5110 and EHD 5247.

EHD 5247 Teaching Language and Speech to Students Who are Deaf and Hard of Hearing (3). Historic approaches and current methods for teaching language and speech; knowledge of language and speech structures and principles needed by students who are deaf and hard of hearing; and an understanding of the development of language and speech in students who are deaf. Prerequisite: EHD 5110.
EHD 5341 Curriculum and Instruction of Students Who are Deaf and Hard of Hearing (3). Students will learn techniques for teaching learners who are deaf or hard of hearing including adaptations for instruction in content areas, multicultural instruction, development and implementation of IEPs. Prerequisites: EHD 5110, EHD 5247, and EHD 5402.
EHD 5344 Anatomy and Physiology for Teachers of Students Who are Deaf and Hard of Hearing (3). Exploration and study of the anatomy and physiology of all aspects of communication process. These aspects include the respiratory, phonatory, articulatory, acoustic, auditory, and neurologic systems. Prerequisite: EHD 5110.
ELD 5145 Strategies in Teaching Students with Learning Disabilities (3). Instructional strategies and approaches for teaching students with learning disabilities. Extensive field work is required. Prerequisites: EDG 5414 and Lab, EEX 6051, EEX 6227, EEX 5608. (AR)

ELD 6323 Advanced Theory and Practice: Specific Learning Disabilities (3). Major concepts in the area of specific learning disability, and skills in the application of these concepts to education. (S,SS)
EME 5315 Instructional Media (3). Development of competencies for effective selection and utilization of instructional media. Consideration of sources, selection, evaluation, and methods of implementing media. (AR)

EME 5403 Introduction to Instructional Delivery Systems (3). A study of the rapidly expanding electronic media technology and its impact on instructional delivery. Prerequisites: EME 3402 or EME 6405. (AR)
EME 5602 Multimedia in the Classroom (3). Use videodisc and compact disc formats; hypermedia; high resolution still images and graphics; audio-program material and text to improve the quality of teaching and student learning. Prerequisites: EME 3402, EME 6405, or equivalent. Corequisite: Basic knowledge of McIntosh environment. (AR)
EME 5623 Digital Video in the Classroom (3). Hands-on digital video techniques and practices for integration into classroom applications. Designed for teachers who wish to use digital video in classroom settings.
EME 5945 Special Topics in Computer Education (1-3). Offers an opportunity for teachers and trainers to participate in activities using specific computer applications. (AR)

EME 6405 Computers in the Classrooms (3). Learning to use microcomputers in a school setting. Emphasis on evaluating and documenting software; creation of classroom materials leading to development of useful software. (F,SS)

EME 6407C Instructional Programming for Teachers (3). An introductory course for teachers to use BASIC to write educational programs appropriate to the teacher's area of specialization. Prerequisites: EME 3402 or EME 6405 or permission of the instructor. (AR)

EME 6408 Microcomputers as Teaching Tools (3). This course develops ability to use the microcomputer as an object, medium, and manager of instruction in the classroom. Prerequisites: EME 6405 or EME 3402 or permission of the instructor. $(F, S)$

EME 6412 Educational Courseware Evaluation and Development (3). This course develops ability to select, evaluate, design, and utilize appropriate software for the school curriculum. Prerequisites: EME 6405 or EME 3402 and one computer language or permission of the instructor. (AR)

EME 6433 Learning Technologies in Science Education (3). Application of learning theories and research to learning technologies in science education. Development, testing and evaluation of curriculum materials.
EME 6507 Advanced Interactive Multimedia (3). Research on the use of text, color, sound, graphics and animation in multimedia presentations. Apply theory and research to design, develop, and evaluate educational multimedia materials using advanced technological tools and distribute them in different formats. Prerequisites: EME 6405, EME 5602.
EME 6628 Administrative and Instructional Applications of Technology (3). Topics of this course include data management, instructional management, teleconferencing, scheduling, and productivity software for educational leaders and school managers. (AR)
EME 6905 Directed Study: Computer Education (1-3). The course provides an opportunity for the student to plan and carry out an independent study project under direction. Prerequisite: Permission of the instructor. (F,S,SS)
EME 7457 Teaching and Learning at a Distance (3). The course will cover distance education technologies, history and research, needs of learners, design, development, and evaluation, intellectual property rights, assessing students at a distance. Prerequisites: Admission into doctoral program, permission of instructor.
EME 7936 Special Topics in Learning Technologies (3). Special topics in the area of learning technologies will be addressed in this course. Topics will vary from semester to semester. Prerequisites: Admission into doctoral program, permission of instructor.
EME 7938 Advanced Seminar in Learning Technologies (3). Important emerging topics, issues, problems, and trends in the area learning technologies will be covered in this course. Prerequisites: Admission into doctoral program, permission of instructor.

EMR 5215 Strategies for Teaching Students with Mental Retardation (3). Familiarizes students with instructional strategies and specialized approaches for teaching students with mental retardation. Requires extensive field work. Prerequisites: EDG 5414, EDG 5414L, EEX 6051 and EEX 5608. (AR)
EMR 6012 Advanced Theory and Practice: Mental Retardation (3). Major concepts in the area of mental retardation and skills in the application of these concepts to education. $(\mathrm{S}, \mathrm{SS})$
ESE 5344C Secondary Classroom Management (3). Provides students with the theoretical and practical approaches for dealing with the problems of classroom management within the goals, materials, and teaching strategies that form secondary classrooms.

ESE 6215 Secondary School Curriculum (3). Examination of programs, trends, and developments in curriculum and instruction in the secondary school. Consideration and evaluation of innovations. (AR)
ESE 6256 Problems in Curriculum and Instruction: High School (3). Investigation of current problems and solutions to essential curricular and instructional issues in high school education. Prerequisites: ESE 6215 or equivalent. (SS)
ESE 6925 Workshop in Secondary Education (1-3). Production and application of materials and techniques in a laboratory or field setting. Prerequisite: Consent of instructor.

ETE 5811C Equipment and Facilities Planning (3). Utilization of research, design, and technical knowledge and skill to plan and update technology education laboratory facilities and equipment. Prerequisite: Graduate standing. (F,S,SS)
ETE 5905 Directed Study in Technology Education (13). Identification, research, and reporting on problems of interest to the student in technology education. Subject to approval of program advisor. (F,S,SS)
ETE 5935C Special Topics in Technology Education (3). Selected topics related to instructional and technical areas. (F,S)
ETE 6683 Instructional Projects Development in Technology Education (3). Knowledge and skill in developing new and innovative instructional projects for use in technology education programs, grades 6-12. (F,S,SS)
ETE 6931 Analysis of Technology Education (3). Knowledge of trends, issues, problems in technology education at the national, state, and local levels. (F,S,SS)
EVT 5317 Occupational Analyses in Health Occupations and Nursing Education (3). This course provides opportunity to expand/update the knowledge base of health care system combining experiences in health care delivery system with curriculum updating. Professional licensure and liability insurance required. May be repeated. (AR)
EVT 6760 Research in Vocational Education (3). This course provides students with knowledge and skill in identifying, defining, collecting, analyzing, and synthesizing research-related problems in vocational and adult education. (S)

FAD 5260 Family Development (3). Dynamics of family interaction and structure, including analysis of socioeconomic and cultural influences, crisis-producing situations, and current issues and trends affecting the family unit. (AR)
FAD 5341 Family Development: Adulthood and Aging (3). Extension of the study of developmental patterns with emphasis on physical, intellectual, social, and emotional influences with particular emphasis on the family and/or family substitute. Graduate students will have additional requirements. (AR)
FAD 5450 Human Sexuality (3). Provides a cognitive overview of human sexuality. Main emphasis is on the affective dimension-an exploration of attitudes and values related to sexuality. (AR)
FLE 5895 Bilingual Education Teaching Methodologies (3). Examination of various approaches to bilingual education, including specific school and classroom organizations. Development of specific instructional strategies for bilingual students. Issues in elementary, secondary, adult, vocational, and special education will also be addressed. (F)
FLE 5908 Directed Study in Foreign Language Education (1-3) (ARR). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (F,S,SS)
FLE 5945 Supervised Teaching: Modern Languages (6). Supervised teaching in a junior or senior high school. Prerequisites: Admission to the Modified Master's Track Program and completion of prerequisite course work in education and subject matter area. (F,S)
FLE 6336 Methods of Teaching Modern Language (3). A modern study of language learning and teaching from the theoretical and practical points of view, including the evaluation and development of techniques and materials for second language teaching. Prerequisites: LIN 3010 or ENG 3500 or equivalent. ( $F, S$ )

FLE 6925 Special Topics in Second Language Education (1-3) (ARR). Production and application of materials and techniques in second language education in a laboratory or field setting. (S)
FLE 6938 Seminar in Second Language Testing (3). Advanced study and research on current topics and issues in the field of second language education. Variety of topics to include language testing. Language proficiency, language and society, bilingual-bicultural education, and error analysis and the language learner. (S,SS)
HEE 5335 Trends and Issues in Home Economics Education (3). This course is an analysis of current social, economic, and educational trends and issues impacting upon home economics education and their implications for current and evolving practices. (F)
HEE 5360 Teaching Child Development (3). This course is designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)
HEE 5361 Teaching Consumer Education and Family Economics (3). This course is designed to upgrade competency in planning, researching, and evaluating
experiences that are current in content and educational strategies. (AR)
HEE 5362 Teaching Clothing and Textiles (3). This course is designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)
HEE 5363 Teaching Family Life Education (3). This course is designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)
HEE 5364 Teaching Housing and Home Furnishings (3). This course is designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)
HEE 5365 Teaching Food and Nutrition (3). This course is designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)
HEE 5905 Directed Study in Home Economics Education (1-3). This course is designed for advanced students in home economics education who wish to pursue specialized topics. Requires prior approval of instructor. (F,S)
HEE 5927 Special Topics in Home Economics Education (1-3). This course includes the development, organization, instruction, evaluation, and administration of programs related to selected aspects of home economics education. (S)
HEE 6156 Teaching Home Economics in Diverse Environments (3). This course consists of utilization of current educational developments, evolving strategies, materials, and resources to teach and evaluate home economics programs in diverse settings. (S)
HEE 6915 Research in Home Economics Education (3). This course is an analysis and application of research pertaining to philosophy, curriculum, evaluation, and teacher education in home economics. Subject to approval of program advisor. (F)
HEE 6928 Special Topics in Home Economics Education (1-3). This course includes the development, organization, instruction, evaluation, and administration of programs related to selected aspects of home economics education. (F,S)
HEE 6937 Seminar in Home Economics Education (3). This course is an application of selected instructional, curricular, and/or administrative principles and practices to the solution of problems of special interest to home economics educators. Subject to approval of program advisor. (S,AR)
HES 5319 Teaching Health Education (4). Students will select various modern techniques and tools for teaching health education in elementary and secondary school settings. (AR)
HME 5225 Problems of Home Management in Contemporary Society (3). This course is the study of influence of diversified cultural impact on management life styles, with emphasis on problems of management resources. Discussion of problems related to single-parent homes, retirement, poverty, death, working parents, migrant families, and other human situations.

Prerequisites: COA 2410, HME 4230, or permission of the instructor. (AR)
HME 5255 Independent Living for the Handicapped (3). This course explores the home and personal living skills required to empower persons with mental and physical limitations to achieve their maximum independence. Suitable for students in special education, health, physical education, recreation, social work, home economics or anyone planning to work with elderly or handicapped. Approved for certification for teachers of the mentally retarded. (AR)
HSC 5455 Basic Driver Education (3). Content includes knowledge of the highway transportation system, rules and regulations. For Driver Education Certification endorsement. (AR)
HSC 5456 Advanced Driver Education (3). Content includes advanced skills for the teaching of driver's education. Prerequisite: HSC 5455. (AR)
HSC 5465 Administration and Supervision of Driver Safety Education (3). Content includes competencies for teacher preparation and improvement in driver and traffic safety education. Prerequisites: HSC 5455 and HSC 5456. (AR)
LAE 5336C Special Teaching Lab - English (3). Development of Instructional Skills, Techniques, and Strategies for Teaching English in the Middle and Senior High School. Prerequisite: EDG 5414.
LAE 5355 Literacy Instruction in the Intermediate Grades (3). Provides understandings, skills, and dispositions needed to teach reading and writing to students who have advanced beyond beginning stages. Required for students in VE Modified Masters Program. Prerequisites: RED 5152 or equivalent. Corequisite: EEX 4940.

LAE 5415 Children's Literature (3). Required in Early Childhood, Elementary and Reading Education Master's Programs. Provides knowledge and skill in critical analysis of purposes, strategies for teaching and evaluation of children's literature.
LAE 5426 Multicultural Perspectives in Teaching Language and Literature for Young Adolescents (3). This course is designed to provide students with a theoretical and practical basis for teaching and reading multicultural literature in the secondary school. Prerequisite: Admission into the program. (AR)
LAE 5465 Adolescent Literature in Middle/Secondary Schools (3). This course examines a wide variety of adolescent and young adult literature. Assists students in the development of instructional strategies for organizing literary experiences among young learners. Prerequisite: Admission into program. (AR)
LAE 5908 Directed Study in English Education (1-3) (ARR). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (AR)
LAE 5927 Special Topics in Language Arts (3). Available to undergraduate and graduate education majors. Provides opportunities to develop skills and knowledge of reading/language arts instruction. Permission of the instructor required. (AR)

LAE 5945 Supervised Teaching: English Education (6). Supervised teaching in a junior or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and subject matter area. (S)
LAE 6305 Instruction in Early Childhood Language Arts (3). Required in Master's program in Early Childhood Education. Refines skills related to program development, methods of teaching, selection of materials, and review of research in preschool, kindergarten and primary grades. Prerequisites: LAE 4314 or permission of the instructor.
LAE 6319 Instruction in Integrated Language Arts (3). Elective in masters program in Elementary Education. Refines skills related to program development, methods of teaching, selection of materials, and review of research in elementary education. Prerequisites: LAE 4314 or permission of the instructor.
LAE 6339 Teaching English in the Secondary School (3). Analysis of methods, programs, and materials for teaching English in the middle school and senior high school, and development of teaching skills. Prerequisite: Undergraduate course in methods of teaching English. (S)
LAE 6815 Computers in English and the Language Arts (3). Covers the basics needed to integrate computers in teaching language arts. Emphasizes selecting and learning to use software to meet objectives in language, literature, and composition. Corequisites: English major or equivalent. (AR)
LAE 6925-26 Special Topics in English Education (13). Production and application of materials and techniques in English education in a laboratory or field setting. (AR)
LAE 6935 Seminar in English Education (3). Designed for advanced students, the readings and discussions will focus on policy issues and recent research in English education. Though primarily for experienced English teachers and supervisors, the course is open to administrators and others, with the consent of the instructor. (F)
LAE 7938 Doctoral Seminar in English Education (3). Advanced doctoral study of current theories and research related to English education. Prerequisites: LAE 6935, EDF 6486. (AR)
LEI 5166C Deviant Leisure (3). This course explores leisure pass times, that are forbidden by law, custom, or belief. Students will examine the negative aspects of leisure. (e.g. substance abuse, harmful sex, gambling and gang activity.)
LEI 5440 Program Development in Parks, Recreation, and Sports (3). This course examines the development of specific programs in parks, recreation, and sports. (S)

LEI 5510 Program Administration in Parks, Recreation and Sport (3). This course is a detailed analysis of administrative procedures and responsibilities in connection with parks, recreation facilities and human resources. (F)

LEI 5595 Seminar in Parks and Recreation Management (3). This course focuses on current problems, issues, and trends in the administration of parks and recreation programs. (F)

LEI 5605 Philosophical and Social Bases of Parks and Recreation Planning (3). This course concentrates on major phases of predesign, design, development, actualization of park and recreation facilities. The course will explore funding, budget, site selection, layout, and maintenance. (F)
LEI 5716 Program Planning in Recreational Therapy (3). Principles and practices in planning and implementing programs in recreational therapy settings. Special emphasis will be placed on a systematic approach through problem solving techniques. Prerequisite: LEI 3703. (S)
LEI 5719 Client Assessment, Evaluation and Documentation in Recreational Therapy (3). The course addresses client assessment, documentation and evaluation from the direct service perspective, administrative requirements, and health care regulatory agency demands. (S)
LEI 5801 Liability and Law in Leisure, Recreation and Sports (3). This course is a detailed analysis of legal issues related to leisure service, delivery and sport management including legal foundations, legal liability, disabled services and current case analysis. (S)
LEI 5907 Directed Study in Parks and Recreation Management (3). This course provides an opportunity for individuals interested in various aspects of park and recreation administration to work on their own under the close supervision of an advisor. Permission of the instructor is required. ( $\mathrm{F}, \mathrm{S}, \mathrm{SS}$ )
LEI 6562 Leisure Services Marketing (3). This is an advanced application of service marketing principles and practices to both public and private leisure service industry to improve both effectiveness and efficiency of operations. (S)

LEI 6725 Administrative Aspects of Therapeutic Recreation (3). This is an in-depth examination of issues related to the roles and responsibilities of the Activity Therapies/Therapeutic Recreation Administrator. (S)
LEI 6726 Trends, Issues, and Managerial Aspects of Recreational Therapy (3). An examination of current issues, trends, and professionalization and managerial concerns in recreational therapy. Prerequisite: LEI 3703. (F)

LEI 6727 Disabling Conditions in Therapeutic Activity Services Administration (3). This is an in-depth review of disabling conditions for the development of in-service training in recreational therapy and adapted activity services. (S)
LEl 6815 Advanced Recreational Therapy Facilitation Techniques (3). Designed to provide an in-depth examination of RT facilitation techniques as they are implemented with individuals with various disabling conditions or limitations. (F)
LEl 6922 Supervised Field Experiences in Parks and Recreation Administration (3-6). This course provides a practical experience for individuals interested in administrative responsibilities. Permission of the instructor and Department Chairperson required. (F,S,SS)
LEI 6970 Thesis: Therapeutic Recreation (3-6). This is an elective in the Masters Recreational Therapy Track. It involves the design and preparation of an original
scholarly investigation in recreational therapy. Prerequisite: EDF 5481. Corequisite: STA 6166. (AR)
MAE 5348 Numbers and Operations for Teaching in Grades K-5 (3). Study mathematics education in numbers and operations for teaching grades K-5 to build teachers' knowledge of content, curriculum, teaching methods and student learning. Prerequisites: MAE 4310 or equivalent course.
MAE 5382 Number Systems, Rational Numbers, and Operations for Teaching in Secondary School (3). Study mathematics education in number systems, rational numbers, and operations to build secondary teachers' knowledge of content, curriculum, teaching methods, assessment, and student learning.
MAE 5516 Diagnosis and Remediation in Mathematics (3). Available to undergraduate and graduate education majors. Provides study of symptoms, causes and consequences of children's math difficulties. Supervised case study included. Prerequisites: MAE 4310, or permission of the instructor. (AR)
MAE 5655 Computers in Mathematics Education (3). Examines the use of computers (microcomputers) in secondary school mathematics. Designing, evaluating, and using varied types of programs in mathematics classes. Learning to use computers to design mathematics curriculum. (F)
MAE 5908 Directed Study in Mathematics Education (1-3). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (F,S,SS)
MAE 5923 Special Topics in Elementary Math Education (3). Available to undergraduate and graduate education majors. Provides opportunities to produce and apply materials and strategies in math ed in elem and middle schools. (AR)
MAE 5945 Practicum: Mathematics Education (3-6). Supervised teaching and other professional development in an elementary, middle, or senior high school. Prerequisite: Permission of the instructor. (S)
MAE 6305 Instruction to Early Childhood Mathematics (3). Required in master's program in early childhood education. Refines skills related to program development, methods of teaching, selection of materials and review of research, in preschool, kindergarten and primary grades. Prerequisites: MAE 4310 or permission of the instructor. (AR)
MAE 6318 Instruction in Elementary Mathematics (3). Required in masters program in elementary education. Refines skills related to program development, methods of teaching, selection of materials, and review of research, in elementary mathematics education. Prerequisites: MAE 4310 or permission of the instructor. (F,S,SS)
MAE 6336 Teaching Mathematics in the Secondary School (3). Analysis of methods, programs, and materials for teaching mathematics in the middle and senior high school, and development of teaching skills. Prerequisites: Undergraduate secondary math methods and permission of the instructor. (S)
MAE 6337 Algebra, Statistics and Probability for Teaching in Secondary School (3). Study mathematics
education in algebra, statistics and probability to build teachers' knowledge of content, curriculum, teaching methods, assessment, and student learning.
MAE 6357 Elements of Algebra and Data Analysis for Teaching in Grades K-5 (3). Study mathematics education in algebraic thinking and data analysis for teaching grades K-5 to build teachers' knowledge of content, curriculum, teaching methods and student learning. Prerequisites: MAE 4310 or equivalent.
MAE 6358 Elements of Geometry and Measurement for Teaching in Grades K-5 (3). Study mathematics education in geometry and measurement for teaching grades K-5 to build teachers' knowledge of content, curriculum, teaching methods and student learning. Prerequisites: MAE 4310 or equivalent.

MAE 6381 Proportional Reasoning, Geometry and Measurement for Teaching in Secondary School (3). Study mathematics education in proportional reasoning, geometry, and measurement to build secondary teachers' knowledge of content, curriculum, teaching methods, assessment, and student learning.
MAE 6745 Current Trends and Issues in Mathematics Education (1-3). Trends and Issues in Math Curriculum, new textbooks, curriculum development projects; curriculum implementations and evaluations. Trends and Issues in Instruction, new techniques. Trends and Issues in Evaluations. "New tests", Research. (AR)
MAE 6899 Seminar in Mathematics Education (3). Designed to provide the advanced student with deeper understanding related to mathematics education. (SS)
MAE 6925 Workshop in Mathematics Education (1-3). Production and application of materials and techniques in math education in a laboratory or field setting.
MAE 7165 Curriculum Development in Mathematics Education (3). This course is required in the Ed.D. degree program in mathematics education. It will examine the history of K-12 mathematics curriculum and the current issues in mathematics education. Prerequisites: MAE 5655, MAE 6336, MAE 6899, and the entire advanced core.
MAE 7938 Doctoral Seminar in Mathematics Education (3). Advanced doctoral study of current theories and research related to mathematics education. Prerequisites: EDF 6486, minimum of 3 doctoral level math courses.
MHS 5350 Educational-Vocational Counseling (3). This course explores concepts and skills pertaining to vocational development, information systems, career education programs, educational-vocational counseling, and socio-psychological influences on career development. Prerequisite: MHS 5400.
MHS 5400 Counseling Skills and Techniques (3). Major theoretical concepts in counseling, competencies in relationship-building, interviewing, role-playing, simulation, and micro-counseling will be explored in this course.
MHS 5460 Crisis Counseling and Intervention (3). Prevention and intervention strategies in crisis situations including child abuse and neglect, suicide, substance abuse, AIDS, and personal loss. (AR)
MHS 6020 Foundations of Mental Health (3). This course provides an examination of the significant events in
the history of mental health care that has contributed to the development of the specialty within the counseling profession. Prerequisite: MHS 5400.
MHS $\mathbf{6 2 0 0}$ Measurement and Appraisal in Counseling (3). This course will provide an in depth examination of the concepts and skills related to the use of tests and other appraisal procedures in counseling. Prerequisite: EDF 5481.

MHS 6410 Behavioral and Cognitive Modification Techniques in Counseling and Education (3). In this course, concepts and skills in using behavior modification, contingency contracting, cognitive behavior management, self-instructional training, problem solving skills and parent and/or teacher consultation.
MHS 6411 Counseling and Consultation in Community Settings (3). Extended laboratory experiences stressing the development of behavioral/cognitive intervention skills in short-term counseling and consultation. Prerequisites: MHS 5400 and MHS 6700.
MHS 6427 Adult Psychopathology (3). The study of the causes, treatment, and diagnosis of emotional and behavioral disturbances in adults will be examined in this course. Prerequisite: MHS 5400.

MHS 6428 Cross Cultural Counseling (3). In this course, concepts and skills involved in counseling clients with backgrounds different from the majority culture. Prerequisite: MHS 5400.
MHS 6450C Substance Abuse Counseling (3). This course will educate mental health practitioners in understanding substances and techniques in counseling those who abuse them. Prerequisite: MHS 5400.

MHS 6470 Human Sexuality Counseling (3). This course addresses counseling issues, strategies and resources in human sexuality relative to mental health professionals. Prerequisite: MHS 5400.
MHS 6500 Theories in Group Dynamics (3). A systematic examination of various theories and relevant research used in study of small group phenomena will be addressed. Prerequisites: MHS 5350, MHS 6513. (AR)

MHS 6505 Advanced Group Development Laboratory (3). Development of advanced skills in the analysis and understanding of group process, function, and structures through actual observation of an ongoing group will be addressed in this course. Prerequisites: MHS 6513, MHS 6514. (AR)

MHS 6511 Group Counseling (3). Exploration of roles and function of group counseling in meeting client needs in a variety of settings. Prerequisite: MHS 5400.
MHS 6512 Organization Development in Education (3). An analysis of theory and practice of organization development and planned change in educational systems. Prerequisites: MHS 6513 and MHS 6514. (AR)

MHS 6513 Human Interaction I: Group Process and Social Behavior (3). In this course, concepts, research, and theory relative to small group process. Students will participate in small face-to-face task groups, with an emphasis on developing competencies in diagnosis and intervention in small groups.

MHS 6514 Human Interaction II: Analysis of Group Participation (3). A focus on participation in an on-going group with attention given to examination of processes of small group phenomena such as interpersonal communication, norms, decision-making, leadership, authority, and membership will be provided in this course. Prerequisite: MHS 6513.
MHS 6519C Principles of Design in Group Intervention: Role of the Consultant (3). This course focuses on role of leader or trainer in complex training design in leadership and human relations training. Emphasis on diagnostic and behavioral skills that help groups become more effective. Prerequisites: MHS 6513, MHS 6514, MHS 6500, and MHS 6513. (AR)
MHS 6629 Human Interaction III: Organizational Consultation (3). Theoretical concepts and skills in organizational development and change will be examined as well as competencies in systems diagnosis and assessment, consultation, agenda setting, team building, decision-making, and feedback. Prerequisites: MHS 6513, MHS 6514. (AR)
MHS 6630 Program Evaluation in Counseling \& School Psychology (3). This course evaluates skills in the student's area of specialization, including competencies in designing evaluation proposals and conducting an actual program evaluation. Prerequisite: EDF 5481.
MHS 6700 Ethical, Legal and Professional Issues in Counseling (3). This course will provide an introduction to the ethical, legal and professional practices in the field of counseling.
MHS 6800 Advanced Practicum in Counseling (3). In this course, advanced competencies in counseling and consultation will be provided. Prerequisite: Course work completion.

MHS 6802 Personality Theories (3). In this course, a survey of the various cognitive, psychodynamic, behavioral, humanistic, existential and family systems theories of personality development and change will be examined.

MHS 6820 Supervised Field Experience in Counseling (9). A demonstration of the full range of competencies learned throughout the program in Counseling will be established through an internship. The internship placements include a variety of field settings. Prerequisites: MHS 6800 and course work completion.

MHS 6910 Directed Study in Counseling and School Psychology (1-6). Competencies contracted for between a student and an instructor in accordance with the student's individual needs will be permitted in this course. Permission of the instructor required.
MHS 6930 Special Topics in Counseling and School Psychology (1, repeatable to 9). In this course, special topics in relation to counseling or school psychology will be examined. Permission of the instructor required.
PEP 5115 Health/Fitness Instruction (3). This course provides the knowledge and skills to evaluate and prescribe health and fitness enhancement programs for healthy adults. Prerequisite: APK 3110. (F)

PEP 5116 Exercise Prescription (3). This course provides the knowledge to prescribe exercise for persons
with medical limitations, particularly cardiovascular disease. Prerequisites: APK 3110 and PET 5521. (S)

PEP 5117 Fitness for Older Adults (3). The course explores the value of physical activity for improving the physical and mental well being of older adults. Emphasis is placed on exercise prescription and supervision of programs for those working with older adults. Prerequisite: APK 3110. (AR)
PET 5052C Motor Learning for Sport Performance (3). The emphasis in this course is on current and advanced topics related to motor skill acquisition. Laboratory practices and applied techniques related to teaching are examined. (F)

PET 5206 Youth Sports (3). This course provides insight into the issues surrounding youth sport programs including: program development and analysis, parental influences, relationship of sport to psycho-socio development. (AR)
PET 5216 Sports Psychology (3). This course includes an analysis of psychological variables that influence physical performance. The course is intended for prospective physical educators, coaches, and others interested in motor performance. (S)

PET 5256 Sociology of Sport (3). Students will be introduced to basic principles of the sociological bases of sport and physical activity. (S)

PET 5368 Exercise, Diet and Weight Management (3). The class prepares students to compare the effectiveness of exercise and several popular diets on weight control and body composition. Prerequisites: HUN 2201 and APK 3110.

PET 5391C Comprehensive Conditioning of Elite Athletes (3). The course prepares a student to develop a comprehensive conditioning program including metabolic, speed, flexibility, plyometric and resistance training. Prerequisite: APK 3110.

PET 5426 Curriculum in Physical Education (3). The emphasis is on curriculum design and development for Physical Education. Includes examination of objectives, content, methods of teaching and evaluation.
PET 5436 Physical Education Curriculum: K-8 (3). This course examines objectives, content, methods of teaching, and evaluative techniques in physical education. The emphasis is on curriculum design and development.

PET 5447 Curriculum in Physical Education 6-12 (3). The goal of this course is to understand the theoretical and practical aspects of designing, developing, and implementing curriculum for the secondary school.
PET 5521 Exercise Test Technology (3). This course provides the knowledge and skill required to conduct an EKG monitored graded exercise test. Prerequisite: APK 3110. (F)

PET 5693 Exercise Testing and Prescription of Special Populations (3). The course prepares a student to test and prescribe exercise programs for selected special population groups. Prerequisite: APK 3110.
PET 5906 Directed Study in Physical Education (1-3). Students will work independently on a topic concerning some phase of physical education or sport under the
guidance of a faculty member. Registration is by permission of advisor. (F,S,SS)
PET 5925 Practicum in Physical Education (1-3). This course focuses in the production and/or application of materials and techniques for physical education in a classroom and/or field setting. (F,S)
PET 5936 Special Topics in Physical Education (1-3). This course presents contemporary issues and practices in physical education and sport. (AR)
PET 5948 Practicum in Physical Education (3). This course focuses on the production and/or application of materials and techniques for physical education in a classroom and/or field setting.
PET 6405 Health Fitness Director (3). This course prepares the student for ACSM's Health Fitness Director certification. Prerequisites: APK 3110 and PEP 5115. (SS)
PET 6535 Master of Science Research in Exercise and Sports Sciences (1-3). The course is for graduate students performing an independent research project (treatise) or thesis as part of the graduate program of study. Prerequisites: EDF 5481 or equivalent and PET 6597 - Survey of Research.
PET 6558 Human Performance in Extreme Environments (3). Maintaining optimal health, fitness, and performance during physical work in stressful environments including heat, altitude, cold and underwater pressure. Prerequisites: Anatomy, Physiology, Exercise Physiology.
PET 6597 Survey of Research in Physical Education (3). This course covers the methods and techniques used in research in physical education. The emphasis is on effective use of resources and writing techniques. (F)
PET 6785 Exercise Program Director (3). This course prepares the student for ACSM's Exercise Program Director certification examination. Prerequisites: APK 3110, PET 5521, and PEP 5115. (SS)

PET 6925-27 Practicum in Physical Education (1-3). This course focuses on the production and/or application of materials and techniques for physical education in a classroom and or field setting. (F,S)
PET 6932 Seminar in Physical Education (3). Students will participate in the exploration, examination, and discussion of problems, issues, and trends in physical education and sport. (AR)
PET 6938 Graduate Research Seminar (1). The seminar is designed to introduce the graduate student to basic science concepts and hands on experience with scholarly inquiry in the sport and leisure science. Corequisite: EDF 5481.

PET 6940 Internship in Exercise Physiology: Graduate (3-6). This is a clinical experience, supervised by physician, designed to provide the student with competence in exercise prescription and leadership in preventive and rehabilitative outpatient exercise programs. Prerequisites: PET 5387, PEP 5115, and PEP 5116. (F,S,SS)
PET 6944 Supervised Field Experience (3-9). Students may use this course to become involved in an in-depth
study, research project, or any one of a variety of other activities, under the guidance of a faculty member. (AR)
RCS 6031 Rehabilitation Counseling: Principles and Practices (3). A survey course that provides an orientation to the rehabilitation process including the history, principles, philosophy, and legal aspects of rehabilitation counseling and related fields.
RCS 6080 Medical Aspects of Disability (3). Medical etiology and remediation of disability. Includes genetic, biochemical, nutritional, and physical agents in mental retardation, learning disability, and emotional handicaps. Prerequisites: EEX 3202 or equivalent. (F)
RCS 6245 Psychological/Sociological Aspects of Disability (3). Psychological/sociological aspects of disability in relation to socio/political forces, attitudes, and behaviors that impede or facilitate the options of individuals with disabilities in schools and communities. (AR)

RCS 6625 Service Delivery and Case Management in Rehabilitation Counseling (3). This course covers an evaluation of disability and rehabilitation potential in the context of service delivery and case management in the vocational rehabilitation process. Prerequisite: RCS 6031 Rehabilitation Counseling: Principles and Practices.
RCS 6801 Advanced Practicum in Counseling and Consultation (3). Advanced competencies in counseling and consultation.
RCS 6821 Supervised Field Experience in Counseling and Consultation (9). Demonstration of the full range of competences learned throughout the program in counseling. Internship placements include a variety of field settings. Prerequisite: RCS 6801.
RED 5147 Developmental Reading (3). Process of reading. Principles, procedures, organization and current practices in the developmental reading program. Overview of instructional practices.
RED 5304 Literacy Instruction in the Primary Grades (3). Provides understandings, skills and dispositions needed to teach reading and writing to students who are beginning to become literate. Required for students in VE Modified Masters Program. Prerequisites: EDG 5415 and EDG 5415L. Corequisite: EEX 4940.

RED 5339 Subject - Related Reading (3). Skills, techniques and strategies for scaffolding the reading of struggling students and enhancing the comprehension and learning independence of all students using subject area materials.
RED 5447 Analysis and Production Reading Materials (3). Elective in graduate program in Reading Education. Exploration, creation, and evaluation of basic reading materials. Prerequisites: RED 4150 or equivalent. (AR)
RED 5448 Teaching Reading by Computer (3). Elective in graduate program in Reading Education. Exploring literacy development with technology. Evaluation and creation of computer programs for teaching reading in grades 4-12. No prior computer experience is required. (AR)
RED 5911 Directed Study in Reading (1-3). Elective in Reading Education. Directed study in area of reading instruction. Permission of the instructor required. (AR)

RED 5925 Special Topics in Reading (3). Elective in master's program in Reading Education. Study in a specified area of reading education. (AR)
RED 6247 Organization and Supervision of Reading Program (3). Required in graduate program in Reading Education. Philosophy, history design, and operation of public and private reading programs. Prerequisites: RED 6314 or equivalent. (F,S)
RED 6305 Instruction in Early Childhood Reading (3). Required in graduate program in early childhood education. Program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood reading education. Prerequisites: RED 4150 or equivalent. (AR)
RED 6314 Theory and Instruction in Literacy (3). Required in graduate program in elementary and reading education. Process of reading program development, methods of teaching, selection of materials, and review of research in elementary reading education. Prerequisites: RED 4150 or equivalent. (AR)
RED 6336 Reading in the Content Areas (3). Required in graduate programs in Elementary and Reading Education and in secondary Modified Master's Programs. Strategies for developing the reading abilities of students in specific subject areas. Prerequisite: RED 6314 For Reading Education majors. (AR)
RED 6515 Programs of Remediation in Reading (3). Required in graduate program in Reading Education. Knowledge and strategies necessary to improve students' reading abilities. Prerequisites: RED 6314 or RED 6305, RED 6546, or their equivalents. (SS)
RED 6540 Reading Assessment (3). Formal and informal assessment for evaluating students and planning datadriven instruction in reading. focus on record keeping and tracking progress, PK-college. Required for MS in reading.
RED 6546 Diagnosis of Reading Difficulty (3). Required in graduate program in Reading Education. Knowledge and strategies necessary to assess students' reading abilities. Prerequisites: RED 6155 or RED 6305, or its equivalent. (AR)
RED 6747 Research in Reading (3). Required in doctoral program and thesis track of Reading Education Master's program. Elective in standard Master's track. Includes reading research, critique, methodology and planning. Prerequisite: EDF 5481. (F,S)
RED 6805 Practicum in Reading (3). Elective in graduate program in Reading Education. Supervised experience as reading professional in teaching, assessing, supervising, or research role. Prerequisite: RED 6314. (F,S)
RED 6845 Clinical Procedures in Reading (3). Elective in graduate program in Reading Education. Reading diagnosis, instruction, and reevaluation in a clinical setting. Prerequisites: RED 6515, RED 6546. (AR)
RED 6931 Seminar in Reading Education (3). Required in doctoral program and thesis track of reading master's program. Elective in standard Master's track. Deals with theory and practice of reading instruction. Prerequisites: Permission of the instructor and RED 6747. (AR)

RED 6932 Critical Issues in Reading Education (3). Elective in Reading Education master's program. Explores topics in specific reading education. (AR)
RED 6971 Thesis in Reading Education (6). Required in thesis track of reading master's program. Design, implementation, and written report of an original research investigation in reading education. Prerequisites: Advanced graduate standing and consent of instructor. (F,S,.SS)
RED 7912 Doctoral Directed Study in Reading (1-6). An elective course in the reading education doctoral program. Directed research in a specified area of reading education. Repeatable. Prerequisite: Admission to reading education doctoral program. (AR)
RED 7938 Doctoral Seminar in Reading Education (3). Required in Reading Education doctoral track. Advanced study in current theories and research related to reading education. Prerequisites: RED 6747, RED 6931. (AR)
SCE 5314 Teaching and Learning in Elementary Science Education (3). Course orientation is directed to understanding and examining "science for all" with employment of the Learning Cycle Model and numerous differentiated strategies for benchmark lessons in K-5 science. Corequisite: Placement or current teaching in a school.
SCE 5337 Secondary Science Lab: Methods and Materials (3). Increase the quantity and quality of laboratory experiences for secondary students by managing the laboratory safely, selecting appropriate activities, and evaluating student performance.
SCE 5905 Directed Study in Science Education (1-3). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (F,S,SS)
SCE 5930 Special Topics in Elementary Science Education (3). Available to undergraduate and graduate education majors. Provides knowledge and skills, content, strategies and materials for teaching elementary science. Permission of the instructor required. (AR)
SCE 5937 Special Topics in Grades 6-8 Science Education (3). Curriculum and instruction focus is on grades 6-8 inquiry and reformed-based practices in earth/space science. Aligned with a new national K12 Science Education and FL NGSSS. Corequisite: Placement or current teaching in a school.

SCE 5945 Supervised Teaching: Science Education (6). Supervised teaching in a middle or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and subject matter area. ( $F, S$ )
SCE 6306 Instruction in Early Childhood Science (3). Required in masters program in early childhood education. Refines skills related to program development, methods of teaching, selection of materials, and review of research, in preschool, kindergarten and primary grades. Prerequisites: SCE 4310 or permission of the instructor. (AR)
SCE 6315 Instruction in Elementary Science (3). Required in masters program in elementary education. Refines skills related to program development, methods of
teaching, selection of materials, and review of research, in elementary science education. Prerequisites: SCE 4310 or permission of the instructor. (AR)
SCE 6317 Teaching and Learning Interdisciplinary Approaches in Elementary Science Education (3). Curriculum and instruction focus is on K-5 inquiry and reformed practices based upon A Framework for K-12 science education: practices, crosscutting concepts, and core ideas: earth and space science. Corequisite: Placement or current teaching in a school.

SCE 6325 Instruction in Middle School Science (3). Refines skills related to program development, methods of teaching, selection of materials, and review of research in middle school science education. Focus is on 6-8 content and methods of teaching. Corequisite: Placement or current teaching in a school.
SCE 6366 Teaching Science in the Secondary School (3). Analysis of methods, programs, and materials for teaching science in the junior and senior high school, and development of teaching skills.
SCE 6545 Science Education and Community Resources (3). This course examines the utilization and cultivation of community resources to meet science education goals for various populations. (AR)
SCE 6925-26 Workshop in Science Education (1-3). Production and application of materials and techniques in science education in a laboratory or field setting. (AR)
SCE 6931 Special Topics in Science Education (3). An individual topic or limited number of topics not otherwise offered in the curriculum that facilitate science teaching in the elementary school will be selected. (AR)
SCE 6933 Seminar in Science Education (3). Analysis of research trends and selected topics in science education. Mainly for graduate students in secondary science education. Individual needs and interests will determine the fine structure of the course content. (S)
SCE 7145 Curriculum Development in Science Education (3). Analysis of theoretical basis of curriculum development in Science Education. Evaluation of currently available material. Development and testing of science curriculum materials. Prerequisites: SCE 6933, EDF 6486. (S)

SCE 7761 Research in Science Education (3). Application of research methodology to Science Education. Analysis of current research. Development of research proposal in Science Education. Conduct field study. Prerequisites: SCE 6933, EDF 6486, SCE 7145. Corequisite: SCE 7938. (SS)
SCE 7938 Doctoral Seminar in Science Education (3). Advanced doctoral seminar in current theories and research related to science education. Prerequisites: SCE 6933, EDF 6486. (SS)
SDS 5420 Counseling Students with Exceptionalities (3). An overview of academic, personal, social and career needs of students with physical and emotional disabilities and counseling implications and strategies for working with special education students.
SDS 5460 Crisis Counseling and Intervention (3). This course addresses prevention and intervention strategies in crisis situations including child abuse and neglect, suicide,
substance abuse, AIDS, and personal loss. Prerequisite: MHS 5400. (S,SS)

SDS 6411 Counseling Children and Adolescents (3). Theory and application of counseling elementary age children and adolescents including family issues and interventions, legal and ethical considerations and counseling at-risk and exceptional children. Prerequisite: MHS 5400.
SDS 6700 Organization and Administration of School Counseling (3). This course covers components, elements and interventions of comprehensive, developmental school counseling program models with an emphasis on system organization, administration, and evaluation. (F,SS)
SDS 6784 School Law for Student Service Workers (3). An overview of current legal issues and problems for school counselors, psychologists and social workers are addressed. (SS)
SDS 6800 Advanced Practicum in Counseling (3). A field experience in a school setting that covers advanced competencies and application of individual and group counseling and consultation. Prerequisites: Course work completion, advisor approval. (F,S,SS)
SDS 6820 Supervised Field Experience in Counselor Education (9). This internship course covers a practical demonstration of the full range of competencies learned throughout the school counseling program. Internship placements include a variety of school field settings. Prerequisites: Coursework completion and SDS 6800. (F,S)
SDS 6930 Special Topics in Counseling and School Psychology (3, repeatable to 9). Courses covering special topics in relation to counseling or school psychology. (F,S,SS)
SPM 5156 Sports Management and Administration (3). Examination of skills and knowledge required in the management and administration of sports-related careers in athletics, recreation, or industry. Prerequisites: Basic management courses: MAN 3025, PAD 4432 or equivalent.
SPS 6190 Academic Assessment and Intervention in the Schools (3). Students will receive supervised practice using norm-referenced and curriculum-based measures to provide academic assessments and monitor academic progress. Emphasis will be placed on linking academic assessment to intervention. Prerequisite: EDF 5481.
SPS 6191 Psycho-Educational Assessment I: Intellectual (3). This course addresses competencies in the assessment of intellectual ability and adaptive behavior in children. Corequisite: SPS 6191L for School Psychology majors. No corequisite for other majors. (F)
SPS 6191L Psycho-Educational Assessment I: Lab (2). Practical skills in the assessment of intellectual ability and adaptive behavior in children are covered in this course. Corequisite: SPS 6191. Lab fee required. (F)
SPS 6192 Psycho-Educational Assessment II: Process (3). This course addresses competencies in the assessment of psycho-educational processes in children and their relationship to intellectual ability. Corequisite

SPS 6192L for School Psychology majors. No corequisite for other majors. Prerequisite: SPS 6191. (S)

SPS 6192L Psycho-Educational Assessment II: Lab (2). Practical skills in the assessment of psychoeducational processes in children are covered in this course. Emphasis on assessing disorders in the visual, auditory, haptic, language, and sensory integration areas. Corequisites: SPS 6191, SPS 6191L. Lab fee required. (S)
SPS 6193 Psycho-Educational Assessment III: Behavior (3). Competencies in behavioral and personality assessment of students within the school setting with emphasis on projective testing and behavioral observations are addressed in this course. Corequisite: SPS 6193L. Prerequisites: SPS 6191, SPS 6192. (SS)
SPS 6193L Psycho-Educational Assessment III: Lab (3). Practical skills in projective and behavioral assessment of students within the school setting are covered in this course. Corequisite: SPS 6193. Prerequisites: SPS 6191, SPS 6192. Lab fee required. (SS)
SPS 6199 Family-School Consultation and Collaboration (3). This course is designed to develop essential communicative/interactive interpersonal skills, as well as collaborative problem-solving skills, in special education, counseling, and school psychology graduate students. Corequisite: Graduate standing. (AR)
SPS 6678 Supervised Field Experience in School Psychology (1-10). An internship where students demonstrate of the full range of competencies learned throughout the program in School Psychology. Internship placements include a variety of field settings. (F,S)
SPS 6805 Professional Problems in School Psychology (3). In this course competencies in regard to the development, role and function of school psychologists are covered. General orientation and legal and ethical issues are included. (F)
SPS 6930 Academic and Behavioral Interventions in the Schools (3). An introduction course to effective academic and behavioral school-based interventions including a functional assessment of behavior. (SS)

SPS 6941 Supervised Practicum in School Psychology (3). Student engage in supervised clinical experience. This course may be repeated. Prerequisites: SPS 6805 and permission of the instructor.
SPS 7176 Consultation and Assessment with Culturally and Linguistically Diverse Populations (3). Issues in consultation and assessment of individuals with culturally and linguistically diverse backgrounds. (AR)
SPS 7195 Child Psychopathology: Assessment and Intervention in the Schools (3). This course emphasizes the consideration of development issues and processes when conceptualizing psychopathology and is designed to prepare school psychology students to provide assessment, direct intervention, and indirect intervention services in school settings. Prerequisite: SPS 6805.
SPS 7407 Behavioral Intervention in the Schools (3). This course is designed to introduce techniques of behavioral intervention applicable to the school setting. A problem solving approach to prevention and intervention
at the individual, class and school level will be emphasized.

SPS 7705 Neuropsychological Issues in School Psychology (3). This course provides a review of neuropsychological theories and research that pertains to children and schooling. The goal of this course is to provide competencies in the application of neuropsychological perspective in school settings. Prerequisite: SPS 6191.
SSE 5381 Developing a Global Perspective (3). Theory, content, and practice. Introduction and utilization of learning materials and teaching strategies in Global Education for K-12.

SSE 5385 Special Teaching Laboratory: Social Studies (3). Development of instructional skills, techniques, and strategies for teaching Social Studies in the Middle School and Senior High School. Prerequisite: EDG 5414.
SSE 5908 Directed Study in Social Studies Education (1-3) (ARR). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (F,S,SS)
SSE 5929 Workshop in Elementary Social Studies Education (3). Available to undergraduate and graduate education majors. Provides knowledge and skills, content, strategies and materials for teaching social studies. Permission of the instructor required. (AR)
SSE 5945 Supervised Teaching: Social Studies Education (6). Supervised teaching in a middle or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and subject matter area. (S)

SSE 6305 Instruction in Early Childhood Social Studies (3). Required in masters program in early childhood education. Refines skills related to program development, methods of teaching, selection of materials, and review of research, in preschool, kindergarten and primary grades. (AR)
SSE 6355 Instruction in Elementary Social Studies (3). Required in masters program in elementary education. Refines skills related to program development, methods of teaching, selection of materials, and review of research in elementary social studies education. (AR)
SSE 6394 Social Studies in Other Nations (3). The course will examine the concept of social studies as a subject area in elementary and secondary schools found in both developed and developing nations. Comparisons and contrasts will be made. Prerequisites: SSE 6633, SSE 6939. (AR)

SSE 6633 Teaching Social Studies in the Secondary School (3). Analysis of methods, programs, and material for teaching social studies in the middle and senior high school, and development of teaching skills. (S,SS)

SSE 6795 Seminar: Research in Social Studies Education (3). The course will examine research in social studies education. The course will serve as a lab for developing a dissertation research design. Prerequisite: EDF 5481. Corequisites: EDF 6486, EDF 6403 or EDF 6475. (AR)

SSE 6924 Workshop in Content, Method, and Materials of Teaching Social Studies (1-3). Focus on content,
methods, and materials needed for teaching social studies in the elementary school, K-6. (AR)
SSE 6925-28 Workshop in Social Studies Education (1-3). Production and application of materials and techniques in social studies education in a laboratory or field setting. (AR)
SSE 6939 Seminar in Social Studies Education (3). Designed for advanced students, the readings and discussions will focus on policy issues and recent research in social studies education. Though primarily for experienced social studies teachers and supervisors, the course is open to administrators and others, with the consent of the instructor. (S)

SSE 7938 Doctoral Seminar in Social Studies Education (3). Advanced doctoral study in current theories and research related to social studies education. Prerequisites: SSE 6939, EDF 6486. (AR)
TSL 5086C TESOL Issues and Methodologies I (3). Initial teacher preparation course which introduces issues, principles, and practices for teaching English to nonEnglish speakers. Fulfills requirements.
TSL 5087C TESOL Issues and Methodologies II (3). Initial teacher preparation course which provides understanding, skills and dispositions needed to select, evaluate, and apply TESOL strategies in classrooms with non-English speakers. Fulfills requirements. Prerequisite: TSL 5086C.
TSL 5142 Curriculum Development in English as a Second Language (3). Description, analysis, planning, design, and evaluation of curriculum in English as a second language (K-adult). ( $\mathrm{F}, \mathrm{S}$ )

TSL 5245 Developing ESOL Language and Literacy (3). This course examines how linguistic theories are applied in the classroom for the development of language and literacy in language minority students. (F,S)
TSL 5361C TESOL for Secondary Teachers (3). Initial teacher preparation course including analysis, application and adaptation of ESOL methods to enhance instruction for linguistically and culturally diverse students. Fulfills META requirements.

TSL 5371 Special Methods of TESOL (3). Investigation of modern techniques for the teaching of oral and written communication in English to non-native speakers of English, including the evaluation and development of materials for English to speakers of other languages. Issues in elementary, secondary, adult, vocational, and special education will also be addressed. (F,S)

TSL 5938 Principles of ESOL Testing (3). Advanced study and research on current issues in the field of ESOL testing. Topics include principles and practices of ESOL testing for classroom use, communicative language test development, criteria for evaluating testing instruments, and study of standardized ESOL tests. Prerequisites: TSL 5371 or TSL 4340. (S)
TSL 6350 Troublesome English: Grammar for ESOL Teachers (3). Course is designed to enhance ESOL teachers' ability to understand and explain the operation of American English grammar using an inductive approach of exploration and discovery. (AR)

TSL 6375C Teaching ESOL Pronunciation and Accent Reduction (3). A course in the TESOL Master's program investigating the theories and methods of teaching pronunciation skills to ESOL students. Prerequisite: LIN 3010.

TSL 6376C Reading and Writing Strategies for ESOL Students (3). A Master's level course in the TESOL Master's program investigating theories and methods of teaching literacy skills, namely reading and writing, to ESOL students.

TSL 6908 Field Component (3). Provides opportunity to carry out a variety of projects designed to develop critical reflection about teaching beliefs and practices in an ESOL classroom environment. Prerequisites: Admission to MS/TESOL program and completion of required course work. (F,S)

## School of Environment, Arts, and Society (SEAS)

The School of Environment, Arts and Society (SEAS) was launched in the Spring of 2010 in response to the growing need for innovative thinkers and leaders to address the complex environmental and societal challenges of the 21th century. SEAS supports the broad traditional disciplinary work within each of its departments while facilitating interdisciplinary approaches to understand the drivers of these pressing challenges, identify solutions, educate current and future leaders, and inform the public.

As an integral part of the College of Arts, Sciences and Education, SEAS unites faculty and students in the natural and social sciences with those in the humanities. SEAS links environmental thinking and action at every level and provides Worlds Ahead research and education at the BA, MS, and PhD levels in the Departments of Biology, Earth and Environment, and English.

Drawing on Miami's unique coastal, inter-American and cosmopolitan locale, SEAS students and faculty are at the forefront of environmental research and are working to ensure a sustainable future for Florida, the country, and the world. To further its global mission SEAS houses a number of premiere centers and programs including the Institute of Water and Environment, the Tropical Conservation Institute, the International Center for Tropical Botany, the Marine Sciences Program, the Creative Writing Program, the Center for the Humanities in an Urban Environment, and the Agroecology Program.

## Biological Sciences

*Steven F. Oberbauer, Professor and Chairperson
Christopher Baraloto, Associate Professor and Director, ICTB
*M. Alejandro Barbieri, Associate Professor
*Bradley C. Bennett, Professor
Kristin Bishop, Instructor
*Kevin Boswell, Assistant Professor
*Heather D. Bracken-Grissom, Assistant Professor
Lisa Brinn, Senior Instructor
Richard P. Brinn, Senior Lecturer
Demian Chapman, Associate Professor
*Ligia Collado-Vides, Senior Lecturer
*Laurel S. Collins, Professor
*Timothy M. Collins, Professor
John Cozza, Instructor
*Todd Crowl, Professor and Director, SERC
*Matthew DeGennaro, Assistant Professor
*Maureen A. Donnelly, Professor and Associate Dean for Graduate Studies, Colleges of Arts, Sciences and Education
Sarah Eddy, Assistant Professor
*Jose Maria Eirin-Lopez, Assistant Professor
Niclas Engene, Assistant Professor
Sian Evans, Instructor
*Kenneth J. Feeley, Associate Professor
*James W. Fourqurean, Professor
*Javier Francisco-Ortega, Professor
*Evelyn E. Gaiser, Professor and Director of the School of Environment, Arts, and Society
*Miroslav Gantar, Senior Instructor
John Geiger, Instructor
Alastair Harborne, Assistant Professor
*Michael Heithaus, Professor and Dean, College of Arts, Sciences and Education
*Lou Kim, Associate Professor
*John S. Kominoski, Assistant Professor
*Suzanne Koptur, Professor
*Lidia Kos, Associate Professor and Graduate Program Director
Marcy Kravec, Senior Lecturer and Associate Chairperson
Jun Li, Associate Professor
*Jessica Liberles, Assistant Professor
John C. Makemson, Professor and Director of Undergraduate Studies
Melissa McCartney, Assistant Professor
*DeEtta K. Mills, Assistant Professor
*Fernando G. Noriega, Professor
Yannis Papastamatiou, Assistant Professor
Thomas R. Pitzer, Senior Instructor and Laboratory Coordinator
*Jennifer H. Richards, Professor
*Laurie L. Richardson, Professor
*Mauricio Rodriguez-Lanetty, Assistant Professor
Helena Schmidtmayerova, Instructor
*Laura Serbus, Assistant Professor
Paul R. Sharp, Instructor
*Philip K. Stoddard, Professor
*Jamie Theobald, Assistant Professor
Martin L. Tracey, Professor
*Joel C. Trexler, Professor and Marine Sciences Program Director
*Tiffany Troxler, Director, SLSC
*Eric von Wettberg, Assistant Professor
Maureen Walter, Senior Instructor

* Douglas Wartzok, Professor
*Ophelia I. Weeks, Professor
*Jeffrey D. Wells, Associate Professor
*Yuying Zhang, Assistant Professor
*Holds Dissertation Advisor Status


## Master of Science in Biology

To be admitted into the Master's degree program in Biology, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submission of Graduate Record Exam scores.
3. Two letters of recommendation of the student's academic potential.
4. Be accepted by a faculty sponsor.
5. Receive approval from the Departmental Graduate Committee.
6. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
7. Doctoral candidates who have filed the D-2 and D-3 forms with the University Graduate School can receive a Master of Science in Biology (non-thesis) en route to the PhD after completion of 36 credits of graduate coursework.

## Degree Requirements

The Master of Science in Biology consists of a minimum 36 credits, including a thesis based upon the student's original research. A maximum of six credits of post baccalaureate course work may be transferred from other institutions, subject to the approval of the Graduate Committee.

## Required Courses

BSC 6457 Introduction to Biological Research 3
BSC 5931 Thesis Proposal Seminar 1
Workshops and Laboratories ${ }^{1}$ 4
BSC 6971 Master's Thesis ${ }^{2} \quad 6$
Electives ${ }^{3} 22$
Quantitative Skills Requirement ${ }^{4}$
${ }^{1}$ Following graduate committee approval, students may fulfill this requirement with any combination of graduate workshops, graduate laboratories, and graduate techniques courses (minimum of three separate courses).
2 To be taken after qualifying exam is passed.
${ }^{3}$ These must include at least 16 credits of courses in the Department of Biological Sciences. No more than six credits can be transferred from another graduate program, subject to the approval of the Graduate Committee. At least six credits must be at the 5000 - or 6000 -level (excluding thesis credits). Credits taken at the 4000-level beyond six, or at lower levels, will not count towards graduation.
${ }^{4}$ Two semesters of graduate courses in quantitative skills (e.g., statistics, mathematics, computer programming), or
demonstrated equivalence of such, is required for the Master of Science in Biology.

## Graduation Requirements

A grade of ' C ' or higher must be obtained in all courses with a cumulative average of 3.0 or higher in the 36 credits, and a thesis must be completed and accepted by the University.

## Doctor of Philosophy in Biology

To be admitted into the Ph.D. program in Biology, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university
2. Have a 3.0 grade point average during the last two years of the undergraduate program or a Master's degree in a relevant discipline;
3. Submission of official Graduate Record Exam (GRE) scores.
4. Be sponsored by a Biology faculty member with Dissertation Advisor Status (see list of graduate faculty with DAS).
5. Arrange to have three letters of recommendation sent to the Biology Graduate Program Director evaluating the applicant's potential for graduate work.
6. Receive approval from the Department Graduate Committee.
7. International graduate students applicants whose native language in not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Degree Requirements

The Ph.D. in Biology is conferred on individuals in recognition of their demonstrated ability to master a specific field of knowledge and to conduct significant independent, original research. A minimum of 90 semester credits of graduate work beyond the baccalaureate are required, including a dissertation based upon the student's original research. A maximum of 36 credits may be transferred from a completed graduate program with the approval of the Advisory Committee.

## Required Courses

| BSC 7961 | Dissertation Proposal Seminar | 1 |
| :--- | :--- | :--- |
| BSC 7982 | Dissertation Defense Seminar | 1 |
| BSC 5945 | Supervised Teaching in Biology | 2 |
| Workshops and Laboratories |  |  |
| BSC 7980 | Ph.D. Dissertation | 4 |
| Electives $^{2}$ |  | 2 |
| Quantitative | Skills Requirements |  |

BSC 6457 Introduction to Biological Research
${ }^{1}$ Following graduate committee approval, students may fulfill this requirement with any combination of graduate workshops, graduate laboratories, and graduate courses (minimum of three separate courses)
${ }^{2}$ No more than 36 credits may be transferred from a completed graduate program, subject to the approval of the Graduate Committee.
${ }^{3}$ Two semesters of graduate courses in quantitative skills (e.g. statistics, mathematics, computer programming), or
demonstrated equivalence of such, is required for the Ph.D. in Biology.

## Graduation Requirements

A grade of ' C ' or higher must be obtained in all courses with a cumulative average of 3.0 or higher in the 90 credits; two semesters of quantitative skills courses must be completed, and a dissertation completed and accepted by the University.

## Combined MS in Forensic Science/PhD in Biology

The MSFS/PhD in Biology combines the Master of Science in Forensic Science with a PhD in Biology. Student who pursue this degree will be enrolled in a continuous program; however, upon completion of all the requirements of the MSFS program (report option), students will be awarded a MSFS degree as they transition towards their PhD.

## MSFS/PhD in Biology Degree Requirements

For admission into the MSFS/PhD program, students must meet the admission criteria of a PhD student with the understanding that they will have an increased class load of 2-3 classes, e.g., Forensic Biology, Forensic Chemistry, and Forensic Analysis, when compared to the normal PhD applicant but will graduate with two degrees. The requirements will be as follows:

1. Hold a Bachelor's degree in a natural science from a relevant university.
2. Have a 3.0 GPA during the last two years of the undergraduate program and submission of official GRE scores.
3. Arrange to have three letters of recommendation sent to the Biology graduate program director evaluating the applicant's potential for graduate work.
4. Be sponsored by a Biology faculty member with Dissertation Advisor Status.
5. Receive approval from the Department Graduate program committee.
6. International graduate student applicants whose native language is not English are required to submit a score for Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IETLS). A score of 80 on the iBT TOEFL or 6.5 overall on the IETLS is required.
As these candidates will be dually enrolled in two graduate degree programs, candidates must complete minimum of 32 credit hours towards their MSFS degree with a grade of ' C ' or higher and a cumulative GPA of 3.0. The MSFS report option must be completed and accepted by the University before full transition towards the PhD. Candidates must also complete a total of 90 credit hours toward the PhD with the allowance for credits transferred from the completed MSFS degree. The student will be able to earn both degrees in a similar time frame that it would take to obtain either degree if pursued consecutively.

Students will be required to select a Master's defense committee while pursuing the MSFS as well as a PhD dissertation committee. This committee may or may not be comprised of the same members as those selected for the

Master's program. The Master's proposal should be presented after the second semester of admission and the PhD dissertation defense should be presented after the fourth semester after admission.

## Required Courses

BSC 6457 Introduction to Biological Research 3
BSC 5931 Thesis Proposal Seminar
BSC 7961 Dissertation Proposal Seminar
BSC 5975 Thesis Defense Seminar
BSC 7982 - Tissert
BSC 7982 Dissertation Defense Seminar 1
BSC 5406 Forensic Biology 3
CHS 5535 Forensic Analysis 3
CHS 5542 Forensic Chemistry 3
PCB $5665 \quad 3$
PCB $5685 \quad$ Population Genetics 3

## Elective Courses

PCB $6025 \quad$ Molecular and Cellular Biology I 3
MCB 5116 Microbial Diversity 3
BSC 5459 Advanced Bioinformatics for Biologists 3
BOT 5852 Medical Botany 3
BOT 5727 Plant Genetics 3
PCB 5616 Applied Phylogenetics 3
STA 5207 Topics in Design of Experiments 3
STA 5507 Nonparametric Methods 3

| Labs and Workshops |  |  |
| :--- | :--- | :--- |
| BSC 6925 | Workshop: Non-Human DNA Profiling <br> and Analysis | 1 |
| BSC 6926 | Workshop in Biology: DNA <br> Instrumentation | 1 |
| BSC 5935 | Workshop in Biology: Advanced DNA <br> Typing | 1 |
| Research | Master's Thesis | $1-2$ |
| BSC 6971 | M. <br> BSC 7980 | Ph.D. Dissertation |

## Course Descriptions

## Definition of Prefixes

BCH-Biochemistry; BOT-Botany; BSC-Biological Sciences; MCB-Microbiology; OCB-Biological Oceanography; PCB-Process Biology (Cell/Molecular/ Ecology/Genetics/Physiology); ZOO-Zoology

BCH 5040 Introduction to Biochemical Research (3). Analysis of biochemical data and experimental design. Prerequisite: Graduate standing.
BCH 5134C Workshop in Chromatography Techniques (1). Workshop covers the theory and practice of chromatographic techniques to separate complex mixtures of biomolecules, including absorption, ion exchange, size exclusion and affinity chromatography. Prerequisite: Graduate status.
BCH 5411C Techniques in Molecular Evolution Research (5). Ribosomal genes from related organisms are amplified by polymerase chain reaction (PCR) and sequenced. Phylogenetic maps are made by computer from sequence data. Students may use material from their own research. Prerequisites: BCH 3033 and BCH 3033L, PCB 4524 and PCB 4524L or Graduate status.
BCH 6130C Workshop in DNA Synthesis and Amplifications (1). Workshop in the chemical synthesis of DNA and the amplification of specific genes by the
polymerase chain reaction (PCR). Students may synthesize DNA oligonucleotides for use in their own research. Prerequisites: Graduate status and Permission of the instructor.

BCH 6132C Workshop in Electrophoresis (1). Workshop in the application of electrophoresis to biochemical and genetic experimentation. Students may use material from their own research in the laboratory section. Prerequisites: Graduate status and permission of the instructor.

BCH 6133C Workshop in DNA Sequencing (1). Workshop in the manual and automated sequencing of DNA. Students may sequence DNA from their own research. Prerequisites: Graduate status and permission of the instructor.

BCH 6507C Workshop in Radiometry and Spectrophotometry (1). Interaction of light with matter (absorption, fluorescence, light scattering) and emission (chemi-and biolumine-scence); analysis of spectra and enzyme kinetics. Prerequisites: PCB 3043 or permission of the Instructor.
BOT 5186C Advanced Marine Botany (3-4). Study of the taxonomy, biology, and ecology of seaweeds, seagrasses, and mangroves including a student research project. Prerequisites: BSC 1011 or equivalent.
BOT 5159C Florida Plant Communities (3). Two-week field trip to many diverse plant communities of the state. Ecological and environmental factors influencing plant distribution will be examined, contrasting vegetation among sites. Prerequisites: Ecology PCB 3043 or Permission of the instructor.
BOT 5304C Workshop in Plant Morphology (2). Techniques to analyze plant form and experience with the diversity plant morphology; field work using the collections at Fairchild Tropical Gardens. Prerequisites: 2 botany courses or permission of the instructor.
BOT 5515 Biochemistry of Plant Natural Products (3). Aspects of primary and secondary plant metabolism will be covered including bio-synthesis and degradation of natural products as well as their biological/ pharmacological activity. Prerequisites: BCH 3033 or CHM 4304.

BOT 5575 Photobiology (3). BOT 5575L Photobiology Lab (1). The study of basic photochemical mechanisms as they occur in molecular biological processes such as photosynthesis, plant growth, animal vision, bioluminescence, and radiation damage. Prerequisite: Permission of the instructor.
BOT 5602 The Functional Ecology of Tropical Plants (3). BOT 5602L The Functional Ecology of Tropical Plants Lab (1). The relationship of climate and soils to the distribution and function of the major plant groups of the tropical regions. Prerequisites: Two courses in botany or permission of the instructor.
BOT 5605 Plant Ecology (3) BOT 5605L Plant Ecology Laboratory (1). In-depth study of plant ecology at three levels: individual, population, and community. Laboratory and field exercises will examine lecture topics. Prerequisites: PCB 3043 or permission of the instructor. Corequisite: Concurrent registration in lecture and lab courses.

BOT 5615 Workshop: Seed Conservation (1). Covers practical issues of seed conservation of tropical plants: longevity curves, seed germination protocols and seed conservation procedures. Prerequisites: Graduate students or permission of instructor.

BOT 5647 Ecology of Marine Vascular Plants (3). Biology and ecology of seagrasses and mangroves, with an emphasis on South Florida and Caribbean species. Physiological ecology, population and community ecology, and ecosystem processes. Prerequisite: Permission of the instructor.
BOT 5648 Workshop on Aquatic Plants (1). Biology and identification of aquatic plants. Prerequisites: Graduate status or permission of the instructor.
BOT 5704 Botanical Terminology, Latin and Nomenclature (2). Course is divided into 3 parts: 1) Botanical Latin and its use; 2) Plant description terminology, and current descriptive standards; and 3) Botanical nomenclature, the ICBN, Phylocode, and others. Prerequisites: BOT 5725C or BSC 5606, or approval of the Advisor.

BOT 5725C Plant Systematics (3). Theory and methods of classification of vascular plants using phylogenetic principles. Covers the integration of morphological and molecular characters. Prerequisites: Graduate students or permission of instructor.
BOT 5727 Plant Genetics (3). Topics related to higher plants, including polyploid inheritance, self-incompatibility, cytoplasmic inheritance, mutable alleles, complex loci, genome analysis, recombination and mutagesis. Prerequisites: BSC 1010 and BSC 1011 and PCB 3063.

BOT 5728 Plant Molecular Systematics (2). DNA markers for phylogenetic analysis of vascular plants, including description of laboratory methods, computerized analytical techniques and evolutionary interpretation. Prerequisites: Graduate status or permission of instructor.
BOT 5728L Plant Molecular Systematics Laboratory (2). DNA markers for phylogenetic analysis of vascular plants, including description of laboratory methods, computerized analytical techniques and evolutionary interpretation. Prerequisites: Graduate status or permission of instructor.
BOT 5816 Ethnobotany (3). Review the use and management of plants by indigenous people. Discuss emerging theories in ethnobotany, examine the role of ethnobotany in conservation and resource utilization. Prerequisites: BOT 3810, BOT 3663, or ANT 3403, or permission of the instructor.

BOT 5816L Ethnobotany Workshop (1). Field methods in the study of plant use by traditional and modern societies. Examines botanical documentation, ethnological description and experimental design. Prerequisite: Permission of the instructor.
BOT 5817 Field Ethnobotany (1-4). A 4-week field course that introduces students to tropical vegetation and its use by traditional cultures. Topics include tropical botany, diversity, ecology, and the relationship between plants and people. Course may be repeated. Prerequisites: BOT 5816 and BOT 5816L or permission of instructor.

BOT 5852 Medical Botany (3). An examination of medicinal plants including the biology, chemistry, and pharmacology of botanical remedies, and their effects on human health. Prerequisites: BOT 3810 or BOT 5816 or permission of instructor.
BOT 5924 Workshop in Tropical Plant Families (3). An introduction to important spermatophyte families, including systematics, ecology, and conservation. Includes laboratory and field experience. Prerequisite: Permission of the instructor.

BOT 5925 Workshop in the Biology of Southern Florida's Native Trees (3). Distribution, floristic relationships, morphology, reproductive biology, taxonomy, and conservation of trees native to southern Florida. Prerequisites: BOT 3154, BOT 3663, or permission of the instructor.
BOT 5928 Workshop on Grasses and Sedges of Southern Florida (1). The systematics, ecology, and identification of South Florida grasses and sedges. Prerequisites: Graduate status or permission of the instructor.

BOT 6275 Plant Breeding Systems (3). Ecology, evolution, genetics and development of plant breeding systems. Prerequisite: Permission of the instructor.
BOT 6585C Plant Structure and Function (4). A quantitative assessment of plant architecture, morphology and anatomy in relationship to physiology, including the measurement of water relations, energy and gas exchange. Prerequisites: Permission of the instructor and graduate status.
BOT 6724 Readings in Pollination Biology (1). Current literature on pollination, including natural history, theory, experimental studies, and reviews. Prerequisites: Graduate status or permission of the instructor.
BOT 6818 Readings in Ethnobotany (1). An examination of 3 or 4 recent books in the ethnobotany or related disciplines, especially those dealing with theoretical issues. Prerequisites: BOT 5816, Graduate Standing, or permission of instructor.
BOT 6901 Readings in Plant Mating Systems (1). Current literature on theory, biology, and evolution of plant mating systems. Prerequisites: Graduate standing or permission of the instructor.
BOT 6920C Workshop in Field Techniques in Natural History of Insect/Plant Interactions (1). A workshop in the techniques for collecting and preserving plants and insects for biological and taxonomic research.

BOT 6921C Workshop in Field Techniques in Pollination Biology (1). Techniques to do a thorough study of the pollination biology of any flowering plant; basic methods and simple instruments for field observations, measurements and manipulations. Prerequisite: Graduate status.
BOT 6923 Workshop: Techniques in Plant Reproductive Biology (1). Workshop in techniques for research on pollination and fertilization in plants. Histological and microscopic examination emphasized. Prerequisites: Graduate status and permission of the instructor.

BOT 6926C Workshop in Plant Nutrient Analysis (1). Field and laboratory methods used in the assessment of nutrient availability for primary producers. Prerequisite: Permission of the instructor.
BOT 6928 Workshop on Plant Gas Exchange and Fluorescence (1). Field and laboratory methods used for measurement of plant photosynthetic production and transportation. Prerequisite: Permission of the instructor.
BOT 6935 Advanced Topics in Botany (3). An intensive study of particular plant topics not otherwise offered in the curriculum. May be repeated for credit with different subject content. Prerequisite: Graduate status.
BOT 6936 Readings in Plant/Animal Interactions (1). Current literature on coevolution of plants and animals, theory, experimental studies, and reviews. Prerequisites: Graduate standing or permission of the instructor.
BSC 5302 Ecosystems of the Past (3). Analysis of local to global change in environments through time using faunal distributions, biodiversity, biogeography, physical and chemical properties of sediments, and stable isotopes.
BSC 5405C Environmental Instrumentation (3). Theory and techniques for measurement of environmental parameters of interest to field biologist. Prerequisite: Permission of the instructor.

BSC 5406 Forensic Biology (3). Forensic applications of molecular biology including PCR, STR techniques and other laboratory methods and data interpretation. Prerequisite: Graduate status.
BSC 5446 Advanced Functional Genomics and Proteomics (3). Analysis of Modern Strategies to understand fundamental biological aspects using advanced genomics and proteomic approaches. Prerequisites: PCB 3063 or equivalent.
BSC 5459 Advanced Bioinformatics for Biologists (3). Introduction to bioinformatic resources/methods for biology graduate students, accessing, searching, retrieving, and analyzing data, including an in-depth research project. Prerequisites: BSC 1010, BSC 1011, PCB 3063.
BSC 5926 Graduate Bioresource Workshop (1). This workshop is designed to introduce Biology graduate students to the various resources available for graduate teaching and research. Prerequisite: Graduate status.
BSC 5927 Workshop: R Programming for Biologists (2). Statistical methods and biological/ecological applications using R programming language. Prerequisites: (Graduate standing in Biology) or (STA 3111 and STA 3112).
BSC 5928 Workshop: Vertebrate Animal Research (1). Reviews the ethical, legal and practical guidelines for conducting research with live vertebrate animals. Required for students capturing, handling or collecting vertebrate animals in the course of research or teaching. Prerequisites: Graduate status or permission of the instructor.
BSC 5929 Workshop: Paleoecology of South Florida
(2). Sampling, preparation, and identification of diatoms and foraminifera from a freshwater to marine transect, and application of ecology to interpreting past ecosystems.

BSC 5931 Thesis Proposal Seminar (1). Presentation of thesis proposal seminar. Permission of major professor required.
BSC 5933 Current Topics in Tropical Biology (3). An intensive study of particular tropical biology topics not otherwise offered in the curriculum. Prerequisite: Permission of the instructor.
BSC 5935 Topics in Biology (1-3). An intensive study of a particular topic or limited number of topics not otherwise offered in the curriculum. May be repeated for credit with different subject content. Prerequisites: Senior or graduate status.

BSC 5936 Glaser Seminar: The Biology of Tomorrow (1). A series of lectures by an invited, internationally recognized authority in biological topics of current and future concern.
BSC 5945 Supervised Teaching in Biology (1-2). Teaching in a biological discipline, under the supervision of departmental faculty. Prerequisite: Graduate status.
BSC 5975 Thesis Defense Seminar (1). Presentation of thesis defense seminar. Permission of major professor required. Prerequisite: Thesis proposal seminar.
BSC 6314 Workshop: DNA Instrumentation and Analysis (1). Introduction to instrumentation and analysis software used for DNA profiling. Permission of the instructor required. Prerequisite: Permission of the instructor.
BSC 6415 Animal Cells in Culture (3). Biology of animal cells cultured in semi-synthetic media: cell nutrition growth, cell cycle analysis, cellular transformation and differentiation, heterokaryons and somatic cell genetics. Prerequisite: Permission of the instructor.
BSC 6456C Microcomputer Use in Biology (1). Introduction to microcomputer operating environments, the utility of microcomputers in biology, and computer interfacing to biological instrumentation. Prerequisite: Permission of the instructor.
BSC 6457 Introduction to Biological Research (3). Analysis of existing biological data and experimental design. Prerequisite: Graduate status.
BSC 6913 Student Research Lab (1-12). Independent laboratory study in a project or projects of the student's choice. Registration by consultation with instructor. May be repeated for additional credit.
BSC 6925C Workshop: Non-Human DNA Profiling and Analysis (1). Current techniques in non-human DNA profiling using molecular markers. Prerequisite: Permission of the instructor.
BSC 6926 Workshop in Biology (1-2). A short intensive treatment of a specialized research topic or technique. Prerequisite: Permission of the instructor.
BSC 6936 Topics in Biology (1-3). An intensive study of a particular topic or limited number of topics not otherwise offered in the curriculum. May be repeated for credit with different subject content. Prerequisites: Senior or graduate status.
BSC 6946 Graduate Biology Internship (1-12). Nonthesis / non-dissertation internship in a laboratory or program outside FIU working under the supervision of a
host scientist and an FIU faculty member. Prerequisite: Admission to candidacy.

BSC 6948 Laboratory Visitation (1-2). Student visits to three laboratories to learn techniques and concepts applicable to M.S. or Ph.D. research. Prerequisite: Permission of the instructor.
BSC 6971 Master's Thesis (1-12). Completion of thesis. Prerequisite: Permission of Major professor.
BSC 7961 Dissertation Proposal Seminar (1). Presentation of doctoral dissertation proposal seminar. Prerequisite: Permission of Major Professor required.
BSC 7980 Ph.D. Dissertation (1-12). Completion of dissertation. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
BSC 7982 Dissertation Defense Seminar (1). Presentation of doctoral dissertation defense seminar. Permission of Major Professor required. Prerequisite: Dissertation Proposal Seminar.
MCB 5116 Microbial Diversity (3). MCB 5116L Microbial Diversity Laboratory (1). Analysis of metabolic and morphological diversity in bacteria in the context of bacterial systematics. Prerequisites: MCB 3020 and MCB 3020L and an additional course in microbiology or biochemistry. Corequisite: Concurrent registration of both lecture and lab courses.

MCB 5205 Advanced Microbial Pathogenicity (3). Overview of microbial pathogenicity, including interactions with hosts, evolution of pathogens, virulence factors, toxins, antibiotics, and case studies of specific pathogens. Prerequisites: MCB 3020 or permission of the instructor.
MCB 5315C Workshop: Prokaryotic Cloning (2). Description of molecular genetic methods for manipulation of prokaryotic DNA. Prerequisites: PCB 3063; BCH 3033 or CHM 4304; or permission of the instructor.
MCB 5405 Biology of Photosynthetic Bacteria (3). Study of the physiology and ecology of photosynthetic bacteria, including blue-green algae (cyanobacteria), purple and green bacteria, and halobacteria.

MCB 5412 Advanced Microbial Physiology (3). Overview of microbial metabolic diversity, including prokaryotic metabolic pathways, stress responses, cell signaling, and metabolic regulation. Prerequisite: Permission of the instructor.

MCB 5453L Workshop: Prokaryotic Cell Signaling (1). Covers chemical signals used by prokaryotes for cell-to cell communications. Prerequisites: MCB 3020 or permission of instructor.
MCB 5605 Microbial Ecology (3). Principles and applications of microbial interactions with the environment. Current research areas are emphasized. Prerequisite: Graduate level standing.
MCB 6445 Microbial Bioluminescence (3). Molecular mechanisms, physiology, genetics and ecology of bioluminescence in microorganisms, particularly bacteria. Prerequisite: Permission of the instructor.
MCB 6635 Marine Microbiology (3). MCB 6635L Marine Microbiology Lab (1). Physiological-ecological study of the distribution and biology of marine bacteria; diseases of marine animals; bacterial role in oceanic mineral cycling.

Prerequisites: MCB 3020 and MCB 3020L and BCH 3033 and BCH 3033L or MCB 4404 and MCB 4404L.

MCB 6920 Luminescence Workshop (2). Bioluminescence and chemiluminescent theory and methods applied to luminous bacteria and molecular biology. Prerequisite: Permission of the instructor.
MCB 6935 Advanced Topics in Microbiology (3). An intensive study of particular microbiological topics not otherwise offered in the curriculum. May be repeated for credit with different subject content. Prerequisite: Graduate status.
OCB 5006 Advanced Biological Oceanography at Sea I (3). An in-depth overview and critical discussion of current methods employed in biological oceanography including design of and working on research ships and planning of research cruises. Prerequisite: Permission of the instructor.

OCB 5007C Advanced Biological Oceanography at Sea II (4). A hands-on experience in research at sea involving cruise planning, participation in an offshore cruise on a research vessel, and subsequent sample analysis, data evaluation and research report. Prerequisites: OCB 5006 or permission of the instructor.

OCB 5575L Workshop: Aquatic Flow Cytometry (1). A practical introduction to theories and applications of flow cytometry in the analyses of aquatic microorganisms (bacteria, phytoplankton) and their physiology. Prerequisite: Permission of the instructor.

OCB 5634 Marine Ecology (3). OCB 5634L Marine Ecology Lab (1). Review processes determining species distribution and abundance in marine ecosystems. Energy flow and trophic relationships examined. Prerequisite: PCB 3043. Corequisite: Concurrent registration of lecture with lab course.

OCB 5636 Advanced Marine Microbial Ecology (3). Diversity, ecology and physiology of marine viruses, bacteria and protozoa, their role in marine food webs and the biogeochemical cycling of carbon and nutrients, and the significance of microbial food webs for marine productivity. Prerequisites: BSC 1010, BSC 1011, OCB 3043, or graduate standing.
OCB 5670L Techniques in Biological Oceanography (1). A laboratory course designed to acquaint the student with biological sampling techniques at sea. Shipboard experience will be required as part of the course. Prerequisites: Previous course in marine biology and permission of the instructor.
OCB 5715 Advanced Fisheries Science (3). Theory and techniques of fisheries science comprising recruitment, growth, migration, population dynamics, modeling and measurement techniques. Prerequisite: Graduate standing.
OCB 6716 Fisheries Population Dynamics (3). Application of statistical techniques and the different classes of fisheries population dynamics models used in fish stock assessment. Prerequisites: OCB 4711 or OCB 5715.

OCB 6927C Workshop in Scientific Diving (2). Covers all aspects of conducting safe underwater research, including theoretical and practical aspects of diving, diving equipment, and scientific techniques. Requires original research. Prerequisites: Open water diving certification, permission of the instructor, FIU Diving Medical clearance, pass standardized swim test, at least 18 years old.
PCB 5025L Molecular Biology Techniques Laboratory (3). Covers DNA and RNA extraction, digestion, electrophoresis, Southern analysis, RFLP analysis, PCR amplification, cloning and automated sequencing. Prerequisites: Graduate status or permission of the instructor.
PCB 5046 Advanced Plant Conservation Biology (3). Survey of the causes and consequences of anthropogenic disturbances on plant diversity at different spatial scales, including critical evaluation of strategies to mitigate these impacts. Prerequisites: PCB 3043 or graduate status.
PCB 5184 Workshop in Microtechnique (1). Laboratory techniques required for preparation of tissues for light microscopy/histological study. Prerequisite: Graduate status.
PCB 5215 Workshop in Histo-and ImmunocytoChemistry (1). Laboratory techniques for preparation of paraffin-embedded and frozen sections; selected procedures to demonstrate the fundamentals of histochemical and immunocytochemical labeling methods. Prerequisite: Graduate status or permission of the instructor.
PCB 5235 Current Topics in Comparative Immunology (1). A weekly seminar/discussion course consisting of research presentations by students, faculty and visiting scientists in the area of comparative immunology. It is recommended for students with a research interest in the comparative study of mammalian and nonmammalian species or using alternative animal models. Prerequisite: Permission of the instructor.
PCB 5236 Immune Assessment (3). A review of the genetics and biochemistry of immune dysfunction with a focus on the methods used to evaluate adaptive and innate immunological function. Prerequisites: PCB 4233 or permission of the instructor.
PCB 5238 Marine Comparative Immunology Workshop (1). A workshop at the Keys Marine Lab to present general and unique research methodologies associated with the immunology of marine animals. Prerequisite: Permission of the instructor.
PCB 5239 Immunophysiology (3). Physiological and endocrine regulation of the vertebrate immune system. Prerequisite: PCB 4233.
PCB 5259 Topics in Developmental Biology (3). Molecular and cellular mechanisms in the development of plants and animals. Prerequisite: Permission of the instructor.
PCB 5307 Limnology (3). PCB 5307L Limnology Lab (1). Chemical and physical properties of standing and flowing freshwater systems; ecophysiology and interactions of the fresh water flora and fauna in relation to abiotic factors; oligotrophic to eutrophic conditions.

PCB 5327 Coastal Ecosystems and Modeling (3). Basics of ecology for coastal and wetland ecosystems. The theory and mechanisms of simulation modeling. Hands-on creation and application of computer models in ecological research. Prerequisites: PCB 3043 and MAC 2311 or permission of the instructor.
PCB 5328 Spatial and Landscape Ecology (3). Ecological processes with spatial components, including neighborhood interactions, foraging, metapopulations, infectious diseases, invasive species, and habitat associations. Prerequisite: PCB 5423. Corequisites: PCB 5443; MAC 2311.
PCB 5356L Tropical Ecology Field Lab (3). Field course in Costa Rica with fieldwork in two or more diverse habitats (rainforest, and dry forest). Emphasis on diversity and interactions between species. Visits to selected sites of deforestation, conservation and restoration.
PCB 5376 Animal Physiological Ecology (3). PCB 5376L Animal Physiological Ecology Laboratory (1). Evolution-oriented approach to physiological adaptations of animals living in diverse environments. Considers the inter relationship between behavior, energetics, and integrative regulation of metabolism. Prerequisites: PCB 3043; BCH 3033 or CHM 4304.

PCB 5405 Biochemical Ecology (3). Principles of chemical communication between diverse organisms and the importance of a variety of allelochemicals in community structure. Prerequisite: Permission of the instructor.
PCB 5407 Workshop: Microelectrodes in Microbial Ecology (1). Use of microelectrodes to measure chemical micro-environments and biological processes in natural samples. Hands-on experience with O 2 and pH electrodes. Prerequisite: Permission of the instructor.
PCB 5415 Advanced Behavioral Ecology (3). In-depth investigation of the adaptive significance of behavior. Synthesis and discussion of literature and theory pertaining to the strategies and tactics organisms use to survive and reproduce. Prerequisites: Graduate status or permission of the instructor.
PCB 5418C Advanced Marine Protected Areas (4). Study of theory and methods for the design and management of Marine Protected Areas including a research project. Prerequisites: BSC 1010 and BSC 1011.
PCB 5423 Advanced Ecology: Populations and Communities (3). Advanced analysis of population and community ecology. Prerequisites: PCB 3043 or permission of the instructor or graduate status.
PCB 5443 Advanced Ecology: Communities and Ecosystems (3). Advanced analysis of ecological principles pertaining to communities, ecosystems, and landscapes, with special emphasis on the South Florida and Caribbean region. Prerequisites: PCB 3043 or permission of the instructor or graduate status. [A]
PCB 5596 Workshop: In Situ Hybridization (1). Analysis of gene expression by in situ hybridization techniques using whole mount and crysectioned tissues. Prerequisites: Graduate status or permission of the instructor.

PCB 5615 Molecular and Organismal Evolution (3). The evolutionary relationships among nucleotides and proteins as well as the processes which yield these relationships. The possible molecular events leading to speciation. Prerequisite: PCB 3063.
PCB 5616 Applied Phylogenetics (3). Methods of phylogenetic analysis with a focus on pragmatic applications to ecological and evolutionary studies. Handson experience with current computer programs for phylogenetic analysis. Prerequisites: Graduate status or permission of the instructor.
PCB 5665 Human Genetics (3). PCB 5665L Human Genetics Lab (2). Principles and techniques in the analysis of humans and primates. Prerequisites: PCB 3063 and PCB 3063L, or permission of the instructor. Corequisite: Concurrent registration of lecture with lab course.
PCB 5677 Evolution and Development (3). The models and evidence for the interaction of development and evolution, using both plant and animal systems. Prerequisite: Permission of the instructor.
PCB 5685 Population Genetics (3). Advanced analysis of gene and genotype frequencies in theoretical populations and analysis of real data. Linkage equilibrium, drift, migration and selection are a few of the topics covered. Prerequisite: PCB 3063.

PCB 5686 Population Biology (3). PCB 5686L Population Biology Lab (1). Intrinsic properties of natural and theoretical populations and their dynamics and interactions, and responses to disturbance. Includes field problems and computer exercises. Prerequisites: PCB 3063 and PCB 4674, or permission of the instructor.
PCB 5687 Evolutionary Ecology (3). PCB 5687L Evolutionary Ecology Lab (1). Adaptations and interactions of plants and animals in natural and disturbed habitats. Prerequisite: PCB 3043.
PCB 5725 Membrane Signal Transduction (3). Hormones and neurotransmitters as extracellular messengers. Membrane receptors and mechanisms of signal transduction: membrane channels and enzymes, direct linkage and G-protein linkage. Second messengers. Prerequisites: BCH 3033 or CHM 4304.

PCB 5786 Membrane Physiology (3). Chemical and physical properties of the plasma membrane, its biosynthesis and functions in transport and signal transduction. Prerequisites: PHY 2048, PHY 2049, BCH 3033.

PCB 5835 Neurophysiology (3). PCB 5835L Neurophysiology (1). Comparative neurophysiology; physicochemical mechanisms of resting and action potentials; synaptic transmission; neural coding and integration; sensory-motor function and neurophysiological basis of behavior. Prerequisites: BCH 3033 and MAC 2311.

PCB 6025 Molecular and Cellular Biology I (3). Protein structure, catalysis, kinetics, and molecular conformation, intermolecular forces; Prokaryotic recombination, transcription and translation, gene regulation and genome organization. Prerequisite: Graduate status.

PCB 6027 Molecular and Cellular Biology II (3). Eukaryotic recombination, transcription, translation, gene regulation and genome organization; Cellular components, cell structure, cell division, cell signaling, development, immonology and cancer. Prerequisite: Graduate status.

PCB 6176C Biological Electron Microscopy (5). Principles and techniques of transmission and scanning electron microscopy as applied to biological materials. Lecture-laboratory combination, enrollment limited. Prerequisite: Permission of the instructor.

PCB 6236 Comparative Immunology (3). An analysis of the immune systems and mechanisms of invertebrate and vertebrate animals. Prerequisite: Permission of the instructor.
PCB 6237 Immunogenetics (3). The impact of classical and molecular genetic analyses on our understanding of the immune response. Prerequisites: PCB 4233 and PCB 3063; or permission of the instructor.

PCB 6318 Readings in Marine Ecosystems Ecology (1). Analysis of current literature on theory, data and case studies of marine ecosystem ecology. Prerequisites: Graduate status or permission of the instructor.
PCB 6417 Workshop: Modeling in Behavioral Ecology (1). Workshop on modeling techniques used to investigate behavioral ecological questions. Development of models to generate testable predictions in behavioral ecology. Prerequisite: Permission of the instructor.
PCB 6526 Advanced Molecular Biology (3). Molecular genetics, controlling mechanisms, recombinant DNA, gene splicing and gene vector construction of viral, bacterial, plant and animal systems. Prerequisite: Permission of the instructor.
PCB 6617 Advanced Phylogenetics (3). Current issues and methods in phylogenetics for advanced students. Prerequisites: PCB 5616 or permission of the instructor.
PCB 6618C Workshop: Parallel Bayesian Phylogenetics (1). Workshop in the analysis of data to infer evolutionary relationships using Bayesian methods implemented in parallel on a computer cluster. Prerequisite: Permission of the instructor.
PCB 6675 Evolutionary Biology and Ecology in the Antilles (3). Introduction to the main ecological features of the Antilles and to the main evolutionary mechanisms behind the unique biodiversity of these islands. Prerequisite: Graduate status.
PCB 6933 Trends in Neurobiology (2). Critical analyses and discussions of selected research articles of current interests. Seminar format. Prerequisite: Permission of the instructor.

PCB 6935 Advanced Topics in Genetics (3). An intensive study of particular genetical topics not otherwise offered in the curriculum. May be repeated for credit with different subject content. Prerequisite: Graduate status.
PCB 7235 Reproductive Immunology (3). Molecular and cellular interactions in early development, ontogenetics, and mother and fetus. Prerequisite: Permission of the instructor.

PCB 7689 Advanced Topics in Population and Evolutionary Genetics (3). Comparison of the synthetic
and mutational drift hypotheses; relationships between molecular and phenotypic evolutionary rates and the phenotypic effects of various forms of mutation. Prerequisite: Permission of the instructor.
ZOO 5265 Biology of Crustaceans (3). ZOO 5265L Biology of Crustaceans Laboratory (1). Morphology, physiology, systematics and evolution in crustaceans.
ZOO 5371 Clinical Anatomy of the Trunk and Limbs (3). ZOO 5371L Clinical Anatomy of the Trunk and Limbs Lab (1). A detailed analysis of the anatomical foundations of kinesology and physical rehabilitation. Special emphasis will be placed on the functional anatomy of the trunk, pectoral and pelvic limbs with clinical correlations to the major disorders commonly treated by physical and occupational therapists. Prerequisites: ZOO 3731 or ZOO 4733. Corequisite: ZOO 5371L.
ZOO 5376 Animal Design and Movement (4). Basic biomechanical and behavioral theories of how animals feed and move. Prerequisites: BSC 1010, and BSC 1011, PHY 2053 and PHY 2054. [D]
ZOO 5424 Herpetology (3). ZOO 5424L Herpetology Laboratory (1). Biology of amphibians and reptiles from a systematic perspective. The three orders of living amphibians and the six living orders of reptiles are covered in detail. Prerequisites: BSC 1010 and BSC 1011, PCB 3043, or permission of the instructor. Corequisite: Concurrent registration of lecture with lab course.
ZOO 5456 Ichthyology (3). ZOO 5456L Ichthyology Lab (1). Systematics, structure, function, ecology, and evolution of fishes. Prerequisites: BSC 1010, BSC 1011 and PCB 3043. Corequisite: Concurrent registration of lecture with lab course.
ZOO 5732 Advanced Anatomy Demonstration (1-4). Dissection and demonstration of the human body with the emphasis on structure and function. May be repeated to a maximum of eight credits. Prerequisites: ZOO 3733 and ZOO 3733L, or permission of the instructor.
ZOO 5745 Advanced Neuroanatomy (3). In-depth knowledge of the embryonic development, structure, and function of the human nervous system with a great deal of clinical consideration. Prerequisites: ZOO 4743 or permission of the instructor.
ZOO 5746 Comparative Neurobiology (4). Structure and function of neural systems at many levels including biophysical and cellular mechanisms, molecular processes, neural circuits, development, and anatomy. Prerequisites: BSC 1010 and BSC 1011, CHM 1045 and CHM 1046 and PHY 2048; graduate standing or permission of the instructor.
ZOO 5785 Advanced Neurobiology (3). An in depth treatment of the nervous system covering molecular and cellular function, sensory and motor systems, and the neural basis of behavior. Prerequisite: Graduate standing.
ZOO 6423 Workshop on Reptile and Amphibian Sampling (1). Biology and sampling methods for reptiles and amphibians. Prerequisite: Graduate status.
ZOO 6782 Advanced Sensory Systems in Neurobiology (3). A comparative overview of sensory systems for graduate students, covering environmental stimuli, physical transduction, neural processing, and
behavioral responses. Prerequisite: ZOO 5785 or permission of the instructor.
ZOO 6935 Advanced Topics in Zoology (3). An intensive study of particular topics not otherwise offered in the curriculum. May be repeated for credit with different subject content. Prerequisite: Graduate status.

## Creative Writing

Heather Russell, Associate Professor and Chairperson, English
Les Standiford, Professor and Director, Creative Writing
Lynne Barrett, Professor
Debra Dean, Associate Professor
John Dufresne, Professor
Denise Duhamel, Professor
Campbell McGrath, Professor
Julie Wade, Assistant Professor

## Master of Fine Arts in Creative Writing

The Master of Fine Arts in Creative Writing is the terminal degree for the practicing writer, designed to qualify the recipient to teach creative writing on the collegiate and university level. The program is housed at the Biscayne Bay Campus. Writers enjoy the opportunity for editorial experience with Gulf Stream magazine, the annual FIU literary awards competition, the annual FIU Writers Workshop, the Miami Book Fair, and the Writers on the Bay Series, which has included residencies by such writers as Richard Ford, Robert Pinsky, Isabel Allende, Tim O'Brien, John Wideman, Michael Ondaatje, Pat Conroy, Luisa Valenzuela, Scott Turow, and Amy Tan. Such major writers as Maxine Kumin, James Jones, Pete Hamill and George Garrett have served on the regular faculty.

## Admission Requirement

Applicants must have a baccalaureate degree with a 3.0 GPA, must submit official GRE scores, and must have completed a minimum of nine semester hours of undergraduate work in creative writing. However, admission is based primarily on the strength of the applicant's submitted writing sample. Deadline is the second Wednesday in January.

## Degree Requirement

Forty eight semester hours are required in studio/academic curriculum, with a minimum in each area as follows:
Literature
Writing Workshop (both poetry and fiction required) 18
Form and Theory
Thesis 6

There is no foreign language requirement. Graduate workshops include short fiction, the novel, memoir, screenwriting, creative non-fiction, and poetry. The program places emphasis on the preparation and completion of a book-length creative thesis of publishable quality. Candidates must pass a final defense/examination.

Fellowships, teaching assistantships, and tuition remission scholarships are available on a competitive basis.

## Course Descriptions <br> Definition of Prefixes <br> CRW-Creative Writing; ENG-English.

CRW 5130 Advanced Fiction Workshop (3). Practice in the techniques and analysis of fiction through the reading, discussion, and revision of student manuscripts in a workshop setting. May be repeated. Prerequisite: 9 hours undergraduate CRW course work.
CRW 5331 Advanced Poetry Workshop (3). Practice in the techniques and analysis of poetry through the reading, discussion, and revision of student manuscripts in a workshop setting. May be repeated. Prerequisite: 9 hours undergraduate CRW course work.
CRW 5620 Advanced Screenwriting Workshop (3). Practice in the techniques and analysis of screen-writing through the reading, discussion, and revision of student manuscripts in a workshop setting. May be repeated. Prerequisite: 9 hours undergraduate CRW course work.
CRW 5934 Special Topics in Creative Writing (1-5). A course designed to give students an opportunity to pursue special studies in aspects of creative writing not otherwise offered. May be repeated. Prerequisites: CRW 2001 and three hours of CRW on the 3000/4000 level.
CRW 5935 Special Topics in Creative Writing (1-5). Gives students an opportunity to pursue special studies in aspects of creative writing not otherwise offered. May be repeated. Prerequisites: CRW 2001 and three hours of CRW on the 3000/4000 level.
CRW 5940 Advanced Independent Study in Creative Writing (1-5). Development and completion of a graduate level independent project in creative writing undertaken with the consent of the instructor. Prerequisites: Graduate standing and permission of the instructor.
CRW 6806 Teaching Creative Writing (3). The course will prepare graduate students (and teachers from secondary schools and community colleges) to teach introductory classes and workshops in Creative Writing. Students will observe and participate in the department's CRW 2001 courses. Prerequisites: CRW 3111, 3311, or graduate standing, or permission of the instructor.
CRW 6971 Creative Writing Thesis (3). Research and writing for the creative writing thesis. May be repeated. Prerequisite: 12 hours graduate CRW course work.

CRW 6972 Creative Thesis Continuance (1). Further guidance and direction for creative writing MFA candidates who have completed the two semester intensive sequence in CRW 6971. May be repeated.
ENG 5058 Form and Theory of Contemporary Literature (3). Various approaches and theories of practice in the major genres of imaginative writing, including development and articulation of the creative aesthetic. May be repeated. Prerequisite: Permission of the instructor.

## Earth and Environment

René Price, Associate Professor and Chairperson
Patricia Houle, Instructor and Associate Chair
Elizabeth Anderson, Director, International Research
Programs, School of Environment, Arts and Society (SEAS)
William Anderson, Associate Professor and Associate
Dean, College of Arts, Sciences and Education
Mahadev Bhat, Professor
David Bray, Professor
Robert Burgman, Assistant Professor
Laurel Collins, Professor
Maria Donoso, Director, Global Water for Sustainability (GLOWS)
Grenville Draper, Professor
Stephen Haggerty, Distinguished Research Associate
Joel Heinen, Professor
Rosemary Hickey-Vargas, Professor
Krishnaswamy Jayachandran, Professor and Graduate
Director for PSM in Environmental Policy and Management
Haiyan Jiang, Associate Professor
Stephen P. Leatherman, Professor
Hong Liu, Associate Professor
Jose Longoria, Professor
Andrew Macfarlane, Associate Professor
Florentin Maurrasse, Professor
Assefa Melesse, Professor
Fernando Miralles-Wilhelm, Professor
Pallab Mozumder, Associate Professor
Jeffrey Onsted, Associate Professor
John Parker, Emeritus Professor
Thomas Pliske, Emeritus Lecturer
Gary Rand, Professor
Rodolfo Rego, Digital Instructor
Jennifer Rehage, Associate Professor
James Riach, Senior Lecturer
Edward Robinson, Distinguished Research Associate
Michael Ross, Associate Professor
Leonard Scinto, Assistant Professor and Assistant Director, Southeast Environment Research Center
Kateel Shetty, Research Scientist
Neptune Srimal, Senior Lecturer
Michael Sukop, Associate Professor
Dean Whitman, Associate Professor and Undergraduate Program Director for Geosciences/Earth Science
Hugh Willoughby, Distinguished Research Professor
Keqi Zhang, Professor and Director of Laboratory for Coastal Research, International Hurricane Research Center
Ping Zhu, Associate Professor and Graduate Program Director

Knowledge of the Earth and its environments is essential for successful stewardship of our home planet. The mission of FIU's Department of Earth and Environment is to be at the forefront of research and education about the dynamic interaction of Earth's systems, the environment, and related societal issues. Programs in the department address understanding and stewardship of the Earth. In addition, the department fosters understanding of the planet's bounty, with topics such as water, mineral, energy and agricultural resources. A third area of emphasis is environmental problems, both natural events such as
earthquakes, volcanic eruptions and floods, and humanmade problems such as oil spills, ecosystem degradation and soil erosion. The department offers the Doctor of Philosophy Degree (Ph.D.) in Earth Systems Science, the Master of Science Degree (M.S.) in Geosciences, and the Master of Science (M.S.) in Environmental Studies.

## Doctor of Philosophy Degree in Earth Systems Science

The Ph.D. degree program offers concentration in either the geosciences with the Geosciences Major, or in environmental sciences, conservation, policy and management with the Natural Resource Science and Management Major. One of the two majors is chosen at the time of application in consultation with the student's prospective advisor, according to the emphasis of the student's research area. The Geosciences Major includes research on the solid Earth (structural geology, tectonics, igneous petrology, geochemistry, economic geology, and geophysics); Earth history, sedimentary rocks, and paleontology (stratigraphy, sedimentology, paleobiology, and paleoecology); Earth surface processes (hydrogeology, coastal geology, environmental biogeoscience, remote sensing and GIS applications, environmental geology, and geologic hazards); and atmospheric science (meteorology and climatology). The Natural Resource Science and Management Major includes research on the environmental sciences as related to environmental policy, conservation, and natural resource management. Overall, the doctoral program emphasizes a multidisciplinary approach to solving geoscientific and environmental problems, and stresses the importance of field observations complemented by laboratory analysis and numerical modeling.

## Application Procedures

Admission decisions to the Doctoral Program in Earth Systems Science will be made by the Department's Graduate Committee. To be considered for admission, applicants must submit the following documents prior to the admission deadlines.

1. FIU On-line Graduate Application Form (available at http://gradschool.fiu.edu).
2. Official transcripts of all college level work. When applicable, a certified English translation must accompany the original.
3. Graduate Record Examination and English proficiency (TOEFL and TSE) exam scores taken within the previous five years, sent from the Education Testing Service.
4. A resume with pertinent information regarding applicant's previous experience and achievements.
5. A statement of intent, including a brief discussion (not to exceed 2000 words) of educational goals and career projections, and the prospective advisor. The applicant may also include a copy of previous written scientific work.
6. Three letters of recommendation from former professors or academic advisors.
7. Official transcripts and test scores should be sent directly to the Office of Graduate Admissions, Florida International University, P.O. Box 659004, Miami, FL 33265.

## Admission Requirements

To be admitted to the Doctoral Program in Earth Systems Science, a student must meet the following minimum requirements:

1. Hold a Bachelor's or Master's degree from an accredited college or university in a relevant discipline.
2. Have a grade point average (GPA) of 3.0 or higher (or equivalent) during the last two years of the undergraduate program, and 3.0 or higher during the Master's degree program.
3. Submit official Graduate Record Examination (GRE) scores.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT (internet-based) TOEFL, 550 on the paper-based TOEFL, or 6.5 overall on the IELTS is required. A score of at least 50 on the Test of Spoken English (TSE) or 26 in the speaking section of the iBT TOEFL is required in order to be eligible for a teaching assistantship.
5. Meet the University's general requirements for admission to graduate programs. All application materials should be submitted by February 1 in order to be considered for Fall term admission and by September 1 for Spring term admission.

## Financial Aid

The Earth and Environment Department offers a number of graduate teaching and research assistantships which are awarded on a competitive basis. Teaching assistantships begin only in the fall semester. The assistantships provide a stipend and waiver of tuition. Applicants interested in an assistantship should indicate this in the FIU Graduate Application form and their cover letter. Applicants seeking assistantships should contact individual faculty members in their area of research interest.

## Course Requirements

The Doctor of Philosophy in Earth Systems Science is conferred based on satisfactory completion of required course work, a demonstrated mastery of a broad scope of knowledge, and the ability to conduct original and independent research. A minimum of 75 graduate-level credit hours is required. A minimum of 24 credit hours is devoted to research toward the Ph.D. Dissertation. A maximum of 36 graduate credit hours of formal lecture courses earned as part of a graduate degree from another accredited program may be transferred with the approval of the major advisor and Graduate Program Director.

| ISC 5150 | Introduction to Research in Earth and <br> Environmental Sciences |  |
| :--- | :--- | :--- |
| ISC 5151 | Earth and Environmental Graduate |  |
|  | Seminar | 1 |
| ISC 6152 | Earth and Environment Advanced |  |
|  | Graduate Seminar | 1 |
| ISC 6153 | Environments of a Changing Planet | 3 |
| GLY 6061 | Geoscience Systems | 3 |
| EVR 6377 | Natural Resource Conservation and |  |
|  | Policy | 3 |

GLY/EVR 7980 Ph.D. Dissertation
The remaining credits must include at least 12 credits of non-research, formal coursework. All coursework is selected in consultation with the major advisor. Natural Resource Science and Management majors should complete at least 18 credit hours in formal environmental coursework, so that upon graduation they can be certified as faculty members qualified to teach in that field.

## Graduation Requirements

1. A minimum GPA of 3.0 in all coursework is required for the Ph.D. degree.
2. Satisfactory performance on the Qualifying Examination covering general geoscientific and/or environmental knowledge and the field of specialization.
3. Successful presentation of a research proposal and oral examination before the Dissertation Committee, which together constitute the Candidacy Examination.
4. Completion and successful defense of a dissertation.

## Master of Science in Geosciences

This degree program offers opportunities for research in the same areas as for the Geosciences Major of the Ph.D. in Earth Systems Science (above). It emphasizes a multidisciplinary approach to solving geoscientific problems, stressing the importance of field observations complemented by laboratory analysis and numerical modeling. The application and admission procedures are also the same. Teaching assistantships are not available for the M.S. in Geosciences.

The Master of Science degree is conferred upon successful completion of the requirements (listed below) of either the Thesis Track or Non-Thesis Track option of the degree program.
Thesis Track: Course Requirements: 30 credits, including:
ISC 5151/ISC6152 Graduate Seminar 2
Courses in field of specialization 18
Electives 4
GLY 6971 Thesis 6
Courses in the field of specialization and electives are chosen by the student in close consultation with a faculty advisor. These courses are selected to fit the student's particular professional goals and to ensure sufficient depth and breadth of geological knowledge.

## Thesis Track: Graduation Requirements

1. A minimum GPA of 3.0 in all coursework counted toward the 30 credits is required for the Master's degree.
2. Satisfactory completion and defense of a thesis proposal and an original research thesis is required.
Non-Thesis Track: Course Requirements: $\mathbf{3 0}$ credits, including:
Courses in field of specialization 18
Electives 12
Electives may include at most 3 credits of Supervised Research (GLY 6910) leading to a research paper.
Doctoral candidates in the Geosciences Major who have filed the D-2 and D-3 forms and accepted by the University Graduate School can receive a Master of Science in

Geosciences en route to the PhD after completion of 36 credits of graduate coursework with "non-thesis track" appearing in the transcript.

## Non-Thesis Track: Graduation Requirements:

A minimum GPA of 3.0 in all course work counted toward the 30 credits is required for the Master's degree.

## Combined BS/MS in Geosciences

The combined BS/MS degree program in Geosciences allows qualified students to earn both degrees in a shorter amount of time than typically required for earning degrees sequentially. The accelerated program is designed for highly qualified undergraduate students in the Earth and Environment, allowing them to complete their MS degree within approximately 2.5 years after starting their second year.

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor of Science program in Geosciences at FIU.
2. Completed at least $75-90$ credits of coursework (including UCC and CLAS).
3. Minimum GPA of 3.2.
4. Official GRE scores.
5. Three letters of recommendation.
6. Approval by the Earth and Environment Graduate Committee.

## General Requirements

1. Meet the requirements of both the $B S$ and $M S$ degree in Geosciences.
2. Overlap of programs: Up to 3 courses ( 9 credits) may be used in satisfying both the BS and MS degree requirements, which must be at the 5000 -level or higher.

## Fields of Concentration in the Geosciences Major of the Ph.D. and the M.S. Geosciences

## Atmospheric Sciences

Researchers focus on hurricane dynamics, hurricane impacts, hurricane boundary layer turbulence structures, atmospheric convection, atmospheric boundary layer and clouds, and cloud-climate feedbacks.

## Environmental Biogeoscience

Research in this concentration applies knowledge of biological, geological, physical, and chemical processes to current threats facing the biosphere, including deteriorating water and air quality, loss of biodiversity and ecosystem function, soil degradation, coastal erosion, and other emerging issues at local or global scales.

## Geophysics/Paleomagnetism/Remote Sensing

Geophysical investigative techniques using gravity, magnetism, seismic reflection and refraction, earthquake seismology, thermal properties, and satellite imagery. Land-based geophysical studies of the Caribbean and South American seismicity and crustal structure. Environmental geophysical studies in the South Florida and Caribbean regions.

## Hydrogeology/Environmental Geology

Field and modeling approaches to groundwater flow and solute fluxes in subsurface and near subsurface environments. Interaction of surface water and groundwater, solute transport, chemical and isotopic tracing techniques, watershed hydrology in Florida and beyond.

## Igneous Petrology/Geochemistry/Economic Geology

Research problems in petrology/geochemistry of igneous and metamorphic rocks with reference to their origin, and relationships in time and space. Origin of hydrothermal and other economic deposits. Field occurrence, geochemistry and petrogenesis of crystalline rocks, especially those of the Caribbean region and South America. Generation of associated (often, economically significant) hydrothermal deposits. Application of trace element and isotope geochemistry to the study of these petrogenetic associations.

## Paleontology

Research applied to taxonomy, phylogeny, evolutionary processes, paleoecology, taphonomy, and biostratigraphy of select microfossil groups. Research may address questions about biodiversity, biogeography, paleoecology, paleoenvironments, response to global climatic changes, and paleooceanography.

## Stratigraphy/Sedimentology

Sedimentary petrology, sedimentary environments, paleooceanography, sequence stratigraphy, cyclic stratigraphy, microfacies analysis, and basin analysis. Field and laboratory techniques address evolution of sedimentary basins and their relationships to global and regional tectonics and paleoceanographic change.

## Structural Geology - Tectonics

Field-oriented research on methods of structural analysis. Analysis of geologic deformation based upon the principles of mechanics and utilizing research data from laboratory and field investigations of folding, fabrics, fracture, and faulting. Structural geology of the Caribbean and South America.

## Fields of Concentration in the Natural Resource Science and Management Major of the Ph.D. in Earth Systems Science

## Land and Aquatic System Science

Application of multidisciplinary science and research techniques to managing environmental problems and sustainable use of land and aquatic resources; understanding and quantification of fundamental physical, chemical, and biological processes operating on land and in water, soil and other environments.

## Natural Resource Management

Study of the interactions between natural systems and human systems. Research and management problems in the fields of natural resource conservation, ecosystem restoration, agroecology, ecotoxicology, forestry, wildlife, fisheries, and coastal and marine resources.

## Environmental Economics and Policy

Analysis of policy effectiveness in managing environmental pollution, sustainable development, energy resources, climate change, food and agriculture, community forests, and local, national and international conservation programs. Research methods in ecosystem service valuation, economic modeling, and ethnographic and other behavioral analyses.

## Master of Science in Environmental Studies

The Department of Earth and Environment offers the Master of Science (M.S.) in Environmental Studies degree to train students for work in the areas of environmental policy, natural resource science and management, and sustainable development. An emphasis of the program is the cultural and political milieu in which environmental issues of a region are embedded. The program is interdisciplinary in nature, and students are encouraged to take advantage of University-wide resources, programs, and courses in environmental issues, such as those in Public Administration, International Relations, Biology, Chemistry, Geosciences, Political Science, Economics, and Sociology/Anthropology.

The M.S. degree program offers two options: thesis track and non-thesis track. The thesis track involves rigorous, solutions-oriented scientific research into the functioning of environmental systems. This track is highly recommended for students who are coming directly from undergraduate programs and who are interested in doctoral research in the future. The non-thesis track is primarily designed for employed professionals who may want to enhance their careers and skills through additional academic training beyond their bachelor's degree and practical training through internships with agencies, corporations, non-profit organizations or academic institutions. It is not recommended for students who do not have job experience.

## Admission Requirements

To be admitted into the Master's Program in Environmental Studies, a student must meet the University's graduate admission requirements and have:

1. A "B" average in upper level work and submit official GRE scores, which every candidate must take. International graduate student applicants whose
native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
2. Submitted three letters of recommendation, a onepage statement of research interests, and a copy of all transcripts to the Graduate Program Director on or before March 1 for the Fall admissions and October 1 for the Spring admissions.
3. Received approval of the departmental Graduate Program Committee.

## Degree Requirements

The Master of Science in Environmental Studies requires 36 credits, including the specific requirements (listed below) of either the thesis-track or non-thesis track option of the degree program. A maximum of six credits of postbaccalaureate graduate coursework may be transferred from other institutions, subject to approval of the Graduate Committee. Particular courses will be determined by the student in consultation with the thesis advisory committee, faculty advisor, or the Graduate Program Director.
Thesis Track: Course Requirements

| ISC 6153 | Environments of a Changing Planet | 3 |
| :--- | :--- | :--- |
| EVR 6377 | Natural Resource Conservation and |  |
|  | Policy | 3 |
| EVR 6950 | Graduate Seminar | 1 |
| ISC 5150 | Introduction to Research in Earth and |  |
|  | Environmental Sciences | 2 |
| EVR 6971 | Master's Thesis | 6 |
| Research Methods or Analysis Course | 3 |  |
| Electives |  | 18 |
| Total Credits |  | 36 |

The research methods course and electives are selected in consultation with student's thesis advisor. Elective courses are chosen in one of the two graduate concentrations (see below) and fit the student's thesis research. Additional Master's Thesis, Thesis Research, or Graduate Independent Study up to a maximum total of 3 credits may also be applied as elective credit. A maximum of six credit hours may be taken at the 4000 level, and a minimum of six credit hours of electives must be taken in Environmental Studies. Students must demonstrate a competency in Statistics (equivalent to two courses of undergraduate statistics, taken prior to the admission into the program, with a " B " or better grade in both courses, or one course of graduate statistics with a "C" or better grade in both courses). Additional course work may be recommended by the advisory committee.

## Thesis Track: Graduation Requirements

A grade of ' B ' or higher must be obtained in all core courses. A grade of ' C ' or higher must be obtained in all courses, with a cumulative GPA of 3.0 or higher in the 36 credits. A thesis must be completed and successfully defended in consultation with the student's graduate thesis committee.

## Non-Thesis Track: Course Requirements

ISC 6153 Environments of a Changing Planet
EVR $6377 \quad$ Natural Resource Conservation and Policy
EVR 5907 Research and Independent Study
EVR 6950
Graduate Seminar

| Quantitative Methods Course | 3 |
| :--- | :--- |
| Electives | 21 |

Total Credits
The quantitative methods course and electives are selected in consultation with faculty advisor. Elective courses are chosen in one of the two graduate concentrations (see below), and to fit the student's particular professional interest and to ensure sufficient breadth and depth of environmental studies knowledge. Students carrying out research, internship or independent study for their non-thesis project should sign up for EVR 5907, but may not exceed 6 credits total. EVR 6970 and EVR 6971 will not count toward electives. A maximum of 6 credit hours may be taken at the 4000 level. A minimum of 12 elective credits must be taken in Environmental Studies. All courses except EVR 6950 must be taken for letter grades.
Doctoral candidates in the Natural Resource Science and Management Major of the Earth Systems Science degree who have filed the D-2 and D-3 forms and accepted by the University Graduate School can receive a Master of Science in Environmental Studies en route to the PhD after completion of 36 credits of graduate coursework with "non-thesis track" appearing in the transcript.

## Non-Thesis Track: Graduation Requirements

A grade of "B" or higher must be obtained in all core courses. A grade of " $C$ " or higher must be obtained in other courses, with a cumulative GPA of 3.0 of higher in the 36 credits. A project (EVR 5907) must be completed under faculty supervision, and the project report must be presented as a part of the Graduate Seminar class. This work may be based on a specific field research, or internship of current occupation. A project is defined as a substantial analysis and proposal for change of real-world environmental problem.

## Graduate Concentrations for the Master of Science in Environmental Studies

The Department of Environmental Studies currently offers graduate-level concentrations in two different areas. 1) environmental policy and society, and 2) environmental sciences. A list of electives for each of these concentrations can be obtained from the Department's Office.

## Master of Science in Environmental Studies: Major in Environmental Policy and Management

Environmental Policy and Management is a major within the Master's of Science in Environmental Studies. This option is meant primarily for working professionals who wish to pursue a Master's on an accelerated basis. Most of the formal coursework is offered on Saturdays, and some courses may be offered as hybrid or fully on-line sections. The curriculum was designed by Earth and Environment faculty to offer students a wide range of competencies within broader professional areas related to environmental policy and management.

## Degree Requirements (a total of 36 credit hours):

## Core Courses

EVR 5355
Environmental Resource Policy

| EVR 5320 | Environmental Resource Management | 3 |
| :--- | :--- | :--- |
| EVR 6950 | Graduate Seminar (3 semesters @ 1 <br> credit each) | 3 |
| STA 6196 | Statistics for Environmental Sciences | 3 |
| Area Subjects |  |  |
| EVR 5409 | Advanced Conservation Biology | 3 |
| EVR 5215 | Water Resources Assessment | 3 |
| GIS 5050 | Environmental GIS | 3 |
| EVR 7322 | Methods in Sustainable Resources |  |
|  | Management | 3 |
| EVR 7445 | Public Lands Management | 3 |
| COM 5606 | Environmental Communications | 3 |
| EVR 5907 | Research and Independent Study* | 6 |
|  |  | Total: |
|  |  | 36 |

*Research and Independent Study (EVR 5907): For these credits a student may participate in directed research in a lab on campus or an internship with an agency or environmental group.

## Course Schedule

Semester 1 (Fall)
EVR 5320 Environmental Resource Management 3 STA 6196 Statistics for Environmental Sciences 3
GIS 5050 Environmental GIS 3
EVR $6950 \quad$ Graduate Seminar 1

## Semester 2 (Spring)

EVR 5355 Environmental Resource Policy 3
EVR $5409 \quad$ Advanced Conservation Biology 3
EVR 5215 Water Resources Assessment 3
EVR 6950 Graduate Seminar 21
Semester 3 (Summer)
EVR 5907 Research and Independent Study* 6
Semester 4 (Fall)
EVR $7322 \quad$ Methods in Sustainable Resource
Management
EVR $7445 \quad$ Public Lands Management 3
COM 5606 Environmental Communications 3
EVR $6950 \quad$ Graduate Seminar 3

## Professional Science Master's (PSM) in Environmental Policy and Management

The Professional Science Master's degree in Environmental Policy and Management is an interdisciplinary program designed to prepare students for careers in local, state and national environmental organizations and agencies. This professional degree is meant primarily for working professionals who wish to pursue a Master's on an accelerated basis. Most of the formal coursework is offered on Saturdays, and some courses may be offered as hybrid or fully online sections. The curriculum offers students a wide range of competencies within broader professional areas related to environmental policy and management.

## Admission Requirements

To be admitted into the professional science master's program in EPM, a student must meet the University's graduate admission requirements and have:

1. A "B" average in upper level work and submit official GRE scores, which every candidate must take. International graduate student applicants whose native language is not English are required to submit
a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
2. Submitted three letters of recommendation, a one page statement of career interests, and a copy of all transcripts to the Graduate Program Director on or before March 1 for the Fall admissions.
3. Received approval of the departmental graduate program committee.

## Degree Requirements

The PSM in Environmental Policy and Management consists of a total of 36 credits, including an internship and completion of an independent study. The program is to be completed in four semesters with a course load of 10 credits during the fall and spring semesters and 6 credits in the summer.

## Core Courses

EVR 5355 Environmental Resource Policy 3
EVR 5320 Environmental Resource Management 3
EVR 6950 Graduate Seminar (3 semesters @ 1 credit each)3

STA 6196 Statistics for Environmental Sciences 3
Area Subjects
EVR $5409 \quad$ Advanced Conservation Biology 3
EVR 5215 Water Resources Assessment 3
GIS 5050 Environmental GIS 3
EVR 7322 Methods in Sustainable Resources Management

3
EVR $7445 \quad$ Public Lands Management 3
MMC $5655 \quad$ Mass Communication and the $\quad 3$
EVR 5907 Research and Independent Study* 6

## Course Schedule

Semester 1 (Fall)
EVR 5320 Environmental Resource Management 3
STA 6196 Statistics for Environmental Sciences 3
GIS 5050 Environmental GIS 3
EVR 6950 Graduate Seminar $1 \quad 1$
Semester 2 (Spring)
EVR 5355 Environmental Resource Policy 3
EVR 5409 Advanced Conservation Biology 3
EVR 5215 Water Resources Assessment 3
EVR 6950 Graduate Seminar 21
Semester 3 (Summer)
EVR 5907 Research and Independent Study*
Semester 4 (Fall)
EVR 7322 Methods in Sustainable Resource Management
EVR $7445 \quad$ Public Lands Management 3
MMC 5655 $\quad \begin{array}{ll}\text { Mass Communication and the } \\ & \text { Environment }\end{array}$
EVR $6950 \quad$ Graduate Seminar 3

## Internship and Study Report

Students are required to complete a minimum of 6 credits as a laboratory or field internship during the summer semester of the program. During this time, they will work on a relevant, management-related project that has been mutually agreed upon by the employer and a faculty advisory committee. Students will be required to write a
report on this project and present it orally as part of the final cumulative examination held at FIU. The student's advisory committee shall consist of the faculty sponsor and at least two additional committee members who have expertise in environmental science and/or the natural sciences.

## Graduation Requirements

A grade of " $B$ " or higher must be obtained in all core courses. A grade of "C" or higher must be obtained in other courses, with a cumulative GPA of 3.0 or higher in the 36 credits. A project (EVR 5907) must be completed under faculty supervision, and the project report must be presented as part of the Graduate Seminar class. This work may be used based on a specific field research, or internship of current occupation. A project is defined as a substantial analysis and proposal for change of real-world environmental problem.

## Combined BS/MS or BA/MS in Environmental Studies

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor's Degree Program in EVR at FIU.
2. Completed at least 75-90 undergraduate credit hours.
3. Current GPA of 3.25 or higher.
4. Official GRE scores.

## General Requirements

1. Completed Bachelor's Degree in EVR at FIU.
2. EVR 5320 Environmental Resource Management can substitute for EVR 4023 Biotic Resources for BS majors and be taken as an elective/area of concentration by BA majors.
3. BA and BS majors can take EVR 5355 Environmental Resource Policy instead of EVR 4352 US Environmental Policy.
4. Two-Three graduate electives (6-9 credits) can be counted towards areas of concentration for BA majors, or as electives or resource courses for BS majors.
5. Take one section of EVR Graduate Seminar for EVR 4920 Undergraduate Senior Seminar.
6. Students are expected to have 12-18 graduate course credits by the time they receive the undergraduate degree.

## Juris Doctor/Master of Science in Environmental Studies Joint Degree Program

The faculties of the College of Law and the College of Arts, Sciences and Education at Florida International University offer a joint degree program culminating in both a Juris Doctor (J.D.) degree, awarded by the College of Law, and a Master of Science in Environmental Studies (MS-ES) degree, awarded by the College of Arts, Sciences and Education. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. Essential criteria relating to the joint degree program are as follows:

1. Candidates for the program must meet the entrance requirements for and be accepted by both Colleges. Both Colleges must be informed by the student at the time of application to the second program that the student intends to pursue the joint degree.
2. The joint degree program is not open to students who have already earned one degree.
3. For law students, enrollment in the MS-ES program is required no later than the completion of 63 credit hours in the J.D. program. For MS-ES students, enrollment in the J.D. program is required no later than the completion of 24 credit hours in MS-ES program.
4. A student must satisfy the curriculum requirements for each degree before either degree is awarded. For the MS-ES degree, students must meet the requirement of the non-thesis track option. The College of Arts, Sciences and Education will allow 6 credit hours of foundation law courses and up to 9 credit hours of upper level environmental law courses to be credited toward both the MS-ES and J.D. degrees. These law classes will count toward the non-EVR Environmental Studies elective credits allowed under the MS-ES non-thesis track program. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the J.D. degree for courses taken in the MS-ES curriculum upon completion of the MS-ES degree curriculum with a grade point average of 3.0 or higher.
5. The College of Arts, Sciences and Education will recognize any significant, environment-related law review or research project completed with a letter grade of ' B ' or better for the J.D. program toward the 3 credit hour course, EVR 5907 Research and Independent Study and the attendant 'Project' required for the MS-ES non-thesis track program. For the purpose of this program, a Project is defined as a substantial analysis and proposal for change of a realworld environmental problem, and requires preparation of a report and presentation as part of the required Environmental Studies Graduate Seminar class.
6. A student enrolled in the joint degree program may begin the student's studies in either College, but full time law students must take the first two semesters of law study consecutively and part-time law students must take the first three semesters of law study
consecutively. Students admitted to one College but electing to begin study in the other College under the joint degree program may enter the second College thereafter without once again qualifying for admission so long as they have notified the second College before the end of the first week of the first semester in the second College and are in good academic standing when studies commence in the second College.
7. A student enrolled in the joint degree program will not receive either degree until the student has satisfied all of the requirements for both degrees, or until the student has satisfied the requirements of one of the degrees as if the student had not been a joint degree candidate.
8. As non-thesis track MS-ES students, students in the joint degree program will not normally be eligible for the graduate teaching assistantships in the Environmental Studies Department.

## Course Descriptions

Note: Laboratories may not be taken prior to the corresponding lecture course. Laboratories must be taken concurrently where noted, but students must register for the laboratory separately.

## Definition of Prefixes

AGR-Agronomy; ESC-Earth Science; EVR-Environmental Studies; EVS-Environmental Science; GIS-Geography: Information Science; GLY-Geology; ISC-Interdisciplinary Science/Natural Science; MET-Meteorology; OCG-Oceanography-Geological; SWS-Soil and Water Sciences F-Fall semester offering; S-Spring semester offering; SSSummer semester offering.

AGR 6251 Sustainable Farming Systems (3). Analysis of sustainability of modern agricultural farming systems under a variety of ecological economic and cultural settings.
AGR 6255 Ecological Agriculture (3). Application of ecological principles to modern farming systems to achieve goals of long-term food production without depleting Earth's resources.
ESC 5005 Earth Science Enrichment Activities for Teachers (1-2). Workshop presenting Earth Science enrichment activities to high school and middle school science teachers.
EVR 5006 Environmental Science and Sustainability (3). Introductory environmental science course for graduate students in environmental studies and other disciplines. Emphasizes physical sciences and applications to environmental issues.
EVR 5044 Advanced GIS and Environmental Data Analysis (3). Explores project planning, geospatial database design and implementation of analytical and display methods in GIS for organizing, querying, analyzing and presenting spatial data. Prerequisites: One of the following: EVR 5050, CGN 4321, CGN 5320, INR 4931, URS 6930.
EVR 5061 South Florida Ecology: Field Studies (3). Introduction to ecology of South Florida. Series of field trips to unique ecosystems (Everglades, hardwood hammocks, coastal regions). No science background
required. Intended for teachers. Not intended for Environmental Studies graduate students.

EVR 5065 Ecology of Costa Rican Rainforest (3). Intensive study of Central American tropical forest ecosystems conducted for two weeks in Costa Rica in sites ranging from lowland to high mountains. Primarily for teachers. Prerequisites: Graduate standing or permission of the instructor. (SS)
EVR 5066 Ecology of the Amazon Flooded Forest (3). Study of the ecology of the flooded forest with emphasis on the relationships between plants and animals and the annual flooding cycle. The course includes a two-week field study at river camp in Peru. Prerequisites: Graduate standing or permission of the instructor. (SS)
EVR 5069 Wetland Ecology and Management (3). Principles of ecology and management as applied to freshwater and estuarine wetlands. Prerequisites: Undergraduate degree in science, or PCB 3043, or permission of the instructor.
EVR 5122 Natural Disasters and Social Vulnerability (3). Natural Disasters and Social Vulnerability course will introduce basic concepts and analytical tools of societal responses in managing natural disasters.
EVR 5219 Water Resources Assessment (3). Elements of hydrological cycle, hydrological processes and water resources assessment with emphasis on surface and groundwater water quantity and quality evaluation is central to the course.

EVR 5236 Air Pollution Dynamics (3). A course designed to give an understanding of the fates of atmospheric pollutants. Scavenging processes in the atmosphere; radiation, residence times, chemical reactions, global transport process, point source dispersion and modeling calculations. Prerequisites: EVS 3360 or EVR 4231.
EVR 5313 Renewable Energy Sources (3). An analysis of renewable energy sources and energy efficiency including wind, biomass, geothermal, hydroelectric, solid waste, solar heating, solar cooling, and solar electricity. Prerequisite: Permission of the instructor.
EVR 5315 Energy Resources and Systems Analysis (3). Detailed analysis of energy flows in natural and manmade systems. Energy systems analysis. Energy use patterns. Conventional and alternate sources of energy.
EVR 5320 Environmental Resource Management (3). The scientific and philosophical basis for the management of renewable and non-renewable energy, mineral, air, water, and biotic resources. Prerequisites: Graduate standing or permission of the instructor. (F)
EVR 5332 Integrated Solutions for Water in Environment and Development (3). Examines the theory and practice of integrated water resources management, focusing on science, policy, and socioeconomic themes evaluated through case studies from different regions of the world. Emphasis given to environmental elements.
EVR 5353 International Energy Policy (3). Focuses on the distribution of global energy resources and related issues. A comparison of the energy policies of various countries serves as the basis for exploring alternative
energy policy approaches. Prerequisites: EVR 5355 or permission of the instructor.
EVR 5355 Environmental Resource Policy (3). A survey of international and national environmental policy and the legal, economic, and administrative dimensions of international accords and selected U.S. law. Prerequisites: EVR 5320 or permission of the instructor. (S)
EVR 5375 Advanced Restoration Ecology (3). Restoration planning, endangered species reintroduction, disturbed land reclamation, ecosystem restoration, challenges of climate change on ecological restoration. Prerequisite: One course or more in ecology.
EVR 5376 Advanced Ecology and Management of Invasive Species (3). An in depth study of the key ecological, social, and management questions surrounding introduced invasive species.
EVR 5409 Advanced Conservation Biology (3). Exploration of modern applications of ecology, genetics and evolutionary biology in the conservation biology. Policy aspects of biological conservation are also discussed. Prerequisites: BSC 1010 and BSC 1011.
EVR 5907 Research and Independent Study (VAR). The student works with a professor on a research project. Variable credit.
EVR 5935 Special Topics (VAR). A graduate-level course dealing with selected environmental topics. The content will not necessarily be the same each time the course is offered.

EVR 5936 Topics in Environmental Studies (3). An analysis of several current environmental topics. Recommended for primary and secondary school teachers.
EVR 6067 Tropical Forest Conservation and Utilization (3). Distribution and classification of tropical forest ecosystems, their description and the ecological principles governing their function. Factors influencing tropical forest utilization and destruction, and strategies for sustainable use and conservation. Prerequisites: EVR 5355 or permission of the instructor.
EVR 6268 Remote Sensing in Hydrology (3). Sensors, platforms, satellites; image rectification, classification; data assimilation and parameterization; soil moisture, rainfall, discharge, evapotranspiration measurement, modeling and validation. Prerequisites: GLY 5754 or equivalent or permission of the instructor and EVR 5219 or EVR 4211 or equivalent or permission of the instructor.
EVR 6300 Topics in Urban Ecology (3). Topics include urban and suburban ecosystems emphasizing energy relations, ecological functions of urban landscapes, urban wildlife, urban forestry and ecological issues relevant to human health and well-being. Prerequisites: PCB 3043 or permission of the instructor.
EVR 6330 Tropical Ecosystems Management (3). Analyzes the dimensions of tropical ecosystems management. Organizational and institutional dynamics of the management of tropical forests, agriecosystems, and coastal areas are covered. Prerequisite: Permission of the instructor.

EVR 6360 Protected Area Management (3). Interdisciplinary examination of ecological, administrative,
and socio-economic aspects of managing protected natural areas. Case studies from developed and developing nations.
EVR 6377 Natural Resource Conservation and Policy (3). Interdisciplinary course focusing on diverse conservation issues and policy aspects of managing and conserving natural resources.

EVR 6405 International Biological Conservation Accords (3). Survey of international biological conservation agreements. Topics include bilateral migratory wildlife agreements, the Berne Convention on Migratory Wildlife, CITES, Ramsar, the UNCED Biodiversity Treaty and the Statement of Principles on Forests. Prerequisites: EVR 5355 or permission of the instructor.

EVR 6406 U.S. Endangered Species Management (3). History and implementation of the U.S. Endangered Species Act. Topics include legal and administrative aspects, reauthorization, procedures for recovery planning and conflict resolution, and biological measures of success. Prerequisites: EVR 5355 or permission of the instructor.
EVR 6950 Graduate Seminar (1). A weekly seminar that features guest speakers, student presentations, and discussions among graduate students and faculty. Environmental Studies graduate students are required to register during three semesters of their program. Prerequisite: Permission of the instructor.
EVR 6970 Supervised Research (1-12). Supervised research toward completion of the student's program of study. Repeatable. Prerequisite: Permission of Major Professor.

EVR 6971 Master's Thesis (1-12). Completion of Master's Thesis. Repeatable. Prerequisite: Permission of Major Professor.
EVR 7056 GIS in Water Resources (3). Spatial analysis of watersheds and modeling of hydrological processes with emphasis on surface runoff, evapotranspiration and sub surface flow. Prerequisite: GIS 5050 or equivalent or permission of the instructor.
EVR 7084 Interdisciplinary Environmental Studies (3). Explores theoretical and practical approaches to interdisciplinary analysis of environmental issues, including sustainability science, ecological economics, and human-nature interactions. Prerequisites: EVR 5320 and EVR 5355 or equivalent or permission of the instructor.
EVR 7322 Methods of Sustainable Resource Management (3). A study of methods and policies for achieving a sustainable environment. Covers project appraisal, resource modeling and national accounts in the context of resource sustainability. Prerequisites: Graduate standing or permission of the instructor.
EVR 7329 Watershed Analysis and Management (3). An examination of the watershed approach to managing water and land resources. Integrating fundamental physical, chemical, and biological processes with human systems at the landscape scale using GIS.
EVR 7445 Public Land Management (3). Examines the historical, administrative, and legal settings that have predisposed various resource management agencies to
succeed or fail in protecting public lands. Explores new and integrated approaches to building consensus on public land management issues. Prerequisites: EVR 5320, EVR 5355, equivalent or permission of the instructor.
EVR 7980 Ph.D. Dissertation (3). Research directed towards completion of the doctoral dissertation. To be taken every semester by the candidates if the Ph.D. Prerequisite: Permission of the major professor.
EVS 6145 Ecotoxicology (3). Fate of chemicals and their acute and chronic toxicological effects on aquatic and wildlife systems. Dose-response relationships, bioavailability, bioconcentration, microbial degradation, and biomonitoring. Prerequisites: One year of biology and one year of chemistry and CHM 2200 and lab or permission of the instructor.
EVS 6194 Applied Soil Biology (3). Examines biology of soil organisms and biologically-mediated chemical transformations occurring in soil ecosystems. Prerequisite: BSC 1011.
EVS 6637 Ecological Risk Assessment (3). Evaluation of risks of foreign chemicals to aquatic and terrestrial systems. Concepts and methodology used in the hazard and risk assessment of toxic effluents, chemical/oil spills, and contaminated sediments. Prerequisites: One year of biology and one year of chemistry and CHM 2200 and lab or permission of the instructor.
GIS 5050 Environmental GIS (3). Concepts of GIS, database design and management, advanced spatial analysis and modeling, uncertainty, error, and sensitivity in GIS. Focus on GIS project design, execution and presentation using AroGIS. Prerequisite: Permission of the instructor.
GLY 5021 Earth Sciences for Teachers (3). Study of geological materials and processes, as covered in Physical Geology, but at a higher level and with additional assignments. Prerequisite: Permission of the instructor. Corequisite: GLY 5021L. (F,S,SS)
GLY 5021L Earth Sciences for Teachers Laboratory (1). Study of the properties of minerals and rocks; interpretation of topographic and geologic maps; study of the geology of Florida, including field trips. Prerequisite: Permission of the instructor. Corequisite: GLY 5021. (F,S,SS)
GLY 5060 Planet Earth: Dynamic Earth (1). Essentials of metamorphism, rock rheology, seismology, plate tectonics, plate boundaries, plate movement, continental rifting and evolution of mountain belts.
GLY 5107 Planet Earth: Evolving Earth (1). Essentials of lithostratigraphy, biostratigraphy, geologic time scale, modern sedimentological processes, sedimentary rocks, evolution and extinction events, paleoenvironments and paleoclimates.
GLY 5108 Paleoenvironments (3). Sedimentary environments, paleoecology of fossils, skeletal minerology, marine paleoenvironmental changes, global patterns of change through time. Prerequisite: Permission of the instructor.
GLY 5158 Florida Geology (3). Detailed lithostratigraphic and biostratigraphic analyses of Southeast Florida and their relationship to tectonics, paleoclimates.

Prerequisites: GLY 4511 and GLY 4511L. (S in alternate years)
GLY 5159 Planet Earth: South Florida (1). Geology, water resources and geologic environments of South Florida.
GLY 5245 Water-Rock Interaction (3). Survey of geochemical processes at the water-rock interface. Topics include absorption of inorganic and organic ions, colloid stability in groundwater, mineral dissolution and precipitation. Prerequisites: CHM 1046, MAC 3312, GLY 4822 or permission of the instructor.
GLY 5246 Geochemistry (3). GLY 5246L Geochemistry Lab (1). Origin of chemical elements and principles affecting their distribution in the solar system, solid earth and hydrosphere. Use of chemical data to solve geologic problems. Prerequisites: Physical Geology and General Chemistry. (S in alternate years)
GLY 5266 Stable Isotope Biogeochemistry (3). Application and theory of stable isotope approaches to biogeochemistry. Topics: Introduction to IRMS machines, C/N/O/H/S (biogeochem. processes), sampling/lab. prep., and recent advances. Prerequisites: One year of chemistry or permission of the instructor.
GLY 5283C Application of ICPES in Geochemistry (3). Determination of elemental abundances in rocks, soils, natural water using inductively coupled plasma emission spectroscopy (ICPES). Instrumental principles, sample selection and preparation methods and application of results to research. Prerequisites: CHM 1045, CHM 1046 or permission of the instructor. (S or SS)
GLY 5286 Research Instrumentation and Techniques in Geology (3). Survey of techniques and instrumentation used in geological research, including computing and data handling. Prerequisites: Graduate standing or permission of the instructor. Corequisite: GLY 5286L. (F)
GLY 5286L Research Instrumentation and Techniques in Geology Lab (1). Introduction to advanced instrumentation and analytical techniques in Geology, including computing and data processing. Prerequisites: Graduate standing or permission of the instructor. Corequisite: GLY 5286. (F)
GLY 5287C Scanning Electron Microscopy with EDS Analysis (3). Imaging and microanalysis of materials using SEM including EDS. Prerequisite: Permission of the instructor.
GLY 5288C Electron Microprobe Microanalysis with EDS Analysis (3). Imaging and analysis or geological and other materials using electron microprobe with EDS analysis. Prerequisite: Permission of the instructor.
GLY 5298 Topics in Geochemistry (3). Seminar covering current research in selected areas of lowtemperature geochemistry: oceans and oceanic sediments; continental waters and sediments; hydrothermal systems. Prerequisites: GLY 5246 or permission of the instructor. (F)
GLY 5322 Igneous Petrology and Geochemistry (3). Presentation and discussion of current topics in igneous petrology and geochemistry in a seminar format. Prerequisite: Permission of the instructor. (S)

GLY 5329 Planet Earth: Solid Earth (1). Essentials of the formation and evolution of the crust mantle and core of the earth. Composition and physical properties. Generation of magmas, their geochemistry.
GLY 5335 Metamorphic Geology (3). Metamorphic mineralogy; characteristics of low, medium and high pressure metamorphic rocks; pressure-temperature determinations; metamorphic textures; modeling and determination of P-T-t paths. (F)
GLY 5335L Metamorphic Geology Lab (1). Petrographic examination of metamorphic rocks. (F)
GLY 5346 Sedimentary Petrology (3). Systematic study of sedimentary rocks. Special emphasis on genetical aspects, geochemistry, paleontology, mineralogy, and microfacies. Emphasizes microscopic study. Prerequisite: GLY 4551. Corequisite: GLY 5346L. (F in alternate years)
GLY 5346L Sedimentary Petrology Lab (1). Laboratory studies of sediments and sedimentary rocks with emphasis on microscopic analyses and geochemical techniques. Prerequisites: GLY 4551 and GLY 4551L. Corequisite: GLY 5346. (F in alternate years)
GLY 5408 Advanced Structural Geology (3). Advanced treatment of the theory of rock mechanics to solve problems of natural rock deformation. Prerequisites: GLY 4400, MAC 3413, or permission of the instructor. Corequisite: GLY 5408L. (S)
GLY 5408L Advanced Structural Geology Lab (1). Problem solving in theory of rock deformation. Experimental procedures in rock mechanics. Corequisite: GLY 5408. (S)
GLY 5415 Caribbean Geology and Tectonics (3). Integration of geologic and geophysical data to understand the evolution and present tectonic configuration of the Caribbean area. Prerequisite: Permission of the instructor.
GLY 5425 Tectonics (3). Properties of the lithosphere; plate kinematics and continental drift; characteristics of plate boundaries; mountain belts; formation of sedimentary basins. Prerequisites: GLY 1010, 1100, 4400, 4300, 3202 or permission of the instructor. (S)

GLY 5457 Geophysical Data Analysis (3). Computer analysis and modeling of geophysical data and digital images. Statistical description of data, linear inverse theory, digital signal and image processing. Computer exercises with MATLAB. Prerequisites: GLY 4450, MAP 2302, MAS 3105, PHY 2048, PHY 2049 or permission of the instructor. Corequisite: GLY 5457L. (F)
GLY 5457L Analysis of Geophysical Data Lab (1). Field and laboratory applications of geophysical techniques. Computer aided analysis and three-dimensional modeling of gravity and magnetic data. Prerequisites: GLY 4450, PHY 2048, PHY 2049, MAC 2311, MAC 2312, MAP 2302. Corequisite: GLY 5457. (F)
GLY 5475 Exploration Geophysics (3). New in depth review of geophysical methods used in exploration and environmental geophysics. Digital data processing; Seismic methods; potential fields; electrical and EM methods; ground penetrating radar. Prerequisites: MAC 2312, PHY 2049 or PHY 2054.
GLY 5593 Topics in Paleoclimatology (3). Broad concepts in paleoclimatology are reviewed and discussed.

Topics include climate models, Quaternary climates, dating and pre-Quaternary climates. Prerequisite: Permission of the instructor.
GLY 5495 Seminar in Geophysics (3). Detailed investigation of current geophysical techniques, including topics on instrument design. Prerequisites: GLY 5457 or permission of the instructor. (S)
GLY 5497 Topics in Structural Geology and Tectonics (3). Selected advanced topics in structural geology and rock deformation. Latest advances in crustal tectonics. Prerequisite: GLY 5408. (S)
GLY 5518 Advanced Stratigraphy (3). Principles of stratigraphy and the geologic time scale applied to the sedimentary rock record, to determine dynamics of sedimentation, depositional environments and correlation. Prerequisite: Permission of the instructor. Corequisite: GLY 5518L.

GLY 5518L Advanced Stratigraphy Laboratory (1). Training in laboratory techniques to analyze sedimentary rocks for depositional reconstruction and correlation. Prerequisite: Permission of the instructor. Corequisite: GLY 5518.
GLY 5599 Seminar in Stratigraphy (3). Discussion of research projects and/or current literature in stratigraphic correlation as derived from sedimentologic principles and biozonation. Prerequisite: GLY 5346. (F,S)
GLY 5608 Advanced Paleontology I (3). Discussion of current literature and research projects on evolution, systematics functional morphology, with reports by members of the seminar. Prerequisites: GLY 4603 or permission of the instructor. (F)
GLY 5621 Caribbean Stratigraphic Micropaleontology (3). Microscopic study of biostratigraphic type sections from the Caribbean area. Emphasis on planktonic foraminifera and radiolaria, paleoecologic and paleoclimatic interpretations. Prerequisites: GLY 4603 or permission of the instructor. (F)
GLY 5627 Workshop: Microfossil Paleoenvironments (2). Recent foraminifera and diatoms are sampled, prepared and identified from marine to freshwater facies. Taxon distributions are used to interpret paleoenvironments.
GLY 5628 Radiogenic Isotope Methods (3). Theory and practice of radiogenic isotope ratio measuring techniques. Use of class-100 clean room facilities, and introduction to thermal ionization mass spectrometry. Prerequisite: General Chemistry.
GLY 5655 Topics in Paleobiology (1-3). Various concepts in paleobiology are reviewed and discussed, based on readings of the literature, including journal articles and books. Prerequisite: Permission of the instructor.

GLY 5710 Watershed Hydrology (3). Hydrologic processes on watershed, water budgets, effects on water quality, field investigative methods using tracers and hydrometric measurements, hydrologic and hydrochemical models.
GLY 5736 Marine Geology and Geochemistry (3). Examination of ocean floor provinces and the evolution of Earth's ocean basins. Interpretation of the distribution and
geophysical and geochemical characteristics of seafloor basalt and sediments. Prerequisite: Permission of the instructor.
GLY 5737 Coastal Processes and Environments (3). Focus on the physical processes that cause erosion and shape our coastlines and the consequences for human development and habitation of this dynamic landscape. Prerequisite: Permission of the instructor.
GLY 5754 Applied Remote Sensing in the Earth Sciences (3). Application of remote sensing and image analysis in the earth sciences; qualitative and quantitative satellite image and air photo interpretation. Emphasis is on use of computer processing packages. Prerequisites: GLY 1010 or permission of the instructor.
GLY 5758 GIS and Spatial Analysis for Earth Scientists (3). Application of GIS technology to spatial problems in the Earth Sciences. Topics include: spatial statistics, sampling theory, surface estimation, map algebra, and suitability modeling.
GLY 5785 Caribbean Shallow-Marine Environments (3). Field study of multiple tropical environments in the Caribbean area. Dynamic processes and coastal evolution in response to natural and human-induced changes.
GLY 5786 Advanced Field Excursion (3). A study of the geology of a selected region of the world followed by 1012 day field trip in order to study the field relationships of the geologic features. Special emphasis is given to stratigraphic, structural and tectonic relationships of lithic package. Prerequisite: Permission of the instructor. (SS)
GLY 5808 Mining Geology (3). Application of theoretical models of ore formation to exploration and the use of geochemical and geophysical techniques in the search for ore deposits. Prerequisites: GLY 4300 and CHM 1046. (F)
GLY 5816 Economic Geology (3). Economically important metal deposits of sedimentary, igneous and hydrothermal origins and their geologic settings and characteristics. Prerequisites: GLY 1010, GLY 4300, CHM 1045, CHM 1046. (S)
GLY 5826 Hydrogeologic Modeling (3). Techniques used in modeling groundwater flow and solute transport in geologic systems. Case studies of significant aquifers. Prerequisites: GLY 5827, MAP 2302, or permission of the instructor. (S,SS)
GLY 5827 Hydrogeology (3). Physics of flow in geological media. Saturated and unsaturated flow, groundwater and the hydrologic cycle, estimating hydraulic parameters of aquifers, introduction to chemical transport. Prerequisites: GLY 1010, MAC 2312, and PHY 2053, or permission of the instructor. (F)
GLY 5827L Hydrogeology Lab (1). Laboratory, field, and computer exercises to complement GLY 5827. (F)
GLY 5828 Chemical Hydrogeology and Solute Transport (3). Quantitative analysis of hydrologic, geologic, and chemical factors controlling water quality and the transport and fate of organic and inorganic solutes in the subsurface. Prerequisite: GLY 5827. (S)
GLY 5834 Field Hydrogeology (3). Field methods in hydrogeology. Drilling, logging, wells, data loggers, hydraulic conductivity/transmissivity measurements, purging, field chemistry parameter measurements,
sampling methods. Prerequisites: GLY 4822 or permission of the instructor.

GLY 5835 Introduction to Lattice Boltzmann Methods (3). The course will provide an introduction to Lattice Boltzmann methods for fluid dynamics simulation. Emphasis on multiphase fluids. Prerequisites: Programming skills, graduate standing, permission of the instructor.
GLY 5875 Applications of Transmission Electron Microscopy (3). An introduction to theory and practical use of the JEOL JEM-1200EX II, Transmission Electron Microscope. Students will learn to prepare specimens and use for digital recording of publishable images. Prerequisites: Graduate standing or permission of the instructor.

GLY 5888 Coastal Hazards and Mitigation (3). Focus on the processes responsible for tsunamis, storm surges, coastal erosion, land subsidence, sea level rise, etc. and their mitigation.
GLY 5889 Geology for Environmental Scientists and Engineers (3). Characterization of rocks and rock masses; geological maps; seismic hazards; weathering of rocks; hydrologic cycle; slope stability; coastal processes; geophysical techniques. Course includes field trips in the South Florida region. Prerequisites: CHM 1045, GLY 1010 or permission of the instructor.(S)
GLY 6061 Geoscience Systems (3). Description and history of the deep Earth, shallow Earth, Earth's surface and Earth's atmosphere that form one great dynamic system. Discussion of research, discoveries and debates from classic and current scientific articles.

GLY 6159 Stratigraphy of the Circum Caribbean Region (4). Detailed lithostratigraphic and biostratigraphic analyses of Caribbean islands, Central America, northern South America and Caribbean basin. Prerequisites: GLY 5621 or permission of the instructor. (SS)
GLY 6247 Geochronology and Radioactive Isotope Geochemistry (3). Use of naturally-occurring radioactive and radiogenic isotopes to determine ages of earth events and rates of earth processes at timescales ranging from the recent past through the age of the earth. Prerequisites: GLY 5246 or permission of the instructor. (S)
GLY 6328 Advanced Igneous Petrology (3). Interpretation of igneous rocks; chemistry and physics of magma generation and crystallization; origin of major igneous rock series with emphasis on tectonic controls. Prerequisite: Permission of the instructor. Corequisite: GLY 6328L. (S)
GLY 6328L Advanced Igneous Petrology Lab (1). Identification of rocks using microscopic and microprobe techniques. Prerequisite: Permission of the instructor. Corequisite: GLY 6328. (S)
GLY 6337 Metamorphic Phase Equilibria (3). Theory and methods of calculation of metamorphic phase equilibria and P-T paths using appropriate analysis of composition space, activity models, geothermometry, geobarometry. Origin and interpretation of zoning in metamorphic minerals. Prerequisites: GLY 5335 or permission of the instructor. (F)

GLY 6345 Sedimentary Petrography (3). Comparative study and fundamental observations of sedimentary rocks in hand specimens and under the petrographic microscope; their classification, theoretical and practical implications. Prerequisites: GLY 4551 or permission of the instructor. (F)
GLY 6345L Sedimentary Petrography Laboratory (1). Laboratory studies of sedimentary rocks in thin section. Prerequisites: GLY 4551 or permission of the instructor. Corequisite: GLY 6345. (F)
GLY 6353 Microfacies Analysis (3). GLY 6353L Microfacies Analysis Laboratory (1). Identification and interpretation of the fossil and mineralogical constituents of sedimentary rocks in thin section. Emphasis is placed on the paleoecological significance of fossil remains in carbonates. Prerequisites: GLY 4551 or permission of the instructor. (S)
GLY 6392 Topics in Igneous Petrology and Geochemistry (3). Research seminar in contemporary petrology and geochemistry. Student presentation on thesis research. Prerequisites: GLY 5322 or permission of the instructor. ( $\mathrm{F}, \mathrm{S}$ )
GLY 6427 Quantitative Geotectonics (3). Application of continuum mechanics and heat transfer to problems in geology. Observational constraints on earth properties. Emphasis is on problems relating to the earth's lithosphere. Prerequisites: GLY 4450, GLY 4400, GLY 5425 and MAP 2302 or permission of the instructor. ( $F$ in alternate years)
GLY 6444 Quantitative Analysis of Joints and Faults (3). Application of fracture mechanics to geologic problems, including the analysis of local and regional stress fields, bedrock fracture systems, estimation of fracture related strain, and the influence of mechanical properties on rock failure. Prerequisites: GLY 4400, GLY 4450, GLY 5425 or permission of the instructor. (F in alternate years)
GLY 6447 Advanced Topics in Structural Geology and Tectonics (3). Detailed exploration of selected research topics in structural geology and tectonics. Prerequisites: GLY 5408 or permission of the instructor. (F,S)
GLY 6448 Stress in the Earth's Crust (3). The distribution and magnitude of stress in the earth's crust, laboratory derived values for earth stress, in situ stress measurements, regional stress patterns and sources of stress in the lithosphere. Prerequisites: GLY 4400, GLY 4450, GLY 5425 or permission of the instructor. (S)
GLY 6468 Paleomagnetism (3). Physics of rock and mineral magnetism, geomagnetism and paleomagnetism; field and laboratory methods, geomagnetic field behavior, magnetostratigraphy, apparent polar wander. Prerequisites: GLY 4400, GLY 3202 or permission of the instructor. Corequisite: GLY 6468L. (F)
GLY 6468L Paleomagnetism Laboratory (1). Physics of rock and minerals magnetism, geomagnetism and paleomagnatism; field and laboratory methods, geomagnetic field behavior, magneostratigraphy, apparent polar wander. Prerequisites: GLY 4400, GLY 3202 or permission of the instructor. Corequisite: GLY 6468. (F)

GLY 6485 Physics of the Earth (3). Properties and dynamics of the Earth's interior studied from a physical
perspective. Topics include heat flow, fluid flow, earthquake seismology. Prerequisites: GLY 4450 and MAC 2313. (F)
GLY 6496 Advanced Topics in Geophysics (3). Discussion of research projects and current literature in geophysics. Prerequisite: GLY 5495. (S)
GLY 6517 Basin Analysis (3). Analysis of sedimentary basins based on their origin, paleogeographic evolution and tectonic setting. Emphasis is placed on the tectonic evolution and economic potential of sedimentary basins. ( S in alternate years)
GLY 6517L Basin Analysis Lab (1). Analysis of different types of sedimentary basins using a case history approach. Corequisite: GLY 6517. (S in alternate years)
GLY 6595 Topics in Sedimentology (3). Oral presentation by students of research projects and survey of relevant literature with reports by members of the seminar. Prerequisite: GLY 5346. (S in alternate years)
GLY 6626 Stratigraphic Micropaleontology: Foraminifera (3). Nomenclature, taxonomy, and biostratigraphy of Cretaceous and Cenozoic planktonic foraminifera. Studies of stratigraphically important taxa from Caribbean land sections, piston cores, and DSDP/ODP sites. Prerequisites: GLY 5621 or permission of the instructor. (F in alternate years)
GLY 6627 Stratigraphic Micropaleontology: Radiolaria (3). Nomenclature, taxonomy and biostratigraphy of Cretaceous and Cenozoic radiolaria. Studies of stratigraphically important taxa using Caribbean land sections, piston cores, and DSDP/ODP sites. Prerequisites: GLY 5621 or permission of the instructor. (S in alternate years)
GLY 6628 Stratigraphic Micropaleontology: Calcareous Nannofossils (3). Nomenclature, taxonomy, and biostratigraphy of triassic to recent nannofossils. Intensive training of identification of marker taxa using land and DSDP/ODP sites. Prerequisites: GLY 5621 or permission of the instructor. ( S in alternate years)
GLY 6690 Topics in Paleontology (3). Oral presentation and discussion of current research projects and relevant literature, with reports by members of the seminar. Prerequisites: GLY 5608 or permission of the instructor. (F)

GLY 6809 Hydrothermal Geochemistry (3). The mineralogy, thermodynamics, chemistry and isotope chemistry of hydrothermal and geothermal systems, with an emphasis on the transport of solutes in hydrothermal solutions and ore-forming processes. Prerequisites: GLY 5246 , CHM 3400 or permission of the instructor. ( S in alternate years)
GLY 6817 Topics in Economic Geology (3). Current research directions in Economic Geology and Geochemistry, including ore formation processes, exploration and remediation.
GLY 6862 Numerical Methods in the Earth Sciences (3). Numerical techniques used by geoscientists, with emphasis on finite-difference and finite-element techniques to solve equations governing fluid flow and mass transport in geological systems. Prerequisites: MAP

2302, GLY 5827 and knowledge of one programming language or permission of the instructor.
GLY 6896 Advanced Topics in Hydrology (1-3). Research-oriented seminar course involving analysis of several contemporary topics chosen from the current literature in hydrology. Specific topics vary. May be repeated. Prerequisites: GLY 5827 and one other graduate level hydrology/hydrogeology course, or permission of the instructor. ( S in alternate years)
GLY 6910 Supervised Research (1-12). Research apprenticeship under the direction of a professor or a thesis advisor. Prerequisites: Full graduate admission and permission of the instructor.
GLY 6941 Supervised Teaching in the Geosciences (1). Teaching a geological discipline under the supervision of departmental faculty. Prerequisite: Graduate standing.
GLY 6945 Proposal Writing (1). A graduate course aimed at introducing students to grant proposal writing.
GLY 6949 Professional Internship in Earth Science (1-
3). Semester or summer term of supervised work at an approved government or industry laboratory or field station. Prerequisite: Graduate standing.
GLY 6966 Master's Comprehensive Examination (0). Oral and written examinations on knowledge in general geology and the student's field of concentration. Schedule to be selected in consultation with the Graduate Committee. Prerequisite: Advanced graduate standing. (F,S,SS)
GLY 6971 Master's Thesis (1-12). Field and/or laboratory research project toward thesis. Selected in consultation with major professor. Prerequisite: Permission of the major professor. (F,S,SS)
GLY 7980 Ph.D. Dissertation (1-12). Field and/or laboratory research directed towards completion of the doctoral dissertation. Selected in consultation with major professor. Prerequisite: Permission of the Major Professor and Doctoral Candidacy. (F,S,SS)
ISC 5150 Introduction to Research in Earth and Environmental Sciences (2). Introduction to research in Earth and Environmental Sciences: nature of scientific inquiry, development of research projects, data analysis, publication and presentation of research results.
ISC 5151 Earth and Environmental Graduate Seminar (1). Weekly seminar emphasizing research- and practiceoriented guest speaker series. Critical examination of current research topics by students, faculty, visiting speakers. Brief student reports. Prerequisite: Permission of the instructor.
ISC 6152 Earth and Environment Advanced Graduate Seminar (1). Weekly seminar emphasizing research- and practice-oriented guest speakers. Critical examination of current research topics by students, faculty, visiting speakers. Student research presentations. Prerequisite: ISC 5151.
ISC 6153 Environments of a Changing Planet (3). Interactions of physical, chemical and biological components and processes that have led to recent past and present environmental development, and possible future changes.

MET 5016 Physics of Atmospheres I (3). A quantitative examination of atmospheric radiation, thermodynamics and clouds, with a brief introduction to dynamics and applications to weather and climate. Prerequisites: Senior or first-year graduate student in physical science, computer science, or engineering.
MET 5017 Physics of Atmospheres II (3). Continuing examination of atmospheric dynamics, waves and inatabilities, with applications to models, weather and climate. Prerequisites: Senior or first-year graduate student in physical science, computer science, or engineering.
MET 5105 Planetary Climate Change: Processes and Impacts (3). Interdisciplinary study of the reasons the Earth's climate is changing, the climates past and expected future variations, impacts on the human and natural environments, and ways to reduce them. Prerequisite: Graduate standing.
MET 5135 Climate Dynamics (3). Global energy cycle, atmospheric radiative transfer, surface energy balance, hydrologic cycle, atmosphere/ocean circulation, climate feedbacks, natural variability, anthropogenic climate change. Prerequisite: Graduate standing.
MET 5305 Boundary Layer Meteorology (3). General survey of boundary meteorology. Topics include atmospheric boundary layer, (ABL), role in exchange and circulation, use in interpreting wind, temperature, and moisture distribution, hurricane boundary layer wind, and turbulent structures. Prerequisites: PHY 2048 and PHY 2049.

MET 5311 Dynamic Meteorology I (3). To study atmospheric phenomena on a rotating planet. It intends to lead towards an understanding of the theories of the atmospheric motion by applying concepts of Math., thermodynamics, and dynamics. Prerequisites: PHY 2048, PHY 2049.
MET 5312 Atmospheric Dynamics II (3). Second graduate-level course in Atmospheric Dynamics. Topics include 2 and 3-dimensional Rossby waves, baroclinic and other instabilities, ageostrophic motions, and general circulation. Prerequisites: Atmospheric Dynamics I and graduate standing in Atmospheric Sciences.
MET 5355 Severe and Hazardous Weather (3). Focuses on introducing thunderstorms, squall lines, mesoscale convection systems, and their interactions with synoptic scale weather. Prerequisites: MET 3003 or permission of the instructor.
MET 5412 Remote Sensing in Meteorology (3). An overview of satellite and radar remote sensing including the principles of atmospheric radiative transfer, the retrieval of atmospheric variables, and basic principles of interpretation. Prerequisites: PHY 2048 and PHY 2049.
MET 5530 Hurricane Meteorology and Impacts (3). Hurricane formation, motion, and impacts on the graduate level. Adds critical reading of the scientific and disaster literatures and quantitative problem sets to the undergraduate experience. Prerequisite: Permission of the instructor.
MET 5533L Weather Discussion and Analysis (1). Focus on analysis and forecasting of middle-latitude and tropical weather systems. Students will be required to give
weather forecast discussions and to work on a research project. Prerequisites or Corequisites: MET 3502 or permission of the instructor.
MET 5561 Midlatitude Synoptic Meteorology (3). Focus on analysis and forecasting of middle-latitude weather systems. Examine the structure and dynamic of these systems by integrating weather observation with the current state of dynamic theory. Prerequisites: MET 3003 or permission of the instructor.
MET 5561L Midlatitude Synoptic Meteorology Lab (1). Focus on analysis and forecasting of middle-latitude weather systems. Develop an understanding of the weather forecasting process, and gain experience in communicating weather forecasts. Prerequisites: MET 3003 or permission of the instructor.
MET 5707 Operational Meteorology Research I (3). Training at NOAA's Miami facilities, focusing in upper air observations, in preparation for careers in forecasting. Offered for Pass/Fail only. Prerequisites: Graduate standing in Atmospheric Science and permission of the instructor.
MET 5708 Operational Meteorology Research II (3). Second semester training at NOAA's Miami facilities, focusing on use of AWIPS system and forecasting procedures, in preparation for careers in forecasting. Offered for Pass/Fail only. Prerequisites: MET 5707 and permission of the instructor.
MET 6971 Thesis (1-12). Individual graduate-level research supervised by a professor in the student's field of specialization or interest, leading toward a completed thesis. Prerequisites: Graduate standing in Geosciences and satisfactory progress toward the degree.
MET 7980 Ph.D. Dissertation (1-9). Continuing graduatelevel research under the supervision of the student's advisor doctoral committee. Writing, revision, defense, and completion of a doctoral dissertation. Prerequisites: Graduate standing in Geosciences and satisfactory progress toward the doctoral degree.
OCC 6413 Biogeochemistry of Estuaries and Coasts (3). A survey of estuarine and coastal ecosystems with particular emphasis on how physical, geological, chemical, and biological processes act to regulate ecosystem function. Prerequisites: PCB 3043, EVR 3013 or equivalent.
OCG 6105 Advanced Marine Geology (3). OCG 6105L Advanced Marine Geology Lab (1). Application of geophysical and geological data to the interpretation of the earth's crust under the oceans, including the data provided by the Deep-Sea Drilling Project, dredging, piston-coring, gravity magnetism, and seismicity. Special emphasis will be given to the genesis and evolution of the Atlantic and Caribbean margins, and their potential for oil resources. Prerequisites: GLY 4730 or permission of the instructor. (F in alternate years)
OCG 6664 Paleoceanography (3). Mesozoic/Cenozoic development of the major ocean basins, their circulation and sedimentation history. Use of micropaleontologic and stable isotopic techniques in paleoceanographic analysis. Prerequisites: GLY 4730 or permission of the instructor. (F in alternate years)

SWS 5305 Advanced Soil Resources Analysis (3). A review of soil science concepts: analysis of physical and chemical properties of soils and nutrient cycling, emphasizing the soils of South Florida. Prerequisites: BSC 1010, BSC 1011, CHM 2210, CHM 2211; or permission of the instructor.

## English

Heather Russell, Associate Professor and Chaiperson
Jacqueline Amorin, Instructor
Joan L. Baker, Associate Professor
Lynne Barrett, Professor
Lynn M. Berk, Professor Emerita
Heather Blatt, Assistant Professor
Chet Breaux, Instructor and Coordinator of the Digital Writing Studio
Nathaniel Cadle, Associate Professor
Phillip Carter, Assistant Professor
Michael Creeden, Senior Instructor and Associate Chair
Maneck Daruwala, Associate Professor
Debra Dean, Associate Professor
Nandini Dhar, Assistant Professor
Vernon Dickson, Associate Professor
John Dufresne, Professor
Denise Duhamel, Professor
Paul Feigenbaum, Associate Professor
Virginia Mueller Gathercole, Professor and Director of Linguistics Program
Michael Gillespie, Professor
Paula Gillespie, Associate Professor and Director of the Center for Excellence in Writing
Justin Grant, Instructor
Kimberly Harrison, Professor and Director of Writing Programs
Bruce Harvey, Associate Professor and Interim Director of the Center for the Humanities in the Urban Environment
Tometro Hopkins, Associate Professor
Kenneth Johnson, Associate Professor
Jonathan Kotchian, Instructor
Anna Luszczynska, Associate Professor
Craig McGill, Professional Advisor
Campbell McGrath, Professor
Asher Milbauer, Professor and Director of Exile Studies
Certificate Program
Kim Miles, Instructor
Jason Pearl, Associate Professor
Martha Schoolman, Assistant Professor
Richard Schwartz, Professor Emeritus
Vanessa Sohan, Assistant Professor
Lester Standiford, Professor and Director of Creative Writing Program
Andrew Strycharski, Instructor and Director of the Film Certificate Program
James Sutton, Associate Professor
Luke Thominet, Assistant Professor
Ellen Thompson, Associate Professor
Julie Wade, Assistant Professor
Donald Watson, Professor Emeritus
Donna Weir-Soley, Associate Professor
Barbara Weitz, Instructor
Shelley Wick, Instructor
Cayce Wicks, Instructor
Feryal Yavas, Senior Lecturer
Mehmet Yavas, Professor
The English Department offers three graduate degree programs: Creative Writing, Linguistics and Literature. The descriptions of the Creative Writing and the Linguistics programs can be found under their respective headings in this catalog.

## Master of Arts in English

To be admitted into the Master's program in English, a student must meet the University's graduate admission requirements and have:

1. A bachelor's degree in English or a related field;
2. A minimum 3.0 undergraduate grade point average;
3. Official GRE scores;
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
5. Two letters of recommendation from undergraduate or graduate professors;
6. A personal essay; and
7. Those who might be chosen for teaching assistantships will be interviewed by at least one member of the committee.

## Degree Requirements

The Master's degree program consists of 30 semester hours of course work at graduate level (course numbers 5000 or above) and a thesis ( 6 credits). A maximum of six graduate semester hours may be transferred into the program subject to the approval of the graduate committee.

## Required Courses

ENG 5048 Literary Theory 3
LIT 5405 Literature, Language and Society 3
Electives: A maximum of 24 semester hours (5000 or 6000) level may be taken at either campus.

## Thesis

LIT $6970 \quad$ Master's Thesis 6
The student must complete a research thesis. The topic must be approved by the faculty member who will supervise the research, and then approved by the Thesis Committee. The thesis will be accepted only after being read and approved by a Thesis Committee. An oral defense is required before the Thesis Committee.

Below is a list of all graduate courses that are offered by the English Department. Graduate standing is required for admission into all graduate courses.

## Course Descriptions

## Definition of Prefixes

AML - American Literature; CRW-Creative Writing; ENG-English-General; ENL-English Literature; LIN - Linguistics; LIT-Literature.

AML 5305 Major American Literary Figures (3). Each section will consider the lifework of several authors such as Hawthorne, Melville, Whitman, Twain, James, Faulkner, Mailer, Wright, Baldwin. May be repeated.
AML 5505 Periods in American Literature (3). The literature and criticism of one specified period of American literature, such as Colonial, Federal, Transcendental, Antebellum, and Twentieth Century. May be repeated with change of period.

CRW 6806 Teaching Creative Writing (3). The course will prepare graduate students (and teachers from secondary schools and community colleges) to teach introductory classes and workshops in Creative Writing. Students will observe and participate in the department's CRW 2001 courses. Prerequisites: CRW 3111, 3311, or graduate standing, or permission of instructor.
ENC 5235 Grant Writing (3). Focus on rhetorical context of grant writing and the application of rhetorical concepts to the discourse of grant writing.
ENG 5009 Literary Criticism and Scholarship (3). Techniques and goals of humanistic research, bibliography, and critical commentary.
ENG 5018 Practical Criticism (3). Applies various critical theories -e.g. the formalistic, historical, structural, archetypal, sociological, etc. -to specific literary productions.
ENG 5026 Advanced Textual Reading (3). The study of selected texts for interpretation from different critical and theoretical perspectives. May be repeated. Prerequisites: Admission to the graduate program in English or by permission of the instructor.
ENG 5048 Literary Theory (3). An introduction to issues in the nature of literature, the philosophy of criticism, and methods of interpretation. The theoretical foundations for literary study. Prerequisites: Admission to the graduate program in English or by permission of the instructor.
ENG 5058 Form and Theory of Contemporary Literature (3). Various approaches and theories of practice in the major genres of imaginative writing, including development and articulation of the creative esthetic. May be repeated. Prerequisite: Permission of the instructor.
ENG 5907 Independent Study (VAR). Individual conferences, assigned readings, reports on independent investigations, with the consent of the chairperson.
ENG 5950 Special Project in English (1-3). Pursuit of projects involving relationship of profession to university and/or community and/or research issues in pedagogy, literature, or other areas. Prerequisites: Consent of Graduate Director or Department Chair. Corequisite: Consent of project supervisor.
ENG 5971 Thesis and Dissertation Workshop (3). A workshop providing practice in the type of writing, research, and analytical skills required for successful graduate study. Prerequisite: Graduate standing.
ENG 6909 Independent Study (VAR). Individual conferences, assigned readings, reports on independent investigations, with the consent of the Chairperson.
ENG 6935 Special Topics in College Pedagogy (3). The pedagogy of teaching a designated area of college and university English, such as Shakespeare, American literature, film studies, creative writing, or linguistics. Course content and organization to be determined by the individual professor. Course does not meet certification requirements.
ENG 6937 Teaching College Composition (3). A seminar-workshop introducing the pedagogy of academic and professional writing courses at the university and college level, to include traditional rhetoric, writing as
process, the modes of discourse, and post-structuralist theory. Course does not meet certification requirements. Prerequisite: Graduate standing. Corequisite: College composition practicum.
ENG 6942 College Composition Practicum (1). Practical experience in the teaching of English at the university and college level through supervised activities to include tutorials, evaluating, and commenting on student essays, supervised classroom discussion and teaching. Course does not meet certification requirements.

ENL 5220 Major British Literary Figures (3). Each section will consider the lifework of an author such as Chaucer, Spenser, Milton, Pope, Wordsworth, Dickens, Browning, Joyce, or others. May be repeated.
ENL 5505 Periods in English Literature (3). The literature and criticism regarding one specified period of English Literature, such as Medieval, Renaissance, Victorian, Twentieth Century, and Contemporary. May be repeated with change of period.
LIN 5019 Metaphor, Language, and Literature (3). Examines nature of metaphor as a cognitive phenomenon; how we use metaphor to conceptualize basic physical and cultural notions; role of cognitive metaphor in literature. Prerequisites: LIN 3013 or LIN 5018.
LIN 5211 Applied Phonetics (3). Study of sounds and suprasegmentals of English. Comparison of phonetic features of English with those of other languages. Universal constraints and markedness in learning second/foreign language pronunciation. Prerequisites: LIN 3010, LIN 3013, or LIN 5018 or the equivalent.
LIN 6084 Research Methods and Research Design in Linguistics (3). Introduction to a range of theoretical issues addressed and practical methods used in linguistic studies. Prerequisite: LIN 5715.
LIN 6165 Field Methods (3). Elicitation, recording and analysis of linguistic data in field research. Prerequisite: LIN 5018.
LIN 6226 Phonetics II (3). Acoustic and auditory phonetics. Cross-language speech perception. Feature systems and place of articulation. Stress and rhythm. Experimental phonetics. Prerequisite: LIN 5206.
LIN 6336 Phonology II (3). Optimality in phonological theory. Syllable structure and prosody. Licensing and underspecification in OT. Phonological acquisition and disorders in OT. Can OT account for phonological opacity? Prerequisite: LIN 6323.
LIN 6709 Research Methods in Psycholinguistics and Bilingualism (3). Analysis of the conduct of research in psycholinguistics and bilingualism and the methods used. Corequisite: LIN 5015 or equivalent.
LIN 6773 Introduction to Computational Linguistics (3). Introduction to basic programming using the R programming language and regular expressions.
LIN 6796 Neurolinguistics (3). Exploration of the neural basis for the production and acquisition of language, including multilingual populations.
LIN 6910 Research Project for Publication I (3). Students carry out a comprehensive research project for publishable standard. For Linguistics MA and PhD
students, for the second year Research Paper for Publication. May be repeated. Prerequisite: LIN 6085.
LIN 6911 Doctoral Research Project for Publication (3). Students conduct an in-depth research project as one of the qualifying steps completed in the third year of PhD studies to proceed to the dissertation project for the PhD. May be repeated. Prerequisites: LIN 6085; LIN 6910.

LIN 6946 Practicum (1-2). Pedagogical techniques, syllabus construction, responding to student questions, fostering student participation, collaborative learning, use of technology in the classroom. Prerequisite: A minimum of 18 graduate credit hours completed in Linguistics.
LIT 5358 Black Literature and LiteraryICultural Theory (3). Examines 20C. black literary critical thought. Students interrogate cultural theories and literary texts from African, Caribbean, African-American, Black British and AfroBrazilian communities. Prerequisite: Graduate standing.
LIT 5359 African Diaspora Women Writers (3). Study of black women writers from throughout the Diaspora from the early 19th century to present. Prerequisite: Graduate standing.
LIT 5363 Literary Movements (3). Individual sections will study the authors, works, and audiences involved in such phenomena as Humanism, Mannerism, Romanticism, Symbolism, the Harlem Renaissance, and others. May be repeated.
LIT 5405 Literature, Society, and Language (3). This seminar explores language's relationship to social formation, specifically as it applies to the relationship between literature and social groups and institutions. Prerequisites: Admission to the graduate program in English or by permission of the instructor.
LIT 5426 Authors in their Times (3). A focus on one or more designated authors and the biographical, political and historical context in which they wrote, using current critical and historical approaches. May be repeated. Prerequisites: Admission to the graduate program in English or by permission of the instructor.
LIT 5486 Literature: Continuity and Change (3). Explores the development of a particular literary genre, ideological concept, or cultural tradition over a broad period of time. May be repeated. Prerequisites: Admission to the graduate program in English or by permission of the instructor.
LIT 5487 Texts and Culture (3). The study of the relationship between specified texts and a historically, socially, or conceptually defined culture, such as Vietnam War Narratives, Jewish Literature, or Postmodernism. May be repeated. Prerequisites: Admission to the graduate program in English or by permission of the instructor.

LIT 5934 Special Topics (3). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. May be repeated.
LIT 6934 Special Topics (3). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. May be repeated.
LIT 6935 Master's Colloquium (3). Individual sections study a specific literary topic, selected and presented jointly by several faculty members. May be repeated.

Prerequisites: Admission to the graduate program in English or by permission of the instructor.
LIT 6970 Master's Thesis (1-6). A thesis is required of all graduate students of English, to be written in the final semester done under the supervision of a faculty member. Prerequisites: Admission to the graduate program in English and by permission of the supervising faculty.

## Liberal Studies

Kiriake Xerohemona, Senior Lecturer and Graduate Program Director
Sean Allen-Hermanson, Associate Professor
Michelle Beer, Associate Professor
Kenton Harris, Senior Lecturer
Bruce Hauptli, Professor
Kenneth Henley, Professor
Jennifer Matey, Associate Professor
Monika Piotrowska, Assistant Professor
Kenneth Rogerson, Professor
Laurie Shrage, Professor
Paul Warren, Associate Professor

## Master of Arts in Liberal Studies

The Master of Arts in Liberal Studies (MALS) program is designed for students who possess a strong desire for intellectual growth and challenge and an interest in interdisciplinary research. It offers students individualized programs of graduate study that transcend traditional disciplinary boundaries and yet lie squarely within the venerable tradition of liberal education.
The MALS curriculum includes three sets of activities:

1. Students take a least three Great Ideas Seminars, in which they study the books, theories, and discoveries that have had the greatest impact on the humanities, the natural sciences, and the social sciences.
2. Students completing the Liberal Studies standard curriculum undertake an Interdisciplinary Concentration consisting of at least six courses spanning three different disciplines unified by a theme chosen by the student in consultation with an advisor. Students completing the Philosophy track of the standard curriculum must complete at least six courses in philosophy. Courses should be chosen by the student in consultation with an advisor.
3. Students complete a Capstone Project - either a Master's Thesis or a shorter Master's Essay - on a topic related to the unifying theme of their Interdisciplinary Concentration.
Unlike many graduate programs in Liberal Studies, which have no departmental "home," the MALS program at FIU is housed in the Department of Philosophy, whose members (listed above) have responsibility for coordinating the program, teaching and arranging guest lecturers for the Great Ideas Seminars, helping students develop their Interdisciplinary Concentrations, and ensuring that Capstone Projects are supervised by appropriate experts.

## Degree Requirements: Standard Curriculum

Thirty-three semester credit hours of course work and a cumulative GPA of 3.0 are required for the MALS degree.

## Great Ideas Seminars*

 9Interdisciplinary Concentration*
Master's Essay or Master's Thesis 3 or 6
*33 hours are required of all MALS students.
Students who receive 3 hours for a Master's Essay instead of 6 hours for a Master's Thesis must complete either four Great Ideas Seminars ( 12 hours) or a 21 hour Interdisciplinary Concentration.

## Degree Requirements: Philosophy Track

Thirty-three semester credit hours of course work and a cumulative GPA of 3.0 are required for the MALS degree.
Great Ideas Seminars*
Graduate Coursework in Philosophy Concentration* 18
Master's Essay or Master's Thesis 3 or 6
*33 hours are required of all MALS students.
Students who receive 3 hours for a Master's Essay instead of 6 hours for a Master's Thesis must complete either four Great Ideas Seminars (12 hours) or a 21 hour Interdisciplinary Concentration.
A prospective MALS student may have already completed some graduate level courses either at FIU or elsewhere. Such graduate work may count towards the MALS degree and in particular towards the student's Interdisciplinary Concentration if the following conditions are satisfied.

1. The student received a grade of " $B$ " or better in those courses.
2. Those courses are approved by the student's advisor and the Graduate Program Director. To obtain such approval, the courses must be appropriately related to the theme unifying the student's Interdisciplinary Concentration.
3. No more than six graduate semester hours can be transferred from another university.

## Admission Requirements

To be admitted into the MALS program, a student must:

1. Hold a Bachelor's Degree from an accredited college or university;
2. Have a grade point average of 3.0 or better in upperlevel work;
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required;
4. Submit a substantial writing sample that is judged by the MALS admissions committee to be of satisfactory quality;
5. Interview with the Director of the Program;
6. Submit a personal statement of academic purpose explaining the reasons the applicant has chosen to apply to the program, and indicating how the program will meet his/hers educational goals and experiences;
7. Submit two or three letters of recommendation that describe academic ability and motivation;
8. Submit a curriculum vita explaining academic background, professional, volunteer services and relevant experience.

## Combined BA/MA in Liberal Studies

The combined (4+1) Bachelor/Master of Arts in Liberal Studies offers outstanding undergraduate FIU students in Liberal Studies as well as in majors such as Philosophy the opportunity to earn a Masters degree in only one additional year beyond the BA degree.

The (4+1) program represents two distinct options:

1. Liberal Studies to MALS. This option allows students to complement the undergraduate major with
graduate study in the same discipline as the undergraduate study.
2. Other majors such as Philosophy to MALS. This option allows students to complement the undergraduate major with graduate study in another area.
The goal is to attract outstanding students into the combined program so that they formally apply to the program in the first semester of their senior year (i.e., when they have completed 90 credit hours.) Interested students should speak with the undergraduate advisor as early as possible because careful selection of undergraduate courses in the sophomore and junior years will be essential for admission to the program.

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

Applicants to the accelerated program need a GPA of 3.20. Formal admission to the accelerated program is usually in the first semester of the senior year. Students would be also required to maintain a GPA of at least 3.20 to remain in the program. Participation in this program allows the students to fulfill some graduate program requirements during their senior year. More specifically, students at the senior level may be allowed to earn up to 9 graduate credits that will count towards their MALS degree. Up to 3 graduate courses ( 9 credits) may be used to satisfy both the Bachelor and Masters degree requirements. All double counted courses must be at the 5000 level of higher. Courses to be allowed to be double counted must be approved by MALS. Before starting the graduate program students must have satisfied all general education and core requirements.

The curriculum for the $(4+1)$ MALS will meet criteria identical to those of the MALS program. A student will not be eligible for assistantship funding before completing all requirements for the Bachelors degree. For the double counted courses, students must, in consultation with their graduate program advisor, approve that the student is taking the course for graduate credit. Graduates and undergraduates may have different workloads and grading criteria. The student must earn a grade of " $B$ " or better for these courses to count towards the Masters requirements.

## Admission Requirements

1. Current enrollment in a bachelors degree in Philosophy or Liberal Studies.
2. Completed at least 75-90 credits hours of coursework.
3. Current GPA of a 3.25 or higher.
4. Application to the Department to enroll in the (4+1) MALS program that will include
a) Three letters of recommendation
b) Personal statement [2-3 pages] describing goals and objectives in seeking a combined accelerated degree
c) A 8-25 pages writing sample of satisfactory quality
5. On-line application to the University Graduate School for admission to the MALS program.
6. Positive evaluation by the undergraduate program director.
7. Approval of the graduate admissions committee.
8. In addition to the admission requirements of the
(4+1) MALS program, students must meet all the admission requirements of the University Graduate School.

## Completion Requirements

1. Completion of both the required courses for the BA (33 credits and the required courses for the MALS (33 credits).
a) For the Liberal Studies-to-MALS option, either the 3 Great Ideas Seminars or $3-5000$ or 6000 level courses in Natural Sciences, Humanities or Social Sciences may be used to satisfy both the Bachelors and Masters degree.
b)For other majors such as the Philosophy-toMALS option, either 3 Great Ideas Seminars or 3 - 5000 or 6000 level courses in Natural Sciences, Humanities or Social Sciences may be used to satisfy both the Bachelors and Masters degree.
2. The bachelor's degree must be awarded when the student completes the requirements for the degree. In other words, the bachelor's degree must be awarded before the master's degree.
3. Students in the (4+1) MALS program have up to one year to complete the Master's degree after receipt of the bachelor's degree.
4. Students who fail to meet the one year post BA requirement or who elect to leave the (4+1) MALS program at any time and earn only the BA degree will have the same access requirements to regular graduate program as any other student, but will not be able to use the 9 credits in both the bachelor's and the master's degrees.

## Summary of Degree Requirements

Great Ideas Seminars: 9 hours (minimum*) Interdisciplinary Concentration: 18 hours (minimum*) Master's Essay or Master's Thesis: 3 hours or 6 hours Total Hours:

33 hours (minimum*)
*33 hours of coursework are required of all (4+1) MALS students. However, a maximum of 3 hours is awarded for the "Master's Essay" course as opposed to 6 hours for "Master's Thesis" course. Students who choose the Essay option must complete either 4 Great Ideas Seminars or a 21 hour Interdisciplinary Concentration.

## Course Descriptions

## Definition of Prefixes

IDS - Interdisciplinary Studies.
F-Fall semester offering; S-Spring semester offering
IDS 6931 Great Ideas Seminar: The Age of Science
(3). Great ideas from the natural sciences. Study of the historical development, the evidential basis, and the broader implications of those ideas. Reflection on the nature and methods of modern science. Prerequisite: Graduate standing.
IDS 6937 Great Ideas Seminar: Special Topics (3). Intensive interdisciplinary investigation of a single great idea such as natural selection or infinity. Study of that idea's cross-disciplinary development, its impact, and its uses and misuses. Prerequisite: Graduate standing.
IDS 6938 Great Ideas Seminar: Human Nature (3). Great religious, philosophical, and scientific ideas about human nature. Discussion of the view that human beings have no nature. Study of such thinkers as Confucius, Plato, Darwin, Freud, Skinner, and Sartre. Prerequisite: Graduate standing.
IDS 6939 Great Ideas Seminar: Politics and Society (3). Great ideas in political and social thought from Plato to the present. Topics include political obligation, the nature of the state, social and economic justice, social contract, liberty, the rule of law, and community. Prerequisite: Graduate standing.
IDS 6972 Master's Essay (1-3). For students working on a master's essay. Oral presentation required. Prerequisite: All other coursework for the Master of Arts in Liberal Studies Degree.
IDS 6973 Master's Thesis (1-6). For students working on a master's thesis. Prerequisites: Graduate standing and permission of the instructor.

## Linguistics

Virginia C. Mueller Gathercole, Director and Professor, English
Feryal Yavas, Assistant Director and Senior Lecturer, English
Melissa Baralt, Assistant Professor, Modern Languages
Lynn Berk, Professor Emeritus, English
Jean-Robert Cadely, Associate Professor, Modern Languages
Phillip M. Carter, Assistant Professor, English
Tometro Hopkins, Associate Professor, English
John Jensen, Professor Emeritus, Modern Languages
Peter A. Machonis, Professor, Modern Languages
Ana Roca, Professor Emeritus, Modern Languages
Ellen Thompson, Associate Professor, English
Mehmet Yavas, Professor, English

## Master of Arts in Linguistics

## Admission Requirements

Applicants must meet the University's Graduate School general admissions requirements; GPA of minimum 3.0, two letters of recommendation, and a statement of purpose on the reasons for pursuing an M.A. in Linguistics. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL), for the International English Language Testing System (IELTS), or for the Pearson Test of English (PTE). A total score of 100 on the iBT TOEFL (equivalent to 600 on the paper-based version of the TOEFL), or a score of 6.5 on the IELTS, or a minimum score of 53 on the PTE is required.

## Degree Requirements

The Master of Arts in Linguistics requires 36 graduate hours in Linguistics. Twenty-one of the 36 hours are in core required courses, the remainder in electives. In addition to maintaining an overall 3.0 average in all courses, students must also obtain a minimum of a ' $B$ ' in each of the required courses ('B-' is not acceptable in these courses) and a minimum of a ' $C$ ' in each elective course (' $\mathrm{C}-$ ' is not acceptable). Course work will be as follows:

## Required Courses: $\mathbf{2 1}$ hours, made up of $A$ and $B$ :

A.

LIN 5018 Introduction to Linguistics* 3
LIN 5206 Phonetics 3
LIN 6085 Research Methods in Experimental
Linguistics
LIN 6323 Phonology 3
LIN 6510 Syntax I 3
LIN 6805 Semantics 3

## B. Linguistic Structure Course: $\mathbf{3}$ hours

A student must fulfill this requirement by taking a structure course on a non-Indo-European Language:
LIN 5108
Language Universals
or
LIN 5574
Languages of the World
or
LIN 6572 Structure of a Non-Indo-European Language

## Electives

15 hours more of electives (or 18 more if LIN 5018 has been waived)
*LIN 5018 will only be required of those students who have no or insufficient background in Linguistics. Students with a prior course in linguistics may opt out of this requirement after passing a qualifying exam on the course materials.

## Masters Research Project

All students will be required to produce a research paper of publishable standard by the end of their second year. (LIN 6910, Research Project for Publication I, may be taken to facilitate completion of this requirement.) The research project must be presented in an open forum at the end of the year.

## Combined BA/MA in Linguistics

To be considered for admission to the combined Bachelor's/Master's degree program, students must have completed at least 75 and no more than 90 credits in the Bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the Bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from his/her Bachelor's degree program. Upon conferral of the Bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Enrollment in undergraduate program in English, Spanish, French, or Portuguese at FIU.
2. Must have completed $75-90$ credits.
3. Must have completed LIN 3013/LIN 3010 General Linguistics, LIN 4680 Modern English Grammar, FRE 3780 French Phonetics, or SPN 3733 General Linguistics with a grade of "A".
4. Current GPA of 3.2 or higher.
5. Two letters of faculty recommendation.
6. A 2-4 page statement of purpose, explaining academic plans and goals.

## Recommended Graduate Courses for Undergraduates

The following graduate courses are recommended to BA students. In order to complete their degree requirements, students may double-count up to 12 graduate credits of coursework toward the Bachelor's and M.A. degrees:

## A. English

LIN 5018 Introduction to Linguistics*
LIN $5107 \quad$ History of the English Language
LIN 5108 Language Universals**
LIN 5206 Phonetics***
LIN $5501 \quad$ English Syntax
LIN 5574 Languages of the World**

LIN 6510
LIN 5715 Language Acquisition
LIN 6602 Language Contact
LIN 5601 Sociolinguistics
LIN 5825 Pragmatics
LIN 5934 Special Topics in Linguistics
B. Spanish

LIN 5018 Introduction to Linguistics*
SPN $5705 \quad$ The Structure of Spanish
SPN $5845 \quad$ History of the Language
LIN 5604
SPN 5736
LIN 5603
LIN 5601
LIN 5720
LIN 5825
LIN 5934
C. French

LIN 5018 Introduction to Linguistics*
FRE $5855 \quad$ Structure of Modern French
FRE 5845 History of Language I
FRE 5846 History of Language II
FRE 5508 La Francophonie
FRE 5735 Special Topics in Linguistics
HAI 5235 Haitian Creole Seminar
LIN 5601 Sociolinguistics
LIN $5825 \quad$ Pragmatics
LIN 5720 Second Language Acquisition
LIN 5934 Special Topics in Linguistics

## D. Portuguese

LIN 5018 Introduction to Linguistics*
LIN 5601 Sociolinguistics
LIN $5825 \quad$ Pragmatics
LIN 5720 Second Language Acquisition
LIN $5934 \quad$ Special Topics in Linguistics
*MA core requirement - prerequisite to all other course requirements
**Fulfills the 'structure course' requirement of MA
***Fulfills one of the core requirements of MA

## M.A. Degree Requirements

1.Course Work ( 36 graduate credit hours)

Core Required Courses: (a minimum of " $B$ " is required in core courses)
LIN 5018 Introduction to Linguistics 3
LIN 5206 Phonetics 3
LIN 6085 Research Methods in Experimental Linguistics
LIN 6323 Phonology 3
LIN 6510 Syntax I 3
LIN 6805 Semantics 3
One course about the structure of a non-Indo-European Language:
LIN 5108
Language Universals
or
LIN 5574
Languages of the World
LIN 6572 Structure of a Non-Indo-European Language
Electives: 5 LIN prefixed graduate courses (or 6 , if LIN 5018 has been waived)

## 2. Master's Research Project

3. Awarding of Degrees
a) The BA will be awarded as soon as all BA requirements of the designated undergraduate program are completed.
b) The MA will be awarded after all MA requirements of the Linguistics Program and the BA requirements are completed.

## Course Descriptions

## Definition of Prefixes

LIN - Linguistics; MHF-Mathematics: History and Foundations.
F-Fall semester offering; S-Spring semester offering
LIN 5017 Cognitive Linguistics (3). Explores the nature of human reason and categorization as revealed by language. Examines the role of metaphor, imagination, and bodily experience in human thought processes. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5018 Introduction to Linguistics (3). Introduction to linguistic theory and analysis, with special emphasis on the major components of languages and modern approaches to their analysis. (F)

LIN 5019 Metaphor, Language, and Literature (3). Examines the nature of metaphor as a cognitive phenomenon; how we use metaphor to conceptualize basic physical and cultural notions; role of cognitive metaphor in literature. Prerequisites: LIN 3013 or LIN 5018.

LIN 5107 History of the English Language (3). Study of the development of the grammar and vocabulary represented in samples of the English language from the 8th century to modern times. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent. (F)
LIN 5108 Language Universals (3). Universal properties of language from two major perspectives: those of Typologists and of Universal Grammarians. A variety of linguistic structures and theoretical explanations are examined. Prerequisites: LIN 3013, or LIN 3010, or LIN 5018, or the equivalent.
LIN 5146 Historical and Comparative Linguistics (3). The study of linguistic methodology for determining historical and genetic relationships among languages. Diachronic syntax and its methodology will be included. The relevance of historical and comparative linguistics to similar processes found in language acquisition and to socio-linguistics will be studied. Prerequisite: LIN 5206.
LIN 5206 Phonetics (3). The study of the articulatory mechanisms used in producing speech sounds and of their acoustic properties. Ear training in the phonetic transcription of speech sounds used in the world's languages. (F)
LIN 5207 Acoustic Phonetics (3). Introduction to principles of acoustic and instrumental phonetics, including the physics of speech sounds and use of the sound spectrograph and other instruments. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent, plus one additional course in phonetics or phonology. Co-requisite: One of the prerequisites may be counted as a co-requisite.

LIN 5211 Applied Phonetics (3). Study of sounds and suprasegmentals of English. Comparison of phonetic features of English with those of other languages. Universal constraints and markedness in learning second/foreign language pronunciation. Prerequisites: LIN 3010, LIN 3013, or LIN 5018 or the equivalent.
LIN 5431 Morphology (3). The study of linguistic methodology for determining the morphological and syntactic structures of languages. Distinct theoretical approaches to analysis will be emphasized. Recent developments in linguistics that bear on languageuniversal and language-specific aspects of morphology. Prerequisite: LIN 6323.
LIN 5501 English Syntax (3). This course will focus on syntactic analysis of English. Although the course itself is non-theoretical, it uses a variety of underlying theoretical approaches to train students in syntactic analysis.
LIN 5574 Languages of the World (3). Introduces the student to the richness of human linguistic diversity while demonstrating concurrently the underlying universality of human language. Prerequisites: LIN 3010, LIN 3013, or LIN 5018 or the equivalent.
LIN 5601 Sociolinguistics (3). Principles and theories of linguistic variation with special attention to correspondences between social and linguistic variables. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5603 Language Planning: Linguistic Minority Issues (3). Introduction to the field of language planning. Minority linguistic issues in developing and developed nations: official languages, endangered languages, and language as problem and/or resource. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5604 Spanish in the United States (3). An examination of the sociolinguistic research into Spanish in the U.S.: varieties of Spanish, language attitudes, language contact and change, and aspects of language use. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5613 Dialectology (3). The geography of language variation: linguistic geography, atlases, national and regional studies. Dialectology within a modern sociolinguistic framework; research approaches. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5625 Studies in Bilingualism (3). Readings and analysis of bilingual programs and binational goals. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5689 Seminar in Lexicon Grammar (3). This course introduces students to research in Lexicon Grammar -syntactic analyses based on a formal classification of large portions of the lexicon. Idioms and NLP applications are also discussed. Prerequisites: LIN 5018 and one structure course (e.g. LIN 5501, SPN 5705, or FRE 5855).
LIN 5715 Language Acquisition (3). The study of the processes underlying normal first-language acquisition. The focus is on the development of the subsystems of language (i.e., the phonological, morphological, syntactic, and semantic subsystems) in the child's growing command of his or her native language.

LIN 5720 Second Language Acquisition (3). Research, theories, and issues in second language acquisition. Topics include the Monitor Model, the role of the first language, motivation, age, individual differences, codeswitching, and the environment; affective variables and attitudes.
LIN 5732 Speech Errors and Linguistic Knowledge (3). This course focuses on the nature of linguistic errors produced by speakers in their native languages. Students will read research on errors produced by adult native speakers of a language, on first-language errors of children, and on errors made by persons acquiring a second language.

LIN 5733 Methods of Teaching Accent Reduction (3). Theory and methods regarding the teaching of pronunciation to non-native speakers of a language. Hands-on practice in helping non-native speakers improve their pronunciation. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5734 Teaching Linguistics (1). Introduces graduate students to pedagogical issues and strategies in the teaching of linguistics. Topics include textbook selection, writing syllabi, student assessment, and professional ethics. Prerequisite: Graduate standing.
LIN 5748 Survey of Applied Linguistics (3). Application of linguistics to problems in many fields, such as literature, translation, criminal justice, speech pathology, computer science, communications, public policy, and language instruction. Prerequisites: LIN 3010 or LIN 3013 or LIN 5018 or the equivalent.
LIN 5760 Research Methods in Language Variation (3). Research in sociolinguistics, dialectology, bilingualism: problem definition, instrument design, data collection and analysis, including sampling techniques and statistical procedures. Prerequisites: LIN 5601, LIN 5625, LIN 5613 or other course in variation.
LIN 5825 Pragmatics (3). Study of the relationships between language form, meaning, and use. Special emphasis on speech act theory. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.

LIN 5934 Special Topics in Linguistics (3). Content to be determined by instructor. May be repeated for credit when content changes. Prerequisites: LIN 3010, LIN 3013, or LIN 5018.
LIN 6085 Research Methods in Experimental Linguistics (3). Focus: conducting experimental linguistic research and the range of methods used; formulating a research question, designing a study, collecting pilot data, and carrying out analyses on results. Prerequisites: LIN 3010, LIN 3013, or LIN 5018 or the equivalent.

LIN 6165 Field Methods (3). Elicitation, recording and analysis of linguistic data in field research. Prerequisite: LIN 5018.
LIN 6226 Phonetics II (3). Acoustic and auditory phonetics. Cross-language speech perception. Feature systems and place of articulation. Stress and rhythm. Experimental phonetics. Prerequisite: LIN 5206.
LIN 6323 Phonology (3). The study of phonological processes in languages and linguistic methodology for phonological analysis. Emphasis will be placed on recent
theoretical questions concerning such issues as the abstractness of underlying forms, the naturalness of processes, and the relevance of markedness to a phonological description. Prerequisite: LIN 5206, Phonetics. (S)
LIN 6336 Phonology II (3). Optimality in phonological theory. Syllable structure and prosody. Licensing and underspecification in OT. Phonological acquisition and disorders in OT. Can OT account for phonological opacity? Prerequisite: LIN 6323.
LIN 6510 Syntax I (3). This course will expose students to the theoretical models on which much contemporary work in English grammar is based. Students will read works on selected topics such as structural linguistics, transformational grammar, and case grammar. Specific content may change from semester to semester. May be re-taken for credit when content changes. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent. (S)
LIN 6520 Syntax II (3). Study of recent developments in syntactic theory within generative grammar. This course builds on Syntax I and provides discussion of major issues in prominent literature in linguistic theory. Prerequisite: LIN 6510. (F)

LIN 6562 Discourse Analysis (3). The study of the organization of language above the sentence level, such as conversational interactions and written texts. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 6572 Structure of a Non-Indo-European Language (3). An in-depth study of the structure of a non-IndoEuropean language. The particular language to be studied will be varied from semester to semester. Course may be repeated. Prerequisites: LIN 5018, LIN 5206, LIN 5222, and a course in syntax.
LIN 6602 Language Contact (3). A study of the language changes that occur when two or more languages come into contact with one another. The course will also examine the characteristics of the individuals and communities involved in such contact.
LIN 6773 Introduction to Computational Linguistics (3). Introduction to basic programming using the R programming language and regular expressions.

LIN 6796 Neurolinguistics (3). Exploration of the neural basis for the production and acquisition of language, including multilingual populations.
LIN 6805 Semantics (3). The study of linguistic semantics. Language-universal and language-specific properties of the semantic structure of words and sentences will be considered. Students will be exposed to a variety of approaches to the study of meaning. Prerequisites: Introductory course in Linguistics or permission of the instructor. (F)
LIN 6905 Independent Study (VAR). This course is designed for students who wish to pursue specialized topics in advanced Linguistics: phonetics, phonology, morphology, syntax, semantics, psycholinguistics, historical linguistics, or language contact. Prerequisites: Introductory course in Linguistics and permission of the instructor.

LIN 6910 Research Project for Publication I (3). Students carry out a comprehensive research project for publishable standard. For Linguistics MA and PhD students, for the second year Research Paper for Publication. May be repeated. Prerequisite: LIN 6085.

LIN 6911 Doctoral Research Project for Publication (3). Students conduct an in-depth research project as one of the qualifying steps completed in the third year of PhD studies to proceed to the dissertation project for the PhD. May be repeated. Prerequisites: LIN 6085; LIN 6910.

LIN 6934 Special Topics in Linguistics (3). Content to be determined by students and instructor. (Approval of the Department required.)
LIN 6937 Seminar in Linguistics (3). Topics vary each semester. Prerequisite: A previous course in the same sub-area of Linguistics.
LIN 6971 Thesis (1-6). Prerequisite: Completion of all other requirements for the M.A. degree in Linguistics.
MHF 5345 Mathematical Logic for Linguistics (3). Formal logical systems and applications. Propositional and predicate calculus, proof systems, completeness and incompleteness theorems, recursion. Chomsky hierarchy, formal grammars. Does not fulfill requirements for Mathematics Degree. Prerequisites: MAD 3512 or permission of the instructor.

## School of Integrated Science and Humanity (SISH)

Interim Executive Director<br>Senior Account Manager<br>Administrative Assistant

Walter Van Hamme<br>Melinda Hoder<br>Vanessa Martinez

The School of Integrated Science and Humanity (SISH) is a unique integration of academic departments, research centers and institutes created to deepen understanding and advance scientific inquiry in the areas addressing human health, well-being and society. Our school explores the critical concerns of our times through knowledge, discussion and awareness of social and ethical issues in the sciences and humanities. With an interdisciplinary approach to frontline research in the natural, biomolecular and behavioral sciences, SISH is a catalyst for strengthening and contributing to outstanding scholarship and innovative teaching.

Through the College of Arts, Sciences and Education, SISH offers academic programs and degrees at all levels in Chemistry and Biochemistry, Mathematics and Statistics, Philosophy, Physics, and Psychology. The school is proud to house many of the university's prominent centers and institutes, including the Biomolecular Sciences Institute, Center of Children and Families, Center of Women's and Gender Studies, International Forensic Research Institute, STEM Transformation Institute, and the proposed Cognitive Neuroscience and Imaging Center.

Based in the Academic Health Center complex on the Modesto A. Maidique Campus, SISH brings together exceptional faculty - leaders in education who are preparing today's students for the ever-growing opportunities in the fields listed above. See also http://sish.fiu.edu.

## Chemistry and Biochemistry

Yong Cai, Professor and Chairperson
Irina Agoulnik, Associate Professor, College of Medicine
Jose R. Almirall, Professor and Director of IFRI
David A. Becker, Associate Professor
John Berry, Associate Professor
David C. Chatfield, Associate Professor
Christopher J. Dares, Assistant Professor
Anthony P. DeCaprio, Associate Professor and Director of Forensic Science Certificate Program
Milagros Delgado, Senior Lecturer and Coordinator of Laboratories at BBC
Francisco Fernandez-Lima, Assistant Professor and Director of the Mass Spectrometry Program
Kenneth G. Furton, Professor and Dean, College of Arts and Sciences
Piero R. Gardinali, Professor
Palmer Graves, Associate Chair, Senior Lecturer and Coordinator of General Chemistry Laboratories
Arthur W. Herriott, Professor Emeritus
Rudolf Jaffe, George Barley Endowed Professor
Jeffrey A. Joens, Professor and Undergraduate Program Director
Konstantinos Kavallieratos, Associate Professor
Leonard S. Keller, Professor
John T. Landrum, Professor and Associate Dean of Pre-Health Professional Advising
Watson J. Lees, Associate Professor and Chemistry Graduate Program Director
Fenfei Leng, Associate Professor
Joseph Lichter, Lecturer
Yuan Liu, Associate Professor
Ramon Lopez de la Vega, Associate Professor
Bruce R. McCord, Professor
Alexander M. Mebel, Professor
Jaroslava Miksovska, Associate Professor
Joong-ho Moon, Associate Professor
Zaida Morales-Martinez, Professor Emerita
Kevin E. O'Shea, Professor
J. Martin E. Quirke, Professor

Raphael Raptis, Professor
Kathleen S. Rein, Professor
Barry P. Rosen, Professor, College of Medicine
Sandra Stojanovic, Lecturer and Coordinator of Organic Chemistry Laboratories
Uma Swamy, Senior Lecturer and Coordinator of General Chemistry Laboratories
Yuk-Ching Tse-Dinh, Professor
Sonia M. Underwood, Assistant Professor
Xiaotang Wang, Associate Professor and Biochemistry Graduate Program Director
Stephen Winkle, Associate Professor
Stanislaw F. Wnuk, Professor
Yi Xiao, Assistant Professor

## Graduate Admission Requirements

1. A minimum undergraduate grade point average (GPA) of $3.0 / 4.0$ in chemistry and cognate science courses and submission of official GRE scores are required. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80
on the iBT TOEFL or 6.5 overall on the IELTS is required.
2. Applicants must send a statement of purpose and arrange to have sent transcripts and three letters of recommendation evaluating the applicant's potential for graduate work. Originals of these items must be sent to the FIU Graduate Admissions office as specified at http://gradschool.fiu.edu. In addition, copies of these items should be mailed directly to the Graduate Program Director (general M.S. and Ph.D. programs) or the Forensic Science Graduate Program Director (Forensic Track Ph.D.). Prospective candidates should refer to both the above website and http://casgroup.fiu.edu/chemistryl for details regarding the application procedure, part of which must be completed on-line.
3. Formal admission to the M.S. and Ph.D. programs is granted by the Graduate Admissions Office. Awards of teaching assistantships are granted by the Graduate Program Director. The Graduate Committee recommends admissions on the basis of a ranking of graduate applicants made by the pertinent committee (for example, the Forensic Graduate Committee for forensic track applicants). Entrance is possible at the beginning of each semester (fall, spring, summer). For consideration for a graduate assistantship, all application materials should be received at least five months prior to the desired starting date.
4. Students whose undergraduate degree is not equivalent to the American Chemical Society certified Bachelor of Science degree in chemistry may be required to make up deficiencies. For example, depending on his or her area of specialization, a student may be required to make up deficiencies in quantum mechanics, instrumental analysis, or biochemistry by successfully completing Graduate Physical Chemistry II (CHM 5426), Graduate Analytical Methods (CHM 5150), or Graduate Biological Chemistry (CHM 5305) respectively.
5. Entering graduate students must pass two proficiency exams. Proficiencies are offered in organic, physical, inorganic, analytical, and biochemistry. One pass must be in either organic or physical chemistry; the other is open. The proficiency exams will be administered to incoming graduate students in the week before the fall and spring semesters. If a student fails to receive a pass in a proficiency exam, he or she must show proficiency by completing the appropriate course with a grade of "B" (3.0/4.0) or better. These courses are Graduate Organic Chemistry (CHM 5225), Graduate Physical Chemistry (CHM 5425), Graduate Analytical Methods (CHM 5150), and Graduate Biological Chemistry (CHM 5305). Students are expected to complete proficiency requirements by the end of their first semester.
6. Graduate students must maintain a GPA of 3.0/4.0. Only courses applicable to the graduate program, excluding those for making up deficiencies or satisfying proficiencies, are counted in the GPA. If the cumulative GPA drops below 3.0 for one semester, the student will be placed on academic probation. A student who fails to raise his or her GPA to 3.0 or higher within one semester will be dismissed from the program.
7. Full-time graduate students generally serve as a Teaching Assistants (TA's) in the Department of

Chemistry and Biochemistry for their first semester. Ph.D. candidates must serve as TA's for at least one year except in unusual circumstances. TA's are awarded on a competitive basis, require a minimum cumulative GPA of 3.0, and can be continued for up to two years for M.S. students and four years for Ph.D. students who maintain acceptable academic performance. A limited number of Graduate Research Assistantships (RA's) may be available.

## Transfer of Credits and Financial Support

Transfer of credits. Students having an M.S. in chemistry may transfer as many as 36 credits towards their Ph.D. degree. However, no more than six of those credits will count toward fulfillment of the formal course work requirement. More than six credits for formal course work can be transferred only with special permission of the Graduate Committee, in which case the number of additional course work credits required will depend on the student's performance in courses, the date courses were completed, and the area of Ph.D. concentration.
Financial Support. Full-time graduate students in good academic standing are eligible for financial support. Teaching and research assistantships are available on a competitive basis. Inquiries concerning application to the program and availability of financial support should be directed to the Chemistry Graduate Program Director.

## Master of Science in Chemistry

## Degree Requirements

1. A minimum of 32 credits of course work. A grade of " C or higher must be obtained in all courses, and a cumulative grade point average of 3.0 or higher which must be maintained. The course work must include:
a) At least nine credits of chemistry in at least two of the six major areas of chemistry (Analytical, Biochemistry, Environmental, Inorganic, Organic, and Physical) from the core listed below:

## Core Courses (three credits each) Analytical

CHM 5138
CHM 5156 Advanced Chromatography
CHM $5165 \quad$ Chemometrics and Sampling
CHM 6157 Advanced Analytical Chemistry

## Biochemistry

CHM 5325
CHM 5503
CHM 5506
Physical Chemistry of Proteins
Physical Chemistry of Nucleic Acids
Physical Biochemistry

## Environmental

CHM 5423 Atmospheric Chemistry
CHM 5765 Aquatic Chemistry
CHM 6281 Environmental Organic Chemistry
CHM 6340
OCC 5050
CHM 6088 Environmental Chemistry of Trace Elements

## Inorganic

CHM 5251
CHM 5440
Organometallic Chemistry
Kinetics and Catalysis
CHM $5540 \quad$ Group Theory in Chemistry
CHM $5650 \quad$ Physical Inorganic Chemistry

Organic
CHM 5236

CHM 5250
CHM 5263
Spectroscopic Techniques and
Structure Elucidation
Organic Synthesis
Physical Organic Chemistry
Physical
CHM 5423
Atmospheric Chemistry
CHM 5490
CHM 5540
CHM 5586
CHM 6430
CHM 6461
CHM 6480

Physical Spectroscopy Group Theory in Chemistry Computational Chemistry Advanced Thermodynamics Statistical Thermodynamics Quantum Mechanics

Courses not listed above may be counted as core course with prior departmental approval.
b) At least six credits of additional graduate-level courses approved by the thesis committee in consultation with the Graduate Program Director with the following guidelines:

1. The courses must be 5000 or 6000 level chemistry courses (CHM prefix) or approved cognates (up to a maximum of six credits).
2. The following do not count toward satisfaction of this requirement: proficiency courses and courses taken to make up for undergraduatelevel deficiencies in chemistry (including CHM 5150, CHM 5225, CHM 5305, CHM 5425, and CHM 5426); and courses corresponding to research, seminar, colloquium, supervised teaching, and thesis completion (CHM 6910L, CHM 6935, CHM 6936, CHM 6940, CHM 6970, and CHM 6971).
c) Full-time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as teaching assistants.
d) Full-time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.
e) At least one credit of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their proposed research at the colloquium for a letter grade in their second semester of graduate study.
f) At least eight credits of CHM 6970 (Thesis Research) involving independent thesis research under the direction of a faculty member in the Department.
g) At least two credits of CHM 6971 (Thesis) taken in the semester in which the M.S. thesis is to be defended.
3. Satisfactory public presentation and defense of a research thesis, evaluated by the student's Thesis Committee. The Thesis Committee will consist of the research advisor and a randomly-assigned committee member appointed by the Graduate Program Director, both from the Department's graduate faculty, and one additional member with expertise in the student's research area. At least one committee member must be tenured in the Department. The Committee may include more members, but they will be non-voting.

## Master of Science in Chemistry with Report Option

## Degree Requirements

1. A minimum of 32 credits of course work. A grade of " C or higher must be obtained in all courses, and a cumulative grade point average of 3.0 or higher which must be maintained. The course work must include:
a) At least nine credits of graduate-level CHM courses as core courses with the following requirements:
i. The courses must be 5000 or 6000 level CHM courses.
ii. The following do not count toward satisfaction of this requirement: proficiency courses and courses taken to make up for undergraduatelevel deficiencies in chemistry (including CHM 5150, CHM 5225, CHM 5305, CHM 5425, and CHM 5426); and courses corresponding to research, seminar, colloquium, supervised teaching, and thesis completion (CHM 6910L, CHM 6935, CHM 6936, CHM 6940, CHM 6970, and CHM 6971).
b) At least nine credits of additional graduate-level courses approved by the student's committee in consultation with the Graduate Program Director with the following guidelines:
i. The courses must be 5000 or 6000 level chemistry courses or approved cognates.
ii. The following do not count toward satisfaction of this requirement: proficiency courses and courses taken to make up for undergraduatelevel deficiencies in chemistry (including CHM 5150, CHM 5225, CHM 5305, CHM 5425, and CHM 5426); and courses corresponding to research seminar, colloquium, supervised teaching, and thesis completion (CHM 6910L, CHM 6935, CHM 6936, BCH 7930, CHM 6940, CHM 6970, and CHM 6971).
c) Full-time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as teaching assistants.
d) Full-time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.
e) At least one credit of CHM 6936 (Chemistry Colloquium is required. Each student must present a seminar on their proposed research at the colloquium for a letter grade.
f) At least eight credits of CHM 6970 (Thesis Research) or CHM 7910 (Dissertation Research) involving independent research under the direction of a faculty member in the Department.
2. Satisfactory completion of a research report approved by the student's thesis/dissertation committee and the department's graduate program director. A submitted manuscript, a report written for the candidacy exam, or a stand-alone research report could satisfy the report requirement.

## Combined BS/MS in Chemistry

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree
program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor of Science program in chemistry at FIU.
2. Current GPA of 3.2 or higher.
3. Official GRE general test scores.
4. Three letters of recommendation.
5. Approval of the Chemistry Graduate Committee.

## Completion Requirements

Completed Bachelor of Science degree in chemistry at FIU Required:

1. 9 credits ( 3 courses) selected from graduate chemistry core courses. Required courses must be completed with an average of "B" or higher, and only one course may receive a grade less than "B-".
2. Electives: 3 courses selected from the Chemistry Graduate Elective Offerings.
3. 9 credits of Thesis Research and 2 credits of Thesis. 1 credit of Colloquium.
4. Overlap: Up to 3 graduate level courses ( 9 credits) may be used to satisfy both the Bachelor's and Master's degree requirements.

## Combined BS in Chemistry/MS in Forensic Science

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor of Science program in chemistry at FIU.
2. Current GPA of 3.2 or higher.
3. Official GRE general test scores.
4. Three letters of recommendation.
5. Approval of the Chemistry Graduate Committee.

## Completion Requirements

Completed Bachelor of Science degree in chemistry at FIU

## Coursework

## Required Courses:

| BSC 5406 | Forensic Biology |
| :--- | :--- |
| CHS 5542 | Forensic Chemistry |
| CHS 5535 | Forensic Analysis |

1. Required courses must be completed with an average of " B " or higher, and only one course may receive a grade of less than "B-".
2. Electives: 5 courses selected from the Forensic Science Graduate Elective Offerings.
3. 6 credits of Thesis Research and 1 credit of Thesis.
4. 1 credit of Colloquium.
5. Overlap: Up to 3 graduate level courses ( 9 credits) may be used to satisfy both the Bachelor's and Master's degree requirements.

## Doctor of Philosophy in Chemistry

## Degree Requirements

1. A minimum of 81 credits of course work. A grade of " $C$ " or higher must be obtained in all courses, and a cumulative GPA of 3.0 or higher must be maintained. The course work must include:
a. At least nine credits of chemistry courses, including courses from at least two of the six major areas of chemistry (Analytical, Biochemistry, Environmental, Inorganic, Organic, and Physical) selected from the core courses listed above (see M.S. in Chemistry 1a).
b. At least nine credits of additional graduate-level chemistry courses approved by the dissertation committee in consultation with the Graduate Program Director. The guidelines listed above in sections $1 \mathrm{~b}(1)$ and $1 \mathrm{~b}(2)$ for the M.S. degree also apply to these courses.
c. Full-time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as teaching assistants.
d. Full-time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester
e. At least one credit of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their proposed research at the colloquium for a letter grade by the end of their third semester of graduate study.
f. At least eight credits of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the Department are required.
g. At least 20 credits of CHM 7980 (Ph.D. Dissertation) are to be taken after the student has advanced to candidacy.
2. Satisfactory completion of cumulative examinations. The student will begin taking the cumulative examinations after completing the proficiency requirements but no later than the beginning of the student's second semester. Six examinations, each lasting three hours, will be given per year. The student must pass four out of ten consecutivelyoffered exams for admission to candidacy.
3. Satisfactory presentation and defense of an original research proposal (on a topic not related to the student's specific doctoral research project) and a satisfactory completion of a Preliminary Oral examination. The presentation and examination occur consecutively in a single session and must be completed before the end of the fifth semester (excluding summers). The examination will be conducted by the Dissertation Committee, be based on the student's dissertation research, and include questions from the student's major field and cognate fields. After fulfilling this requirement, passing the comprehensive examinations, and completing all required course work, the student advances to candidacy.
4. Satisfactory public presentation and defense of a research dissertation, evaluated by the Dissertation Committee. The student's Dissertation Committee will consist of the research advisor (a FIU graduate faculty member who holds dissertation advisor status), a member from outside the Department, or School, but within FIU, a randomly-assigned member appointed by the Graduate Program Director from the Department's graduate faculty, and at least two additional committee members with expertise in the student's research area. At least three members of the Dissertation Committee, including the major research advisor, must be graduate faculty members from the Department of Chemistry and Biochemistry, and at least two of these three members must be tenured. The Committee may include additional members, but they will be non-voting.

## Doctor of Philosophy in Chemistry with a Environmental Chemistry Track

## Degree Requirements

1. A minimum of 81 credit hours. A grade of $C$ or higher must be obtained in all graded courses, and a cumulative GPA of 3.0 or higher must be maintained. The course of study must include:
a. 12 credit hours of required classes including four of the following six courses, each of which is worth three credit hours.
CHM 5423 Atmospheric Chemistry
CHM 5765 Aquatic Chemistry
CHM 6281 Environmental Organic Chemistry
CHM 6340 Organic Geochemistry
OCC 5050 Chemical Oceanography
CHM 6088 Environmental Chemistry of Trace Elements
b. Two chemistry core courses chosen from the following
CHM 5156 Advanced Chromatography
CHM 5138 Advanced Mass Spectrometry
CHM 5236 Spectroscopic Techniques and Structure Determination

CHM 6157 Advanced Analytical Chemistry
CHM 5165 Chemometrics and Sampling
CHM 5260 Physical Organic Chemistry
c. At least one elective. The list of approved electives is maintained by the Chemistry and Environmental Science Major Graduate Committee. This committee consists of the Environmental Science Graduate Program Director, the Chemistry and Biochemistry Graduate Program Director, and two Departmental faculty members active in research in environmental science. A list of current faculty who will participate in the Environmental major and who could serve on the Chemistry and Environmental Science Major Graduate Committee is given below.
d. Full time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as a teaching assistant.
e. Full time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) and one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.
f. At least one credit of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their proposed research at the colloquium for a letter grade by the end of their third semester of graduate study.
g. At least eight credit hours of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the Department.
h. At least 20 credits of CHM 7980 (Ph.D. Dissertation) is to be taken after the student has advanced to candidacy.
i. A maximum of 36 credits may be transferred from a completed master's degree from another graduate program with the approval of the Graduate Committee. However, only six credit hours can be counted towards the formal academic coursework requirement (1 a-c). Students must elect an appropriate course load in accordance with their research topic, and in agreement with their Graduate Committee and the Departmental Graduate Advisor.
2. Satisfactory completion of cumulative exams. The students will begin taking the cumulative examinations after completing the proficiency requirements but no later than the beginning of the student's second semester. Six exams, each lasting three hours, will be given each year. The student must pass four out of 10 consecutively offered exams for admission to candidacy. Cumulative exams in the area of Environmental Chemistry will be added to existing specialties.
3. Satisfactory presentation and defense of an original research proposal and a satisfactory completion of a preliminary oral examination. The presentation and examination occur consecutively in a single session and must be completed before the end of the fifth semester (excluding summers). The examination will be conducted by the Dissertation Committee, be based on the student's dissertation research, and include questions from the student's major field and cognate fields. After fulfilling this requirement, passing the cumulative examinations, and completing all required course work, the student advances to candidacy.
4. Satisfactory public presentation and defense of a research dissertation, evaluated by the Dissertation Committee. The student's Dissertation Committee will consist of the research advisor (an FIU graduate faculty member who holds dissertation advisor status), a member from outside the Department or School but within FIU, a randomly selected member appointed by the Graduate Program Director from the Department's graduate faculty, and at least two additional committee members with expertise in the student's research area. At least three members of the Dissertation Committee, including the major research advisor, must be graduate faculty members from the Department of Chemistry and Biochemistry, and at least two of these three members must be tenured. The Committee may include additional members, but they will be non-voting.

## Doctor of Philosophy in Chemistry with a Forensic Science Track

To be admitted into the Ph.D. program in Chemistry with a Forensic track, a candidate must:

1. Hold a Bachelor's degree in chemistry, forensic science or a relevant discipline from an accredited college or university approved by the Chemistry graduate committee. The minimum requirement is a bachelors degree in a natural science with a least 7 semester courses (28 hours including labs) of chemistry courses including physical chemistry, analytical chemistry and biochemistry. Any deficiencies must be completed before being fully accepted to the Ph.D. program;
2. Have a 3.0/4.0 average or higher during the last two years of the undergraduate program or a Master's degree in a relevant discipline;
3. Official Graduate Record Exam (GRE) scores;
4. Arrange to have three letters of recommendation sent to the Forensic Science Graduate Program Director evaluating the applicant's potential for graduate work;
5. Pass at least two proficiency exams in either analytical or biochemistry and either organic or physical chemistry - students who have not taken physical chemistry must take one semester of physical chemistry to make up the deficiency;
6. Receive approval from the Forensic Science Graduate Committee;
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

All admissions to the Chemistry Ph.D. program must be recommended by the chemistry graduate committee and signed off by the chemistry graduate program director.

## Degree Requirements

1. A minimum of 81 credits or course work. A grade of "C" or higher must be obtained in all courses, and a cumulative GPA of 3.0 or higher must be maintained. Students must choose either the Analytical or the Biochemistry concentration. The course of study must include:
a. Twelve credits of required classes that depend on the concentration (each of the following courses is worth three credits):

| Analytical Chemistry/Trace Concentration |  |  |
| :--- | :--- | :--- |
| BSC 5406 | Forensic Biology | 3 |
| CHS 5542 | Forensic Chemistry | 3 |
| CHS 5539 | Forensic Toxicology | 3 |
| CHS 5545 | Chem Anl. Explosives | 3 |
|  | or |  |
| CHS 5538 | Chem Anl. of Drugs | 3 |
| BiochemistryIDNA Analysis Concentration |  |  |
| BSC 5406 | Forensic Biology |  |
| CHS 5542 | Forensic Chemistry | 3 |
| CHS 5536 | Forensic DNA Chemistry | 3 |
| PCB 5685 | Population Genetics | 3 |

b. Two chemistry core courses chosen from the following: Advanced Chromatography (CHM 5156); Advanced Mass Spectrometry (CHM 5138); Spectroscopic Techniques (CHM 5236); Organic Chemistry of Nucleic Acids (CHM 5302); Physical Biochemistry (CHM 5506); Advanced Analytical Chemistry (CHM 6157); Chemometrics \& Sampling (CHM 5165); Advanced Biological Chemistry (CHM 6982).
c. At least one elective. The list of approved electives is maintained by the Chemistry and Forensic Graduate Committees.
d. Full-time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as teaching assistants.
e. Full-time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.
f. At least one credit of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their proposed research at the colloquium for a letter grade by the end of their third semester of graduate study.
g. At least eight credits of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the Department.
h. At least 20 credits of CHM 7980 (Ph.D. Dissertation) is to be taken after the student has advanced to candidacy.
2. Successful completion (grade of "pass") of a comprehensive exam composed by the student's Dissertation Committee and approved by the Dissertation Advisor in consultation with the Forensic Graduate Committee.
3. Presentation and defense of an original research proposal on a forensic-related topic that is not related to the student's specific doctoral research project. The topic must be approved by the Dissertation Advisor in consultation with the Forensic Graduate Committee. After fulfilling this requirement, passing the comprehensive exam, and completing all required course work, the student advances to candidacy.
4. Satisfactory public presentation and defense of a research dissertation, evaluated by the Dissertation Committee. The composition of the Dissertation

Committee is as described in section 4 for the Ph.D. in Chemistry (no track) above.

## Doctor of Philosophy in Chemistry with a Radiochemistry Track

## Admission Requirements

To be admitted into the Ph.D. program in Chemistry with the Radiochemistry Track, a candidate must:

1. Hold a Bachelor's degree in chemistry or a relevant discipline from an accredited college or university approved by the Chemistry Department Graduate Committee. The minimum requirement is a Bachelor's degree in a natural science with a least 7 semester courses ( 28 hours including labs) of chemistry courses including: physical chemistry, analytical chemistry and biochemistry. Any deficiencies must be completed before being fully accepted to the Ph.D. program.
2. Have a 3.0/4.0 average or higher during the last two years of the undergraduate program or a Master's degree in a relevant discipline.
3. Submit general GRE scores. There is no minimum requirement for the overall GRE score, but the applicants with an average percentile rank of 60 on the verbal and quantitative parts of the GRE will be preferentially considered.
4. Arrange to have three letters of recommendation sent to the Radiochemistry Graduate Program Director, each evaluating the applicant's potential for graduate work.
5. Pass at least two proficiency exams in either analytical or biochemistry and either organic or physical chemistry.
6. Receive approval from the Radiochemistry Graduate Committee.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL, 80 on the internetbased TOEFL (iBT) or 6.5 overall on the IELTS.
8. All admissions to the Chemistry Ph.D. program must be approved by the Chemistry Department Graduate Committee and signed off by the Chemistry Graduate Program Director.

## Degree Requirements

1. A minimum of eighty one (81) credits or course work. A grade of "C" or higher must be obtained in all courses, and a cumulative GPA of 3.0 or higher must be maintained. The course of study must include:
a. Six credits of required classes (each of the following courses is worth three credits):
CHS 6110 Topics in Radiochemistry 3
CHM 6XXX Advanced Radiochemistry 3
b. Two of the following six classes:

CHM 6480 Quantum Mechanics

## or

PHY 6645 Advanced Quantum Mechanics I 3
CHM 6157 Advanced Analytical Chemistry 3
CHM 5156 Advanced Chromatography 3
PHZ $5340 \quad$ Particle Interactions and Detection 3

## CHM 5540

CHM 5650
Group Theory In Chemistry
3
c. Three electives. The list of approved electives include:
CHM 5236 Spectroscopic Techniques and Structures Elucidation
CHM 5138 Advanced Mass Spectrometry 3
CHM 6088 Environmental Chemistry of Trace Elements
CHM 5165 Chemometrics and Sampling 3
CHM 5490 Physical Spectroscopy 3
CHM 6461 Statistical Thermodynamics 3
CHM $5440 \quad$ Kinetics and Catalysis 3
CHM 5586 Computational Chemistry 3
CHM $5263 \quad$ Physical Organic Chemistry 3
CHM 5506 Physical Biochemistry 3
PHZ 5730 Biophysical Effects of Radiation 3
PHZ $5732 \quad$ Clinical and Medical Dosimetry 3
d. Full-time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as teaching assistants.
e. Full-time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.
f. Each student must present a seminar on their proposed research to the dissertation committee by the end of their third semester of graduate study.
g. At least one credit of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their original research proposal on a radiochemistry-related topic that is not related to the student's specific doctoral research project at the colloquium for a letter grade by the end of their fourth semester of graduate study. Topic must be approved by the Dissertation Advisor in consultation with the Radiochemistry Graduate Committee.
h. At least eight credits of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the Department.
i. At least 20 credits of CHM 7980 (Ph.D. Dissertation) is to be taken after the student has advanced to candidacy.
2. Satisfactory completion of cumulative exams. The students will begin taking the cumulative examinations after completing the proficiency requirements but no later than the beginning of the student's second semester. Six exams, each lasting three hours, will be given each year. The student must pass four out of 10 consecutively offered exams for admission to candidacy. Cumulative exams in the area of Nuclear and Radiochemistry will be added to existing specialties.
3. Satisfactory presentation and defense of an original research proposal, and satisfactory completion of a preliminary oral examination. The presentation and examination occur consecutively in a single session and must be completed before the end of the fifth semester (excluding summer). The examination will: be conducted by the Dissertation Committee; be based on the student's dissertation research; and
include questions from the student's major field and cognate fields. After fulfilling this requirement, passing the cumulative examinations, and completing all required course work, the student advances to candidacy.
4. Satisfactory public presentation and defense of a research dissertation, evaluated by the Dissertation Committee. The student's Dissertation Committee will consist of the research advisor (an FIU graduate faculty member who holds dissertation advisor status), a member from outside the Department or School but within FIU, a randomly selected member appointed by the Graduate Program Director from the Department's graduate faculty, and at least two additional committee members with expertise in the student's research area. At least three members of the Dissertation Committee, including the major research advisor, must be graduate faculty members from the Department of Chemistry and Biochemistry, and at least two of these three members must be tenured. The Committee may include additional members, but they will be non-voting.

## PhD Program in Biochemistry

The PhD in Biochemistry is a shared degree among the Department of Chemistry and Biochemistry, the Department of Biological Sciences, and the Herbert Wertheim College of Medicine. The core of graduate courses will provide a firm foundation in the theory and techniques of biochemistry, with full integration of the core disciplines of chemistry and biology. With this foundation, students will be prepared to specialize in either biochemistry or molecular biology.

## Admission Requirements

1. Hold a BS degree in Biology or Chemistry or the equivalent from an accredited college or university. Previous completion of at least 28 credits, including labs, of chemistry or biology courses at the upper division level is required. The following courses are recommended as background regardless of undergraduate major: biochemistry or molecular biology, two semesters of organic chemistry, and two semesters of general biology. Students are expected to have taken either physical chemistry or genetics as an undergraduate. Students not having taken at least one of these courses will be required to make up this deficiency either before or during their first year of graduate study by taking appropriate coursework.
2. A GPA of at least 3.0 (on a four-point scale) during the last 60 credits of the undergraduate program.
3. Official Graduate Record Exam (GRE) scores.
4. Three letters of recommendation evaluating the applicant's potential for graduate and research work.
5. A statement of purpose/research interests.
6. Receive approval from the Biochemistry Graduate Committee.
7. Foreign students whose native language is not English must obtain a score of 80 or higher on the TOEFL iBT or 550 on the paper TOEFL or a 6.5 on the IELTS.

## Degree Requirements

The PhD in Biochemistry requires a minimum 75 semester hours beyond the baccalaureate degree. The Dissertation

Committee will assist the student to choose a curriculum suitable to the student's interests, goals and background. This will include selection of electives as well as suggestions for other courses that may be needed to develop skills critical for the student's research and career goals, especially quantitative skills. A grade of $C$ or higher must be earned in all courses.

## Coursework Requirements

## Required Core Courses ( $\mathbf{1 6}$ credits)

BHC 6831 Introduction to Biochemical Research 3
BCH 6108 Biochemical Techniques 3
CHM 6036 Advanced Biochemistry I 3
PCB 6025 Molecular and Cellular Biology I 3
CHM 6037 Advanced Biochemistry II 3
PCB 6027 Molecular and Cellular Biology II 3
BSC XXXX Ethics, Publication and Intellectual Property
Additional Required Courses (33 credits)
BSC $5945 \quad \begin{aligned} & \text { Supervised Teaching in Biology } \\ & \text { or }\end{aligned}$
CHM 6940 Supervised Teaching 2
BSC 6913 Student Research Laboratory 1
CHM 6910L Graduate Research in Chemistry 1
BSC $7961 \quad 1$
CHM 6936 Chemistry Colloquium 1
BSC 6936 Topics in Biology 4
CHM $6935 \quad$ Graduate Seminar 4
BSC 6913 Student Research Lab 4
or
CHM 7910 Dissertation Research
BSC 7980/CHM 7980 PhD Dissertation
or
BSC 7982 Dissertation Defense Seminar
Electives (5-26 credits)
BSC $6415 \quad$ Animal Cells in Culture 3
BSC 6415L Animal Cells in Culture Lab 2
CHM $5302 \quad$ Organic Chemistry of Nucleic Acids 3
CHM $5325 \quad$ Physical Chemistry of Proteins 3
$\begin{array}{ll}\text { CHM } 5351 & \text { Computer Modeling of Biological } \\ & \text { Molecules }\end{array}$
CHM 5440 Kinetics and Catalysis 3
CHM $5503 \quad$ Physical Chemistry of Nucleic Acids 3
CHM 5506 Physical Biochemistry 3
CHS 5536 Forensic DNA Chemistry 3
MCB 6935 Advanced Topics in Microbiology 3
PCB $5665 \quad 3$
PCB 5665L Human Genetics Lab 2
PCB 5725 Membrane Signal Transduction 3
PCB 5786 Membrane Physiology 3
PCB 6236 Comparative Immunology 3
PCB 6526 Advanced Molecular Biology 3
PCB 6566 Chromosome Structure and Function 3
PCB 6786 Membrane Biophysics 3
PCB 6935 Advanced Topics in Genetics 3
BCH 6130C DNA Synthesis and Amplification 1
BCH 6132C Electrophoresis 1
BCH 6133C DNA Sequencing 1
MCB 5315C Prokaryotic Cloning 2

## Rotation and Choosing an Advisor

Students will spend 4-5 weeks in the laboratories of three Biochemistry faculty. Some flexibility in length of rotation is acceptable. In most cases, the rotations will be completed during the first semester of study, but an extension into the second semester is possible. At the end of each rotation, the student and the faculty member will complete an evaluation form. After completing a minimum of three rotations, students will submit an ordered list of three advisors they would like to work with. The Biochemistry Graduate Committee will make the research advisor assignments.

## Supervised Teaching

Two semesters of supervised teaching or documentation of the equivalent amount of teaching experience is required. Concurrent enrollment in BSC 5945/CHM 6940 Supervised Teaching is required.

## Completion of Candidacy Exam

The Candidacy Exam consists of two parts: 1) a written Qualifying Examination and 2) presentation of an Original Research Proposal followed b y a Preliminary Oral Exam. The written Qualifying Exam will be administered at the end of the third semester of study (excluding summers), by which time all core courses should have been completed. The exam will be designed primarily to test material mastered in core courses. After passing the written Qualifying Exam, the student will present and defend an original research proposal (on a topic not related to the student's specific doctoral research project) and undergo an oral exam.

## Presentation of Formal Proposal of the Dissertation Topic

Each student must present a public seminar on their proposed research. This is done in the context of a onecredit course (BSC 7961 or CHM 6936) for a letter grade.

## Submission and Defense of Dissertation

All students must submit a dissertation based upon original research in biochemistry. After submission of the dissertation and completion of all other prescribed work, the candidate will give a public presentation of the completed research and be given a final oral examination by the Dissertation Committee.

## Course Descriptions

## Definition of Prefixes

BCH-Biochemistry (Biophysics); CHM-Chemistry; CHS-Chemistry-Specialized; OCC - Chemical Oceanography F-Fall semester offering; S-Spring semester offering; SS Summer semester offering.

BCH 5045 Survey of Biochemistry (3). For students NOT specializing in biochemistry. Topics will cover the structure, function, biosynthesis and synthesis of biological molecules, biological macromolecules and macromolecular assembles. Prerequisite: CHM 2211.
BCH 6108 Biochemical Techniques (3). Introduction to theories of basic biochemical techniques commonly used in a biochemistry laboratory. Prerequisite: One semester of biochemistry.

BCH 6831 Introduction to Biochemical Research (3). An overview of the analysis of biochemical data and experimental design. Prerequisite: Graduate standing.
BCH 7930 Biochemistry Graduate Seminar (1). Presentations and discussions of current topics in the biochemical sciences. Corequisite: Graduate standing.
CHM 5138 Advanced Mass Spectrometry (3). Intensive examination of the processes and techniques involved in creating, controlling and measuring ionic species by mass spectrometry. Theory of mass spectrometry, methods of ionization, instrumental designs, quantitative mass spectrometry, meta-stable ions, and tandem mass spectrometry. Prerequisites: CHM 4130, CHM 4130L or Permission of Instructor.
CHM 5139C Mass Spectrometry Workshop (2). Basic description of processes and techniques involved in creating, controlling and measuring elemental or molecular ionic species by mass spectrometry techniques. WS designed to provide hands on experience. Prerequisite: CHM 4130.
CHM 5150 Graduate Analytical Methods (3). Analysis of analytical data, electrochemistry, spectro-analytical techniques, chromatography, survey of new analytical methods. Prerequisites: Graduate standing or permission of the instructor. (F,S)
CHM 5156 Advanced Chromatography (3). Intensive examination of the contemporary practice of chromatography including available chromatographic techniques, their selection and application. Prerequisites: CHM 4130 or permission of the instructor.
CHM 5165 Chemometrics and Sampling (3). Methods of evaluating analytical chemistry data. Planning sampling design for water, air and solids. Sample preparation and extraction techniques. Prerequisite: CHM 4130.
CHM 5225 Graduate Organic Chemistry (3). Advanced topics in organic chemistry. Structure of organic molecules, reaction mechanisms, organic synthesis, and natural product chemistry. Prerequisites: Graduate standing or permission of the instructor. (F,S)
CHM 5236 Spectroscopic Techniques and Structures Elucidation (3). Advanced techniques for the spectroscopic identification of organic compounds. Interpretation of spectral information for determination of structures of various classes of organic compounds. Prerequisites: CHM 4220 and CHM 4230L.
CHM 5250 Organic Synthesis (3). Use of classical and modern reactions in the design and construction of complex organic molecules including natural products. Some topics covered will be construction reactions, refunctionalization, stereochemistry and conformational analysis. Prerequisites: CHM 4220 or permission of the instructor.
CHM 5251 Organometallic Chemistry (3). Fundamentals and applications of organometallic chemistry. Structures and bonding, ligand types, organometallic reactions, physical methods of characterization. Prerequisites: CHM 4611, CHM 3411.
CHM 5252 Asymmetric Synthesis (3). Recent advances in asymmetric synthesis for the selective design and construction of tetrahedral stereocenters. Focus on
principles of configuration in transition state assemblies. Prerequisite: CHM 4220.

CHM 5263 Physical Organic Chemistry (3). A series of topics will be discussed including molecular orbital theory as it pertains to organic molecules, kinetic and thermodynamic approaches to the study of reaction mechanisms, quantitative approaches to conformational analysis, etc. Prerequisites: CHM 4220 and physical chemistry or permission of the instructor.
CHM 5280 Natural Products Chemistry and Biosynthesis (3). Studies of the chemical origins (biosynthesis), properties, and synthesis of the various classes of naturally occurring compounds: terpenes, steroids, alkaloids, acetogenins. Prerequisites: CHM 4220 or permission of the instructor.
CHM 5285 Marine Natural Products: Chemistry and Pharmacology/Toxicology (3). Identification, isolation, and characterization of toxic and other biologically active compounds from marine sources.
CHM 5302 Organic Chemistry of Nucleic Acids (3). Organic chemistry of ribose sugars, nucleotide heterocyclic bases, mechanism-based inhibitors of enzymes involve in nucleic acid metabolism, and chemical synthesis of DNA. Prerequisites: CHM 4220 or permission of the instructor.
CHM 5305 Graduate Biological Chemistry (3). Structures of biological molecules; Biochemical reaction mechanisms; Enzyme kinetics; Biomolecular thermodynamics; Biomolecular spectroscopy. Prerequisites: Graduate standing or permission of instructor.

CHM 5306 Special Topics in Biological Chemistry (3). Investigation of one or more areas of biologically related chemistry. Prerequisites: CHM 4305 or permission of the instructor.
CHM 5325 Physical Chemistry of Proteins (3). Protein structures, dynamics and functions. Use of spectroscopic methods. Thermodynamics of protein folding and ligand binding. Enzyme Kinetics. Prerequisites: Biological Chemistry and Physical Chemistry or permission of instructor.
CHM 5351 Computer Modeling of Biological Molecules (3). Introduces use of computers in studying biological macromolecules. Simulations, visualization methods, software, databases. Prerequisite: CHM 3411, Biochemistry recommended.
CHM 5380 Special Topics in Organic Chemistry (VAR). An intensive examination of one or more areas selected by instructor and students. Prerequisites: CHM 4220 and physical chemistry or permission of the instructor.

CHM 5423 Atmospheric Chemistry (3). Chemical processes in atmospheres. Photochemistry, chemical kinetics, tropospheric and stratospheric chemical reactions, anthropogenic effects on the earth's atmosphere and chemistry of planetary atmospheres. Prerequisites: CHM 3411, or permission of the instructor.
CHM 5425 Graduate Physical Chemistry (4). Prequantum physics, the Schrodinger equation and its solutions, atoms and molecules, rotational, vibrational, and
electronic spectroscopy. Prerequisites: Graduate standing or permission of the instructor.

CHM 5426 Graduate Physical Chemistry II (4). Gas laws; thermodynamics and equilibrium, electrochemistry, and chemical kinetics. Prerequisite: Graduate standing or permission of the instructor.
CHM 5440 Kinetics and Catalysis (3). Theory of elementary reactions, activated complex theory, mechanisms of complex reactions. Prerequisites: CHM 3411, MAP 3302.

CHM 5490 Physical Spectroscopy (3). Introduction to atomic and molecular quantum states, selection rules, and fundamental principles of spectroscopy. Introduction to group theory and to the theory of UV/visible, infrared, Raman, microwave, NMR, photo-electron, and mass spectroscopies, and the applications of these methods to the determination of fundamental physical properties and the structure of organic and inorganic molecules. Prerequisite: Physical Chemistry.
CHM 5490L Physical Spectroscopy Lab (1). The theory of spectroscopy and the use of modern instrumentation to investigate molecular structure. Prerequisites: CHM 2211, 2211L. Corequisites: PHY 4604 or CHM 5490.

CHM 5503 Physical Chemistry of Nucleic Acids (3). Physical chemistry of nucleic acids including spectroscopic determination of structures of DNAs, RNAs, and DNA protein complexes and thermodynamic and kinetic studies of nucleic acid-ligand complexes and nucleic acid structures. Prerequisites: CHM 4305 or permission of the instructor.
CHM 5506 Physical Biochemistry (3). Physical properties of biomolecules, molecular conformation; thermodynamic, kinetic, and spectroscopic properties of biomolecules. Prerequisites: CHM 4305 or permission of the instructor.
CHM 5517 Solid State (3). Crystalline form of solids, lattice dynamics, metals, insulators, semiconductors, and dielectric materials. Prerequisites: CHM 5490 or PHY 4604.

CHM 5540 Group Theory In Chemistry (3). The fundamental theory is developed with emphasis given to representations. Specific applications covered, with emphasis on molecular orbital theory and spectroscopy. Prerequisite: CHM 3411.
CHM 5586 Computational Chemistry (3). Surveys computational methods for studying issues pertinent to organic and biological chemistry. Emphasis on developing an understanding of principles and putting methods to use. Includes methods for studying reaction thermodynamics, reaction mechanisms and NMR spectral properties. Prerequisites: CHM 3410, CHM 3411.
CHM 5650 Physical Inorganic Chemistry (3). Introduction to use of physical methods to determine the structure of inorganic compounds. Prerequisites: CHM 4611 or permission of the instructor.

CHM 5681 Special Topics in Inorganic Chemistry (VAR). An intensive examination of one or more areas selected by instructor and students. Prerequisites: CHM 4611 or permission of the instructor.

CHM 5765 Aquatic Chemistry (3). Redox chemistry, chemistry of sediments, organic biogeochemistry, chemodynamics, and fates or organic pollutants in aqueous environments. Prerequisites: CHM 2211, CHM 4130, or permission of the instructor.

CHM 5931 Special Topics (3). A course covering selected special topics in chemistry.

CHM 5932 Special Topics (3). A course covering selected special topics in chemistry.
CHM 5934 Special Topics in Analytical Chemistry (VAR). An intensive examination of one or more areas selected by instructor and students. Core course Prerequisites: CHM 4130 or permission of the instructor.
CHM 5936 Special Topics in Environmental Chemistry (3). An intensive examination of one or more areas selected by the instructor and students. Prerequisite: Permission of the instructor.

CHM 5938 Special Topics in Physical Chemistry (VAR). An intensive examination of one or more areas selected by instructor and students. Prerequisites: CHM 3411 or permission of the instructor.
CHM 6036 Advanced Biochemistry I (3). Overview of the structure and function of Biomacromolecules, i.e., proteins, enzymes, and nucleic acids emphasizing the current literature. Prerequisites: One semester of biochemistry or consent of the instructor.
CHM 6037 Advanced Biochemistry II (3). Introduction to biochemical pathways regulation and intra- and extracellular communication on the molecular level. Prerequisite: CHM 6036.

CHM 6088 Environmental Chemistry of Trace Elements (3). Occurrence, transformation, detection, speciation, and other aspects of trace elements in the environment.
CHM 6157 Advanced Analytical Chemistry (3). Modern analytical methods, applications, and instrumentation. Topics include spectroscopy, chromatography, electrochemistry, optimization theory, and computerized instrumentation. Prerequisites: CHM 4130 or permission of the instructor.
CHM 6166 Hyphenated Analytical Techniques (3). Covers hyphenated analytical techniques required for the analysis of trace elements and organic compounds in environmental and biomedical sciences. Prerequisites: CHM 4130 or equivalent.
CHM 6167 Modern Analytical Methods for Surface and Structural Interrogation (3). Beam interactions with surfaces, gas-phase post-ionization separations, analytical instrumentation for biological and structural mass spectrometry. Prerequisite: CHM 4130.
CHM 6281 Environmental Organic Chemistry (3). Characteristics, origin, fate and transformation of organic compounds in air, water, sediments and biota. Prerequisites: CHM 2211, CHM 3411, or permission of the instructor.
CHM 6340 Organic Geochemistry (3). Organic geochemistry of recent and ancient environments. Characteristics, origin, and transformation of organic matter in the geosphere, including formation of crude oil.

Prerequisites: CHM 2211, CHM 3411, CHM 4130, GLY 1010, or permission of the instructor.
CHM 6382 Advanced Biological Chemistry (3). In depth exploration of one or more biological chemistry areas, for example, use of multinuclear NMR in examining nuclear acids and proteins; biosynthesis of toxins, roles of porphyrins. Topics covered vary with instructor. Prerequisites: Biological Chemistry and Physical Chemistry or permission of instructor.
CHM 6430 Advanced Thermodynamics (3). The laws of classical thermodynamics and their application. Open and closed systems, irreversible processes, high and low temperature systems, solids, liquids, and gases. Core course. Prerequisites: CHM 3411 or permission of the instructor.
CHM 6449 Photochemistry (3). Fundamentals of photochemistry. Excited states, energy, and electron transfer processes, photo-oxidation, reactive species, and environmental photochemistry. Prerequisites: CHM 4220 or permission of the instructor.
CHM 6461 Statistical Thermodynamics (3). Principles of statistical thermodynamics. Ensembles, classical and quantum statistics, ideal and nonideal gases, equilibrium, crystals, liquids, and polymers. Prerequisites: CHM 3411 or permission of the instructor.
CHM 6480 Quantum Mechanics (3). Introduction to quantum mechanics. The Schrodinger equation and its solutions, approximation methods, spin, symmetry, structure of atoms and molecules. Prerequisites: CHM 3411 or permission of the instructor.
CHM 6511 Polymer Chemistry (3). A quantitative study of polymers. Mechanism of formation, configuration of polymer chains, and the relationship between physical properties and chemical constitution. Prerequisite: CHM 3411 or permission of the instructor.
CHM 6621 Inorganic Reaction Mechanisms (3). Review of kinetics and determination of mechanism. Study of mechanism of reactions of coordination complexes including electron transfer reactions, ligand substitution reactions, coordinated ligand reactions of importance in homogeneous catalysis. Prerequisite: Physical Chemistry I (Kinetics).
CHM 6624 Coordination Chemistry (3). Electronic structure of metals and transition metal complexes; redox reactions; introduction to organometallic and Bioinorganic Chemistry. Symmetry and group theory applied to Transition Metal Complexes. Physical methods in Inorganic Chemistry. Prerequisites: CHM 3410 Physical Chemistry (Kinetics), CHM 3411 Physical Chemistry II (Quantum Mechanics).
CHM 6802 Research Ethics (1). Ethical issues in biochemical research. Scientific misconduct, professional integrity, intellectual property, authorship and publication. Corequisite: Graduate standing.
CHM 6905 Independent Study in Chemistry (1-6). Independent study and problems in an area of chemistry, under faculty supervision. May be repeated. Prerequisite: Permission of the instructor.

CHM 6910L Graduate Research in Chemistry (VAR). The student works directly with a professor on a research
project. Credit is assigned on the basis of four hr/wk per credit hour. Results to be presented as a seminar. Permission of the instructor.
CHM 6935 Graduate Seminar (1). An examination of various current research topics in chemistry. Prerequisite: Graduate standing.
CHM 6936 Chemistry Colloquium (1). Analysis of current developments and topics presented by faculty members and registered students. Prerequisite: Admission to graduate program in chemistry.
CHM 6940 Supervised Teaching (1-3). Graduate student serves as lecturer and demonstrator in undergraduate laboratories coordinated and supervised by a faculty member. May be repeated. A maximum of three hours may apply to the Master's degree. Prerequisite: Good graduate standing.
CHM 6949 Industrial Internship (3). A semester of supervised work in an outside laboratory. Prerequisite: Permission of the instructor.
CHM 6970 Thesis Research (1-10). Research toward completion of Master's Thesis. Repeatable. Prerequisite: Permission of the department.
CHM 6971 Master's Thesis (1-6). Completion of thesis. Prerequisite: Permission of major professor.
CHM 7910 Dissertation Research (1-10). Research towards the completion of a doctoral dissertation. Repeatable. Prerequisite: Graduate Standing.
CHM 7980 Ph.D. Dissertation (1-12). Completion of doctoral dissertation. Prerequisite: Permission of Major Professor and Doctoral Candidacy. May be repeated.
CHS 5435 Pharmacology and Toxicology of Drugs (3). Provides an in-depth understanding of basic pharmacological and toxicological principles of drug action from a molecular, mechanistic, and physiochemical viewpoint. Prerequisite: Graduate standing.
CHS 5502 Forensic Chemistry for Teachers (3). Incorporates concepts and techniques from the application of analytical chemistry, molecular biology, biochemistry, toxicology, and microscopy to forensic casework. Exposure to teaching resources in these areas and case study format of presentation. Open to education majors only. Prerequisites: CHM 3120, CHM 3120L, CHM 2211, and CHM 2211L or permission of instructor.
CHS 5535 Forensic Analysis (3). Advanced topics on the role that physical evidence plays in their criminal justice system. Topics include crime scene methods, laboratory management and the legal framework as it relates towards physical evidence. Prerequisites: CHM 3120, CHM 3120L, CHM 2211, CHM 2211L, or permission of the instructor. (Does not count towards chemistry elective requirement).
CHS 5535L Forensic Analysis Lab (1). Laboratory to accompany Forensic Analysis CHS 5535. Prerequisites: CHM 3120, CHM 3120L, CHM 2211, CHM 2211L or permission of the instructor.
CHS 5536 Forensic DNA Chemistry (3). Chemical basis for current methodologies of DNA analysis. DNA sequencing, PCR, STR, AFLP, mass spectrometry. Prerequisites: CHM 4304 or permission of instructor.

CHS 5538C Chemistry and Analysis of Drugs (3). Introduction to the chemistry of drugs of abuse, including reactivity, synthesis and the principles of analysis from solid doses and from body fluids. Laboratory analysis through the determination of unknown samples. Prerequisites: CHM 4130, CHM 4130L, CHM 4304, CHM 4304L.
CHS 5539 Forensic Toxicology (3). Provides the basic concepts of forensic toxicology as it applies to drug and body fluid analysis. Prerequisites: CHM 2211+L, CHM $3120+$ L, CHM $4305+$ L (BCH 3033+L) or permission of instructor.

CHS 5542 Forensic Chemistry (3). Advanced analytical methods in Forensic Chemistry for application to the analysis of controlled substances, materials (ie., paint, glass, and fibers), flammable and explosives residues with an emphasis on new methods and method development.
CHS 5545 Chemistry and Analysis of Explosives (3). Chemistry and reactivity, including thermochemistry, of modern industrial and military explosives' with an emphasis on the analysis of explosives residues from post-blast debris and from samples of environmental interest. Prerequisites: CHM 4130, CHM 4130L.
CHS 6110 Topics in Radiochemistry (3). Principles and applications of radiochemistry. Types of radionuclides, decay modes, radiation detection, counting statistics, dose determination, hazards, and applications. Prerequisites: Graduate student status and CHM 3411 or equivalent.
CHS 6111 Advanced Radiochemistry (3). Radioanalytical techniques, applications of radioisotopes and tracers, nuclear reactor, the chemistry of trausuranic elements, the nuclear fuel cycle and advanced solvent extraction processes. Prerequisite: CHS 6110.
CHS 6905 Independent Study in Forensic Science (16). Independent study and problems in an area of forensic science under faculty supervision. Prerequisite: Permission of instructor.

CHS 6946 Graduate Forensic Internship (1-6). Internship in an operational forensic laboratory, contributing in a specific manner on an assigned research project. Six hours a week minimum residence time per credit in the lab under the supervision of a host lab scientist and a faculty member is required. A final written report and presentation required. Prerequisite: Core courses in Forensic M.S. Program.
OCC 5050 Chemical Oceanography (3). Interaction of chemical processes in marine systems with biological, geological, and physical processes. Prerequisites: Graduate standing or permission of the instructor.

## Forensic Science

DeEtta Mills, MSFS Graduate Program Director, Associate Professor, Biological Sciences and Director, Forensic DNA Profiling Facility
Jose R. Almirall, Professor, Chemistry and Biochemistry and Director, International Forensic Research Institute (IFRI)
Bruce McCord, Professor, Chemistry and Biochemistry and Associate Director, IFRI
Anthony P. (Tony) DeCaprio, Associate Professor, Chemistry and Biochemistry and Director, Forensic Science Certificate Program
Kenneth Furton, Provost, Executive VP and Professor, Chemistry and Biochemistry
Kevin McEIFresh, Assistant Director, IFRI
Jeannette Perr, Graduate Program Director, Professional Science Master's in Forensic Science
Jeffrey Wells, Associate Professor, Biological Sciences
Yi Xiao, Assistant Professor, Chemistry and Biochemistry
Administered by the International Forensic Research Institute (IFRI), the Master of Science in Forensic Science is an interdisciplinary program designed to prepare students for careers in local, state and national forensic science laboratories. The program may also be suitable preparation for doctoral instruction in several disciplines.

## Admission Requirements

To be admitted into the Master's degree program in Forensic Science, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.*
2. Have a 3.0 GPA in upper-level course work and submit official Graduate Record Exam (GRE) scores.
3. Two letters of recommendation of the student's academic potential.
4. Be accepted by a faculty sponsor.
5. Receive approval from the Graduate Committee.
6. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
*Minimum requirement is the equivalent of a bachelor's degree in biology, chemistry or related science approved by the graduate committee. It is recommended that students have the equivalent of a minor in chemistry before taking the required courses.

## Degree Requirements

The Master of Science in Forensic Science consists of a minimum of 32 credits, including a thesis based upon the student's original research or completion of an independent study report option.**

A maximum of six credits of post-baccalaureate coursework may be transferred from other institutions, subject to the approval of the Graduate Committee. The graduate committee will consist of the Graduate Program Director and a member from each of the following departments: Chemistry, Biology, Criminal Justice and Psychology. The thesis committee shall consist of the research advisor (normally the faculty sponsor), and at
least two additional committee members who have some expertise in the graduate student's research area. All members must hold graduate faculty status.

| Required Courses |  |  |
| :---: | :---: | :---: |
| BSC 5406 | Forensic Biology | 3 |
| CHS 5542 | Forensic Chemistry | 3 |
| CHS 5535 | Forensic Analysis | 3 |
| BSC 5931 | Thesis Proposal or | 1 |
| CHM 6935 | Thesis Proposal or approved cognate ${ }^{1}$ | 1 |
| BSC 5975 | Thesis Defense Seminar or | 1 |
| CHM 6971 | Thesis Defense Seminar or approved cognate ${ }^{1}$ | 1 |
| BSC 6971 | Thesis or | 6 |
| CHM 6970 | Thesis or approved cognate ${ }^{1}$ | 6 |

Electives ${ }^{2}$
${ }_{1}$ Equivalent courses in the student's area(s) of thesis concentration may be substituted upon approval by the thesis committee in consultation with the Graduate Program Director (i.e., CCJ, GLY, PHY, PSY). 2At least fifteen credits of additional graduate-level courses, workshops and laboratories (excluding research and seminar) from participating departments approved by the thesis committee in consultation with the Graduate Program Director. [Consult the Director for a selected list of Chemistry, Biology, Earth Sciences, Criminal Justice, and Legal Psychology courses].
${ }^{* *}$ A report option is available for students with at least one year of forensic science lab work experience. Students approved for this option can replace "Thesis" with "Independent Study in Forensic Science (CHS 6905)" and the two additional required courses "Analytical Toxicology (CHS 5539)" and "Advanced Quality Control (STA 5664)".

## Graduation Requirement

A grade of " $C$ " or higher must be obtained in all courses with a cumulative average of $3.0 / 4.0$ or higher, and presentation and submission of a satisfactory research thesis to the Thesis Committee.

## Professional Science Masters in Forensic Science

The Professional Science Masters (PSM) in Forensic Science program designed to educate students in chemical and biological knowledge related to forensic science, and the necessary administrative skills related to managing (forensic) laboratories.

## Admission Requirements

To be admitted into the PSM in Forensic Science, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 GPA in upper-level course work.
3. Two letters of recommendation of the student's academic potential.
4. Be accepted by a faculty sponsor.
5. Receive approval from the Graduate Committee.
6. International graduate students applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL, 80 on the internetbased TOEFL (iBT) or 6.5 overall on the IELTS.

## Degree Requirements

The program consists of 32 credits; 23 credits will focus on technical forensic science content and 9 credits on professional business content. Of the 23 credit hours of forensic science content, FIU will offer 17 credits (with 2 credits for an internship), and 3 credits will be offered each by UCF and UF ( 6 credits total). Credits transferred need to be graduate level (>5000) and earned with a grade of "B" or better, and the course(s) cannot have been taken longer than seven years from the term the student begins as a PMS student. A maximum of six credits of postbaccalaureate coursework may be transferred from other institutions. Student will go through the program as a lockstep cohort.

## Graduation Requirements

A grade of " $C$ " or higher must be obtained in all courses with a cumulative average of 3.0/4.0 or higher. If students fail any course, they will have to retake that course the next time it is offered, either during the two-year period or as a part-time student after the two-year period. The later will delay the students' completing the program in two years.

## Required Courses

## Semester I: Fall (9 credits)

CHS $5535 \quad$ Forensic Analysis 3
BSC 5406 Forensic Biology 3
MAN 6501 Operations Management 3
Semester II: Spring (9 credits)
CHS 5542 Forensic Chemistry 3
CHS 5536 Forensic DNA Chemistry 3
MAN $6830 \quad$ Organization Information Systems 3
Semester III: Summer (6 credits)
VME 6766 Laboratory Quality Assurance/Quality Control (UF Course)
BSC 6925C Workshop: Non-Human DNA Profiling and Analysis or
BSC $5935 \quad$ Topics In Biology
CHM 5934 Special Topics in Analytical Chemistry
Semester IV: Fall (8 credits)
CGS $5131 \quad$ Computer Forensics I: Seizure and Examination of Computer Systems (UCF Course)
ACG 6026 Accounting for Managers 3
CHS 6946 Graduate Forensic Internship 2

## Combined BS in ChemistrylMS in Forensic Science

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000 -level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor of Science program in chemistry at FIU.
2. Current GPA of 3.2 or higher.
3. Official GRE general test scores.
4. Three letters of recommendation.
5. Approval of the Chemistry Graduate Committee.

## Completion Requirements

Completed Bachelor of Science degree in chemistry at FIU

## Required:

1. BSC 5406 Forensic Biology
2. CHS 5542 Forensic Chemistry
3. CHS 5535 Forensic Analysis
4. Required courses must be completed with an average of " $B$ " or higher, and only one course may receive a grade of less than "B-".
5. Electives: 5 courses selected from the Forensic Science Graduate Elective Offerings.
6. 6 credits of Thesis Research and 1 credit of Thesis.
7. 1 credit of Colloquium.
8. Overlap: Up to 3 graduate level courses ( 9 credits) may be used to satisfy both the Bachelor's and Master's degree requirements.

## Combined MS in Forensic Science/PhD in Biology

The MSFS/PhD in Biology combines the Master of Science in Forensic Science with a PhD in Biology. Student who pursue this degree will be enrolled in a continuous program; however, upon completion of all the requirements of the MSFS program (report option), students will be awarded a MSFS degree as they transition towards their PhD.

## MSFS/PhD in Biology Degree Requirements

For admission into the MSFS/PhD program, students must meet the admission criteria of a PhD student with the understanding that they will have an increased class load of 2-3 classes, e.g., Forensic Biology, Forensic Chemistry, and Forensic Analysis, when compared to the normal PhD
applicant but will graduate with two degrees. The requirements will be as follows:

1. Hold a Bachelor's degree in a natural science from a relevant university.
2. Have a 3.0 GPA during the last two years of the undergraduate program and submit official GRE scores.
3. Arrange to have three letters of recommendation sent to the Biology graduate program director evaluating the applicant's potential for graduate work.
4. Be sponsored by a Biology faculty member with Dissertation Advisor Status.
5. Receive approval from the Department Graduate program committee.
6. International graduate student applicants whose native language is not English are required to submit a score for Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IETLS). A score of 80 on the iBT TOEFL or 6.5 overall on the IETLS is required.
As these candidates will be dually enrolled in two graduate degree programs, candidates must complete minimum of 32 credit hours towards their MSFS degree with a grade of ' C ' or higher and a cumulative GPA of 3.0. The MSFS report option must be completed and accepted by the University before full transition towards the PhD. Candidates must also complete a total of 90 credit hours toward the PhD with the allowance for credits transferred from the completed MSFS degree. The student will be able to earn both degrees in a similar time frame that it would take to obtain either degree if pursued consecutively.

Students will be required to select a Master's defense committee while pursuing the MSFS as well as a PhD dissertation committee. This committee may or may not be comprised of the same members as those selected for the Master's program. The Master's proposal should be presented after the second semester of admission and the PhD dissertation defense should be presented after the fourth semester after admission.

## Required Courses

BSC 6457 Introduction to Biological Research 3
BSC 5931 Thesis Proposal Seminar 1
BSC 7961 Dissertation Proposal Seminar 1
BSC 5975 Thesis Defense Seminar 1
BSC 7982 Dissertation Defense Seminar 1
BSC 5406 Forensic Biology 3
CHS 5535 Forensic Analysis 3
CHS 5542 Forensic Chemistry 3
PCB 5665 Human Genetics 3
PCB $5685 \quad$ Population Genetics 3

## Elective Courses

PCB 6025 Molecular and Cellular Biology I 3
MCB 5116 Microbial Diversity 3
BSC 5459 Advanced Bioinformatics for Biologists 3
BOT 5852 Medical Botany 3
BOT 5727 Plant Genetics 3
PCB 5616 Applied Phylogenetics 3
STA 5207 Topics in Design of Experiments 3
STA 5507 Nonparametric Methods 3

## Labs and Workshops

BSC 6925 Workshop: Non-Human DNA Profiling and Analysis

| BSC 6926 | Workshop in Biology: DNA <br> Instrumentation | 1 |
| :--- | :--- | :--- |
| BSC 5935 | Workshop in Biology: Advanced DNA <br> Typing | $1-2$ |
| Research |  |  |
| BSC 6971 | Master's Thesis | 6 |
| BSC 7980 | Ph.D. Dissertation | 24 |

## Mathematics and Statistics

Abdelhamid Meziani, Professor and Chair
Gerardo Aladro, Associate Professor
Dongmei An, Senior Instructor
Leonid Bekker, Senior Instructor
Umut Caglar, Instructor
Chongsheng Cao, Professor
Zhenmin Chen, Professor
Laura DeCarli, Professor
Tedi Draghici, Associate Professor
Julian Edward, Professor
Domitila Fox, Senior Instructor
Ciprian Gal, Associate Professor
Maydelin Galvez, Instructor
Florence George, Associate Professor
Gauri L. Ghai, Associate Professor and Advisor
Ramon Gomez, Senior Instructor
Susan Gorman, Senior Instructor
Gueo Grantcharov, Professor
Stephan Grigoriev, Instructor
Sneh Gulati, Professor
Kathleen Guy, Instructor
Jerry Hower, Instructor
Kai Huang, Associate Professor
Steven M. Hudson, Professor
George Kafkoulis, Associate Professor
Golam Kibria, Professor
Solange Kouemou, Senior Instructor
Mark Leckband, Associate Professor
Thomas Leness, Associate Professor
Bao Qin Li, Professor
Surender Lindley, Instructor
Dane McGuckian, Senior Instructor
Lakshmy Menon, Instructor
Idris Mercer, Instructor
Roneet Merkin, Instructor
Jie Mi, Professor
Ada Monserrat, Instructor
Richard Nadel, Senior Instructor
Sergio Perez, Instructor
Shivanni Ramhit, Instructor
Taje Ramsamujh, Associate Professor
Laura Reisert, Instructor
Michael Rosenthal, Senior Instructor
Alireza Rostamian, Senior Instructor
Dev K. Roy, Associate Professor
Philippe Rukimbira, Professor
Samuel S. Shapiro, Professor Emeritus
Carmen Shershin, Senior Lecturer
Robert Storfer, Senior Instructor
Yuanchang Sun, Assistant Professor
Theodore Tachim Medjo, Professor
Louis Roder Tcheugoue Tebou, Professor
Klaus Utikal, Instructor
Enrique Villamor, Professor
Wei Wang, Assistant Professor
Zhongming Wang, Assistant Professor
Anna Wlodarczyk, Senior Instructor
Wensong Wu, Assistant Professor
Yi Zhi Yang, Senior Instructor
Mirroslav Yotov, Senior Lecturer
Hassan Zahedi-Jasbi, Associate Professor and Director of Statistics Division
John Zweibel, Associate Professor and Advisor

## Master of Science in Mathematical Sciences

## Admission

The following are in addition to the University's graduate admission requirements:

1. Bachelor's degree in mathematics, applied mathematics or mathematical sciences from an accredited university or college. A bachelor's degree in some other discipline is also acceptable provided the applicant has sufficient mathematics background. The following courses (or equivalent courses) are required for those whose bachelor's degrees are not in mathematics, applied mathematics or mathematical sciences: Advanced Calculus, Linear Algebra, Complex Variables and Algebraic Structures.
2. A ' $B$ ' average or higher in upper division mathematics courses.
3. Graduate Record Examination (GRE) taken within the past five years. At least 151 on the quantitative portion of the GRE, or an earned graduate degree from an accredited institution and the approval of the department. Risk Analysis Management Track applicants are allowed to use Graduate Management Admission Test (GMAT) to meet the admission requirement instead of GRE. The minimum required GMAT total score is 500 .
4. Three letters of recommendation concerning the candidate's achievement and potential, from persons familiar with the candidate's previous academic performance.
5. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.3 overall on the IELTS is required.
6. Approval of the Graduate Committee.

## Option 1

The student must complete a minimum of 24 semester hours of graduate course work. This course work must include 5 courses from the following two lists, with at least 2 from each list.

## List A:

MAA 6406 Complex Analysis 3
MAA 5616 Introduction to Real Analysis 3
MAP $5316 \quad$ Ordinary Differential Equations 3
MAS $5311 \quad$ Graduate Algebra 3
MAS $5312 \quad$ Galois Theory 3
MHF 5107 Graduate Set Theory 3
MHF $5306 \quad$ Graduate Mathematical Logic 3
MHF 5325 Theory of Recursive Functions 3
MTG 5326 Introduction to Algebraic Topology 3
MAP 5415 Introduction to Fourier Analysis 3
List B:
MAD 5405
MAP 5236 Mathematical Techniques of Operations
MAP 6326
MAP 5407 Methods of Applied Analysis 3
MAS $5145 \quad$ Applied Linear
Algebra

| STA 5446 | Probability Theory I | 3 |
| :--- | :--- | :--- |
| STA 5447 | Probability Theory II | 3 |

Electives
The remaining 9 hours of course work will be used to enhance a coherent program of study best suited to the student's needs and interest. This requires the prior approval of the Graduate Committee and may be done in one or a combination of the following ways: a) Further work from lists A and B. b) A maximum of 2 courses of independent study, taken with Mathematical Sciences faculty. c) Graduate level course work in Engineering, Physics or Statistics.

## Master's Project

The student will complete his or her graduation requirements by writing an expository paper under the direction of a faculty member. The student may earn six credit hours (MAT 5970 Master's Research) in preparing the project. Successful completion of the Master's project requires a grade of ' $B$ ' or higher, as well as approval of a committee consisting of three mathematics faculty (including the director).
Remarks: The course work must be completed with a 3.0 or higher Grade Point Average (GPA) and a grade of ' $C$ ' or higher in each course. A maximum of six graduate semester hours may be transferred into the program from outside the University, subject to the approval of the Graduate Committee. A total of 30 credit hours is required for graduation.

## Option 2

This course work must include 7 courses from List A and List B in Option 1, with at least 3 courses from each list.

## Electives

Same as in Option 1.

## Option 2 has no Master's Project requirement

Remarks: The course work must be completed with a 3.0 or higher Grade Point Average (GPA) and a grade of ' $C$ ' or higher in each course. A maximum of six graduate semester hours may be transferred into the program from outside the University, subject to the approval of the Graduate Committee. A total of 30 credit hours is required for graduation.

## Risk Analysis and Management Track

This track will consist of 12 one-semester three credit graduate courses, and one optional elective during the last semester of the program. The degree will be completed in 12 months. Full time students will take four courses per semester to complete the program in three semesters.

## Admission Requirements

Admission requires a Bachelor's in Mathematics or related fields. In addition, applicants must satisfy conditions 3 through 5 in the admission requirements for our Master of Science in Mathematical Sciences, and have a GPA of at least 3.0 in undergraduate studies. Admission to the program requires applicants to have a firm grasp of mathematics at a high undergraduate level. This means calculus through multivariable calculus, linear algebra and differential equations. Knowledge in probability, statistics,
computer programming, economics, or finance is recommended but not required. A student with promise but lacking prerequisites may be admitted but required to take one or more preparatory courses during their first semester.

## Degree Requirements

The track in Risk Analysis and Management (RAM for short) requires 36 credits. The student must take 12 graduate credits, 3 credits each.

## Course Requirements

## Fall Term

MAP 6635 Risk Analysis and Management I 3
FIN 6428 Corporate Finance 3
COP 6007 Computer Programming Concepts 3
A course from List I below (to be chosen based on the class' background)

Spring Term
MAP 6218 Stochastic Calculus 3
MAP 6636 Risk Analysis and Management II 3
A course from List I below (to be chosen based on the class background)
MAD $5405 \quad$ Numerical Methods

## Summer Term

MAP 6632
PDE in Risk Analysis and Management 3
MAP 6637 Risk Analysis and Management III 3
ECO 7429 Topics in Econometrics 3
FIN 6515 Security Analysis 3
FIN 6426
Financial Management Policies
List I
MAP $5204 \quad$ Optimization and Linear Algebra 3
MAA 5616 Introduction to Real Analysis 3
STA 6326 Mathematical Statistics I 3
STA 3033 Introduction to Probability and Statistics
for CS

## Combined BS in Mathematics/MS in Mathematical Sciences

This program will allow strong students in mathematics to complete a bachelor's degree and a master's degree in 5 years rather than the usual six. A minimum of 140 credits are required for graduation with both the bachelor's and the master's degree. In addition to fulfilling the requirements for the Bachelor's degree in mathematics, these 140 credits include 30 graduate credits required for the Master's of Science in Mathematical Sciences. A maximum of ten (10) graduate mathematics credits can be concurrently used toward the bachelor's and master's degrees.

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree
program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in a Bachelor's degree program in mathematics.
2. Current overall GPA of at least 3.2 and GPA of at least 3.2 in upper division courses.
3. Completion of $75-90$ undergraduate credit-hours.
4. (Verbal and Quantitative) GRE scores with a minimum of 151 in the quantitative portion before entering the MS phase of the program.
5. Approval of the graduate committee.

## Completion Requirements

## Year 1 and 2:

MAC 2311 Calculus I
MAC $2312 \quad$ Calculus II
MAC $2313 \quad$ Calculus III
MAS 3105 Linear Algebra
MAP 2302 Ordinary Differential Equations
Year 3
Fall
MAA 3200 Introduction to Advanced Mathematics
STA 4321 Introduction to Mathematical Sciences I
One course from List 1 or 2
Spring
MAA 4211 Advanced Calculus
MAS $4301 \quad$ Algebraic Structures
One course from List 1 or 2

## Summer

One course from List 1 or 2 and 1 graduate course
Year 4
Fall
MAA 5616 Introduction to Real Analysis
One course from List 1 or 2
Senior Seminar (1 credit)

## Spring

One graduate course
Two courses from List 1 or 2

## Summer

Three graduate credits

## Year 5

Fall
Nine graduate credits

## Spring

Nine graduate credits
The graduate courses distribution should follow catalog descriptions of the master's program requirements. Students must take at least 3 courses from List 1 and at least 3 courses from List 2. The balance of the 140 semester hours required for graduation may be chosen from any courses in the university, a minimum of six (6) of these should be at the upper division level or higher.

## List 1

MAD 4203

MAA 4402 Complex Variables 3
MTG $3212 \quad$ College Geometry 3
MAS 4203 Number Theory 3
MAA 4212 Topics in Advanced Calculus 3
MAS $4302 \quad$ Topics in Algebraic Structures 3
MTG 4302 Topology 3
List 2
MAP $4401 \quad$ Advanced Differential Equations 3
MAD 3305 Graph Theory 3
MAP 3103 Mathematical Modeling 3
STA $4322 \quad$ Mathematical Statistics II 3
MAD $3401 \quad 3$
MHF 4302 Mathematical Logic 3
MHF 4102 Axiomatic Set Theory 3

## Master of Science in Statistics

The Master of Science in Statistics at Florida International University is primarily an applied statistics program. It offers a balance of statistical theory, statistical methodology, and optionally, an area application concentration. The program offers a thesis option and a non-thesis option. Regardless of the concentration or thesis option, the program requires a total of 36 credithours as follows: six core courses (18 hours), four elective courses or an area of concentration (12 hours), and either a thesis (6 hours) or two additional elective courses (6 hours) and a comprehensive examination.

## Admission Requirements

To be admitted into the program, applicants must meet the university's graduate admission requirements (see Office of Graduate Admissions in this catalog), GRE scores are required. If an applicant has an earned graduate degree from an accredited US institution, the Department may waive the GRE requirement. All the applicants must also meet the following departmental requirements:

1. Bachelor's degree in statistics, mathematics, or in a related field from an accredited university or college. A bachelor's degree in some other discipline is also acceptable provided the applicant has a suitable mathematics background.
2. A 3.0 or higher (on a 4-point scale) GPA in mathematics and statistics courses.
3. Three letters of recommendation from persons familiar with the applicant's academic qualifications.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
5. Approval of the departmental graduate committee.

## Core Courses: (18)

STA 5206 Design of Experiments
STA 6244 Data Analysis I
STA 6246 Linear Models
STA $6247 \quad$ Data Analysis II
STA 6326 Mathematical Statistics I
STA 6327 Mathematical Statistics II

## Elective Courses: (12)

A student may select four courses from Lists A, B, and C or may opt for an area of concentration (see below).

## Concentration Area: (12)

Students interested in a concentration in Biostatistics/ Environmetrics must select two courses from List A and two track-related electives. At least one of these electives must be from outside the department.

Students interested in a concentration in Reliability Analysis/Quality Control must select two courses from List $B$ and two track-related electives. At least one of these electives must be from outside the department. All electives must be approved by the Graduate Program Director.
List A: Biostatistics/Environmetrics
STA 5826 Stochastic Processes
STA 6176 Biostatistics
STA 6678 Environmental Statistics
List B: Reliability Analysis/Quality Control
STA 5666 Advanced Quality Control
STA 5676 Reliability Engineering
STA 5826 Stochastic Processes

## List C: Elective Statistics Courses

STA 5207 Topics in Design of Experiments
STA 5236 Regression Analysis
STA $5507 \quad$ Nonparametric Methods
STA 5906 Independent Study
STA $6505 \quad$ Analysis of Categorical Data
STA $6807 \quad$ Queueing and Statistical Models
STA 6940 Supervised Statistical Consulting
STA 7707 Multivariate Methods I
STA 7708 Multivariate Methods II
Elective Courses from Outside of the Department Elective courses from outside of the department must be approved by the Graduate Program Director.

## Thesis Option: (6)

Students opting to write a thesis must enroll in STA 6971, Thesis Research and STA 6972, Master's Thesis (6 credithours total).

## Non-Thesis Option: (6)

Students who opt not to write a thesis must take two additional elective courses selected from List $C$ or from outside of the department. These courses must be approved by the Graduate Program Director.

## Graduation Requirements

1. Grade and GPA requirements: a) cumulative GPA of 3.0 or higher in all courses, b) an average grade of " $B$ " or higher in all core courses, with a minimum grade of "C" or higher in each core course, and c) a grade of "C" or higher in each concentration or elective course.
2. A candidate who opts to write a thesis must successfully defend the thesis orally and have the written thesis approved by his/her thesis committee.
3. A candidate who chooses the non-thesis option must take and pass a comprehensive examination. Students must follow all regulations of the University Graduate School.

## Combined BS/MS in Statistics

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree
program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the first semester of the senior year Bachelor's Degree Program in Statistics at FIU
2. Completed at least 75-90 undergraduate credits hours
3. Current GPA of 3.25 of higher
4. Official GRE scores (quantitative and verbal)

## Courses and other General Requirements

Students enrolled in the program may count up to 9 hours as credits for both the undergraduate and graduate degree programs. These courses must be taken at least the 5000 level and can be chosen from the following list (amongst others):
STA 5206 Design of Experiments I
STA 5236 Regression Analysis
STA 5507 Nonparametic Methods
STA 5666 Advanced Quality Control
STA $5207 \quad$ Topics in Design of Experiments
STA 7707 Multivariate Methods I
STA $7708 \quad$ Multivariate Methods II
Students who count cross listed courses towards the degree will not get credit for both the 4000 level and the 5000 level course. In fact, the students will not be allowed to take both the courses.

In addition, as part of earning the MS degree the students are required to take the following core courses:
STA 6244 Data Analysis I
STA 6247 Data Analysis II
STA 6326 Mathematical Statistics I
STA 6327 Mathematical Statistics II
The BS/MS program is designed to be a continuous program; however, upon completion of all the requirements of the undergraduate degree, students will receive the BS degree. Students in this program have up to one year after receipt of the bachelor's degree to complete the MS degree. Students who fail to meet the post BS requirement or who elect to leave the combined program at any time and earn only the BS degree will have the same access requirements to regular graduate programs as any other student but will not be able to use the 9 credits for both the bachelor's and master's degree.

Students enrolled in the program must maintain an overall GPA of 3.0 or higher and must get a minimum grade of " $B$ " in all the core courses. Upon completion of the entire $4+1$ program, students must have accumulated a minimum of 30 hours of credits at the graduate (5000+) level. In addition, to get the MS degree, the students will also be required to take a comprehensive examination or
do a thesis. Students opting for the comprehensive exam will be required to take an additional 6 hours of credits at the graduate $(5000+$ ) level. All students enrolled in the program will be expected to attend the departmental seminars.

## Course Descriptions

## Definition of Prefixes

COT-Computing Theory; MAA-Mathematics: Analysis; MAD-Mathematics: Discrete; MAP-Mathematics: Applied; MAS-Mathematics: Algebraic Structures; MATMathematics; MHF-Mathematics: History and Foundations; MTG-Mathematics: Topology and Geometry; STA-Statistics
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering

COT 5310 Theory of Computation I (3). Abstract models of computation; halting problem; decidability and undecidability; recursive function theory. Prerequisite: MAD 3512.

COT 6400 Analysis of Algorithms (3). Complexity behavior of algorithms is described for Set Manipulation, Graph Theory, and Matrix Manipulation problems, among others. P and NP classes of problems reveal an inherent difficulty in designing efficient algorithms. Prerequisite: COP 3530.

MAA 5616 Introduction to Real Analysis (3). Lebesgue Measure and Integral with applications to Integral Transforms. Prerequisites: MAS 3105, MAA 4211, MAP 4401 or MAA 4212.

MAD 5405 Numerical Methods (3). Advanced ideas and techniques of numerical analysis for digital computation. Topics include: linear and non-linear systems, ordinary differential equations, continuous system modeling techniques, and languages. Prerequisites: MAS 3105 and MAP 2302.
MAA 6406 Complex Analysis (3). Harmonic functions, normal families, Riemann mapping theorem, univalent functions, infinite products and entire functions, elliptic functions, analytic continuation. Prerequisites: MAA 4211 and MAA 4402.

MAD 7408 Topics in Numerical Analysis (3). Topics include numerical linear algebra, special methods, finite element methods, computational fluid dynamics, signal and image processing. Prerequisite: MAD 6xxx Numerical Methods II.

MAP 5117 Mathematical and Statistical Modeling (3). Study of ecological, probabilistic, and various statistical models. Prerequisites: MAC 2313, COP 2210, MAS 3105; and STA 3033 or STA 3164 or STA 4322.

MAP 5204 Optimization and Linear Algebra (3). Vectors, Euclidean spaces, operations on matrices, rank, determinants, linear and quadratic programming, Kuhn, Tucker techniques for constrained optimization. Prerequisite: MAC 2313.
MAP 5208 Numerical Optimization (3). The generalization of optimization theory and techniques to other formulations comprise a large area of applied mathematics. This course is mainly about convex
optimizations. Prerequisites: MAP 2302, MAC 2313, MAS 3105.

MAP 5236 Mathematical Techniques of Operations Research (3). This course surveys the mathematical methods used in operations research. Topics will be chosen from linear programming, dynamic programming, integer programming, network analysis, classical optimization techniques, and applications such as inventory theory. Prerequisites: MAP 5117 and MAS 3105 and either CGS 3420 or COP 2210.

MAP 5255 Mathematical Scientific Computation (3). Programming in Matlab, Graphics in Matlab, Creating GUIs in Matlab, Simulink. Prerequisites: MAC 2313, MAP 2302, MAS 3105.
MAP 5316 Ordinary Differential Equations (3). Existence and uniqueness theorem, matrix formulation, physical applications, regular singular points, autonomous systems, Laplace transform, special topics. Prerequisites: MAA 3200, MAA 4402 and MAS 3105.
MAP 5317 Advanced Differential Equations for Engineers (3). Topics may include Bessel Functions and other special functions arising from classical differential equations, Sturm-Liouville problems, partial differential equations, transform techniques. Credit may not be counted for both MAP 4401 and MAP 5317. Credit for MAP 5317 may not be applied toward the Master's degree in Mathematical Sciences. Prerequisites: MAC 2313 and MAP 2302.

MAP 5318 Dynamical Systems and Introduction to Chaos Theory (3). Important techniques for linear systems of differential equations and nonlinear systems, as well as applications of these systems in a wide variety of fields. Prerequisites: MAS 3105, or equivalent, or permission of the instructor.

MAP 5407 Methods of Applied Analysis (3). Convergence, fixed point theorems, application to finding roots of equations, normed function spaces, linear operators, applications to numerical integration, differential and integral equations. Prerequisites: MAA 4211, MAP 2302, and MAS 3105.

MAP 5415 Introduction to Fourier Analysis (3). Basic real analysis, and measure theory, LP spaces and convolution, the Fourier transform in $\mathrm{L}^{2}$, Plancherel theorem, application to differential equations and wavelets. Prerequisites: Advanced Calculus, Linear Algebra.
MAP 5467 Stochastic Differential Equations and Applications (3). Review of measure theory, stochastic processes, Ito Integral and its properties, martingales and their generalizations, stochastic differential equations, diffusions. Applications to boundary value problems and finance. Prerequisites: MAS 3105, MAP 4401, MAA 4211, MAA 5616 or permission of instructor.

MAP 6217 Calculus of Variations (3). Fundamental problems, weak and strong extrema, necessary and sufficient conditions, direct methods, optimal control problems, Pontryagin Maximum principle. Prerequisites: MAP 4401 and MAA 5616.

MAP 6218 Stochastic Calculus (3). Discrete time models, Brownian motion, stochastic integration, ITO's integral, Ornstein-Uhlenbeck processes, Girsanov
theorem, Black-Sholes model. Prerequisites: STA 4321 or equivalent.

MAP 6326 Partial Differential Equations (3). Basic concepts of first and second order PDE's applications to optics and wave fronts, Cauchy problem, Laplace equation, Green's function, Dirichlet problem, heat equation. Prerequisite: MAA 4211.
MAP 6357 Partial Differential Equations II (3). Modern aspects of PDEs. Topics include distribution theory, fundamental solutions, maximum principles, Sobolev spaces, initial and boundary value problems. Prerequisites: MAA 6616 and MAP 6326.

MAP 6630 Numerical Methods in Risk Analysis and Management (3). Quadrature methods, numerical solutions to ODEs and PDEs, Monte Carlo method, applications to asset pricing. Prerequisites: Calculus 3, Matrix Algebra, Diff. Equations.
MAP 6631 Intro to Quantitative Risk Analysis and Management (3). A mathematical introduction to arbitrage-based pricing of derivative securities. Prerequisites: MAC 2313, MAS 3105.
MAP 6632 PDE in Risk Analysis and Management (3). Deterministic and stochastic optimization, dynamic programming, Hamilton-Jacob, equation, forward and backward Kolmogorov equation, Feynman-Kac formula. Prerequisites: Stochastic Calculus, Differential Equations, Calculus 3, Matrix Algebra.
MAP 6635 Risk Analysis and Management I (3). Basic probability, Martingales, Black-Sholes models, BlackSholes formula, American options. Prerequisites: MAC 2313, MAS 3105, STA 4321. Corequisites: STA 4321 or equivalent.
MAP 6636 Risk Analysis and Management II (3). Discrete and continuous time models, application of stochastic integrals and ITO's Lemma to Finance, Risk of Neutral Valuation. Prerequisite: MAP 6635.
MAP 6637 Risk Analysis and Management III (3). Continuous time Risk Management. Arbitrage pricing theory. Exotix options. Interest rate models. Yield curves and pricing of interest rate derivative. Prerequisite: MAP 6636.

MAP 7359 Topics in Partial Differential Equations (3). Advanced topics in partial differential equations. Topics may include: mathematical fluid mechanics; inverse problems; microlocal analysis of PDE; spectral analysis and scattering theory. Prerequisite: MAP 6357.
MAS 5145 Applied Linear Algebra (3). Vector spaces and linear maps, solutions of linear systems, orthogonal projection and QR factorization, determinant and eigenvalues of a matrix. Prerequisites: MAS 3105 and MAA 3200.
MAS 5311 Graduate Algebra (3). A study of the basic material on groups, rings and vector spaces. Topics include the Jordan-Holder theorem, structure of modules over Euclidean domains and canonical forms of matrices. Prerequisites: MAS 4301 or equivalent.
MAS 5312 Galois Theory (3). Extension fields, ruler and compass constructions, fundamental theorem of Galois Theory, cyclotomic and cyclic extensions, solutions of
equations by radicals, selected topics. Prerequisites: MAS 5311 or permission of the instructor.

MAS 5315 Algebraic Geometry (3). Introduction to the theory of affine and projective schemes, coherent sheaves and sheaf cohomology. Application to studying algebraic varieties. Prerequisites: MAS 4301, MAA 4402.
MAT 5907 Independent Study (VAR). Individual conferences, assigned reading, and reports on independent investigations.
MAT 5921 Training in Mathematical Exposition (1). Students prepare and present supervised lectures on undergraduate mathematical topics to fellow students. Prerequisite: Graduate standing.
MAT 5970 Master's Research (1-6). Research toward preparation of master's project. Prerequisite: Permission of graduate committee.
MAT 6946 Applied Experience Component (1-3). Consists of a one semester (usually summer) internship at private corporation or government agency. Has three parts: i) weekly colloquia in math-science; ii) internship; iii) presentation after internship. Prerequisite: Permission of the department.
MAT 7908 Independent Study (1-3). For senior Ph.D. students to work on topics where standard courses cannot be opened. Could consist of individual conferences, assigned reading, or independent investigations. Prerequisite: Permission of the Math-Stats department.
MAT 7917 Graduate Research Seminar in Mathematics (3). Under supervision of faculty, students will read and present seminal papers a field of mathematics. Course will train students reading and comprehension of research articles, and in preparing talks. Prerequisite: Permission of the department.
MHF 5107 Graduate Set Theory (3). Zermelo-Frankel axioms, ordinals and cardinals, Godel's constructible universe, large cardinals, forcing and the independence of the Continuum Hypothesis and the Axiom of Choice. Prerequisites: MHF 4102 or MAA 4211 or permission of the instructor.
MHF 5306 Graduate Mathematical Logic (3). First order languages, construction of models from constants, advanced construction of models, non-standard models, recursion theory, RE sets, Turing degrees, oracle construction. Prerequisites: MHF 4302 or permission of the instructor.
MHF 5325 Theory of Recursive Functions (3). Turing machines, decision problems, coding, s-m-n theorem, Rice's and Myhill's theorems, oracles, degrees, finite and infinite injury constructions. Prerequisite: MHF 4302 or COT 5310.

MHF 5345 Mathematical Logic for Linguistics (3). Formal logical systems and applications. Propositional and predicate calculus, proof systems, completeness and incompleteness theorems, recursion. Chomsky hierarchy, formal grammars. Does not fulfill requirements for Mathematics Degree. Prerequisites: MAD 3512 or permission of the instructor.
MHF 5930 Topics in Modern Mathematics (3). Designed to provide student with the opportunity to pursue topics not
otherwise covered in other courses. Prerequisites: MAC 2313, MAS 3105.

MTG 5326 Introduction to Algebraic Topology (3). Classification of surfaces, fundamental group, homotopy type, Van Kampen theorem, simplicial complexes, introduction to homology theory. Prerequisites: MAS 4301 and MTG 4302.

STA 5065L SAS Data Analysis Lab (1). Entering data, descriptive statistics, graphing data, crosstabulations, ttests, correlation and regression, and analysis of variance. Prerequisites: A statistics course and graduate standing or permission of the instructor.
STA 5105L SPSS Data Analysis Lab (1). Topics include: Entering data from various sources, data checking, descriptive statistics, graphing data, crosstabulations, ttests, correlation and regression, ANOVA, and reliability. Prerequisites: A statistics course or concurrent enrollment in a statistics course, and graduate standing or permission of the instructor.
STA 5106 Intermediate Statistics I (3). Power, measures of assoc., measurement, ANOVA: one-way and factorial, between and within subjects expected mean squares, planned comparisons, apriori contrasts, fixed, random, mixed models. This course may be of particular interest to behavioral sciences. Prerequisites: STA 3111 or STA 3123 or STA 3033; and graduate standing. (F)
STA 5107 Intermediate Statistics II (3). Correlation and regression both simple and multiple, general linear model, analysis of covariance, analysis of nominal data, analysis of categorical data. This course may be of particular interest to behavioral sciences. Prerequisite: Permission of the instructor. (S)
STA 5126/PSY 5206 Fundamentals of Design of Experiments (3). CRD and RCB designs. Latin square designs. Factorial, nested and nested-factorial experiments. Fixed, random and mixed models. Split-plot designs. Covariance analysis. Prerequisites: STA 3112 or STA 3123 or STA 3163 or STA 4322 or equivalent.
STA 5206 Design of Experiments I (3). Design and analysis of completely randomized block, Latin square factorial, nested experiments. Multiple comparisons. Credit for only one of three STA 4202, STA 5126, and STA 5206 courses will be granted. Prerequisites: STA 3033 or STA 3164 or STA 4322 or (STA 3163 and STA 4321).
STA 5207 Topics in Design of Experiments (3). This applied course in design of experiments covers topics such as split-plot design, confounding, fractional replication, incomplete block designs, and response surface designs. Prerequisite: STA 5206.
STA 5236 Regression Analysis (3). Simple, multiple and polynomial regression, analysis of residuals, model building and other related topics. Credit for both STA 4234 and STA 5236 will not be granted. Prerequisites: STA 3112 or STA 3123 or STA 3164, or STA 6167.
STA 5446-STA 5447 Probability Theory I and II (3-3). This course is designed to acquaint the student with the basic fundamentals of probability theory. It reviews the basic foundations of probability theory, covering such topics as discrete probability spaces, random walk, Markov Chains (transition matrix and ergodic properties),
strong laws of probability, convergence theorems, and law of iterated logarithm. Prerequisite: MAC 2313.

STA 5507 Nonparametric Methods (3). Distribution-free tests: sign, Mann-Whitney U, Wilcoxon signed rank, Kruskal-Wallis, Friedman, etc. Rank correlation, contingency tables and other related topics. Credit for both STA 4502 and STA 5507 will not be granted. Prerequisite: A course in statistics.
STA 5666 Advanced Statistical Quality Control (3). Review of statistical methods useful in quality improvement. Statistical process control. Taguchi's and Deming's philosophies. Control charts. Process capability analysis. Acceptance sampling plans. Prerequisites: STA 3033 or STA 3163 or STA 4321 or equivalent.
STA 5676 Reliability Engineering (3). The course material is designed to give the student a basic understanding of the statistical and mathematical techniques which are used in engineering reliability analysis. A review will be made of the basic fundamental statistical techniques required. Subjects covered include: distributions used in reliability (exponential, binomial, extreme value, etc.); tests of hypotheses of failure rates; prediction of component reliability; system reliability prediction; and reliability apportionment. Prerequisite: STA 4322.

STA 5800 Stochastic Processes for Engineers (3). Probability and conditional probability distributions of a random variable, bivariate probability distributions, multiple random variables, stationary processes, Poisson and normal processes. Prerequisites: MAC 2313, MAP 2302, STA 3033.

STA 5826 Stochastic Processes (3). This course is intended to provide the student with the basic concepts of stochastic processes, and the use of such techniques in the analysis of systems. Subjects include: Markov Processes, queueing theory, renewal processes, birth and death processes, Poisson and Normal processes. Applications to system reliability analysis, behavioral science, and natural sciences will be stressed. Prerequisite: STA 5447.

STA 5906 Independent Study (1-6). Individual conferences, assigned reading, and reports on independent investigation.
STA 6166 - STA 6167 Statistical Methods in Research I and II (3-3). For non-mathematical sciences graduate students. A non-calculus exposition of methods and applications of statistical techniques for the analysis of data. Statistical packages will be used. Prerequisite: Graduate standing. (F,S)
STA 6176 Biostatistics (3). Statistical analysis of data encountered in medical sciences. Analysis of count data, Kaplan-Meier survival analysis, Cox proportional hazards model, analysis of covariance, logistic regression, etc. Prerequisites: STA 3163 or equivalent.

STA 6196 Statistics for Environmental Sciences (3). Environmental Quality Data, Binomial, Poisson, Normal, Lognormal, and Extreme value distributions. Prediction and Tolerance Intervals, Hypothesis Testing of Environmental Quality Data, Risk Assessment, Regression, Spatial Statistics. Prerequisites: STA 2122, STA 3145, STA 6166 or the equivalent.

STA 6244 Data Analysis I (3). Exploratory data analysis; testing of distributional assumptions; Chi-square tests, tests for means, variances, and proportions. Prerequisites: STA 3033, STA 4322, or STA 6327.
STA 6246 Linear Models (3). Introduction to the theory of linear models. Distribution of linear and quadratic functions of normal vectors. Development of inferential procedures for simple and other more complex linear models Prerequisites: MAS 3105, STA 6247, and STA 6327.
STA 6247 Data Analysis II (3). Analysis of variance, regression analysis. Analysis of covariance, quality control, correlation, empirical distributions. Prerequisites: MAS 3105 and STA 6244.
STA 6326 Mathematical Statistics I (3). An introduction to the theories underlying statistical analysis. Basic concepts of probability theory, combinatorial analysis, random variables, and expectation. Prerequisite: MAC 2313.

STA 6327 Mathematical Statistics II (3). Estimation of parameters, tests of hypotheses, regression, nonparametric methods, analysis of variance, and multivariate concepts. Prerequisite: STA 6326.
STA 6505 Analysis of Categorical Data (3). Analysis of contingency tables, measures of association, logit and loglinear models. Prerequisites: STA 5107 or STA 5236 or STA 6167.
STA 6636 High Dimension Data Analysis (3). Statistical techniques used to analyze high dimensional data sets. Topics include machine learning, high dimensional data, discriminant analysis and clustering. Prerequisites: STA 6246 and STA 5236 or equivalent.
STA 6678 Environmental Statistics (3). Review of probability theory and probability processes. Bernoulli, Poisson, and normal processes. Dilution of pollutants. Lognormal processes. Prerequisites: MAC 2312 and STA 3164.

STA 6746 Multivariate Statistical Analysis (3). Multivariate normal, Wishart and Hotelling's distributions. Statistical inferences based on one or two samples. MANOVA. Principal component analysis, factor analysis, and cluster analysis. Prerequisites: STA 3112 or STA 3123 or STA 6167.
STA 6807 Queueing and Statistical Models (3). Review of probability concepts, basic probability distributions, Poisson process, queuing models, statistical models. Prerequisites: Permission of the instructor, MAC 2312 and either STA 3033 or STA 4321.
STA 6930 Special Topics (3). A course designed to give students an opportunity to pursue special studies not otherwise offered in the curriculum. May be repeated. Prerequisite: Permission of the instructor.
STA 6940 Supervised Statistical Consulting (3). Formulation of statistical problems from client information, consulting session management, interpersonal aspects of consulting, problem solving techniques. Prerequisites: Permission of the instructor, STA 4102, STA 6247, and STA 6327.
STA 6971 Thesis Research (1-6). Supervised research on theoretical or applied statistics leading to a thesis.

Repeatable. Prerequisite: Permission of student's program committee.
STA 6972 Master's Thesis (1-6). Thesis completion and submission in partial fulfillment of Master's degree requirements. Prerequisite: Permission of student's program committee.
STA 7707 Multivariate Methods I (3). Multivariate normal, Wishart and Hotelling's distributions. Inferences for one and two mean vectors. Profile analysis. One- and two-way MANOVA. Multivariate multiple regression. Prerequisites: STA 3112 or STA 3123. (F)
STA 7708 Multivariate Methods II (3). Principal components analysis. Factor analysis. Canonical correlation analysis. Discriminant analysis. Cluster analysis. Multidimensional scaling. Prerequisite: STA 7707. (S)

## Physics

Bernard Gerstman, Professor and Chairperson
Werner Boeglin, Professor
Richard A. Bone, Professor
Prem Chapagain, Associate Professor
Yesim Darici, Associate Professor
Rudolf Fiebig, Professor
Lei Guo, Assistant Professor
Kenneth Hardy, Professor Emeritus
Jin He, Assistant Professor
Laird H. Kramer, Associate Professor
Angela Laird, Associate Professor
Robert Laird, Clinical Research Professor
Hebin Li, Assistant Professor
Wenzhi Li, Professor
Pete C. Markowitz, Professor
Oren Maxwell, Professor
Stephan L. Mintz, Professor Emeritus
Rajamani Narayanan, Professor
Brian A. Raue, Professor
Jorge Reinhold, Associate Professor
Jorge L. Rodriguez, Associate Professor
Misak Sargsian, Professor
Caroline E. Simpson, Professor
Fiorella Terenzi, Instructor
Walter Van Hamme, Professor
Xuewen Wang, Associate Professor
James R. Webb, Professor
Yifu Zhu, Professor

## Master of Science in Physics

The Master of Science in Physics is a 45 semester hour program consisting of course work at the 5000 and 6000 level and research with one of the departmental research groups culminating in a master's thesis. Students entering the program must have a bachelor's degree or equivalent course work in Physics.

Doctoral candidates who have filed the D-2 and D-3 forms with the University Graduate School can receive a Master of Science in Physics en route to the PhD after completion of 45 hours of graduate coursework.

## Graduate Admission Requirements

For admission to the graduate programs, a Bachelor's degree in physics is required with a minimum undergraduate GPA of 3.0 . The GRE is required. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Required Courses

PHY 5115 Mathematical Physics I
PHZ 5156 Computational Physics I 3
PHY 5240 Advanced Classical Mechanics 3
PHY 5346 Advanced Electromagnetic Theory I 3
PHY 5347 Advanced Electromagnetic Theory II 3
PHY 6645 Advanced Quantum Mechanics I 3
PHY 6646 Advanced Quantum Mechanics II 3
PHY 6936 Advanced Topics 3
PHY 6524 Statistical Physics 3
PHY $6935 \quad$ Graduate Research Seminar 3-6

In addition, three semester hours of specialized course work are required in the student's area of specialization and $12-15$ hours of thesis work for a total of 45 hours.

## Doctor of Philosophy in Physics

The Doctor of Philosophy in Physics program requires 90 credit hours at the graduate level, including a minimum of 24 credit hours of dissertation research. A maximum of 36 credits may be transferred from a completed graduate program with the approval of the Graduate Committee.

## Graduate Admission Requirements

For admission to the graduate programs, a Bachelor's degree in Physics is required with a minimum undergraduate GPA of 3.0. The GRE is required. The GRE advanced is recommended. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Required Courses

1. All Required Courses for the Master of Science in Physics program listed above.
2. Four additional graduate level (5000 or higher) courses.
All doctoral candidates must take a Ph.D. comprehensive exam. This exam is designed to test general knowledge of physics at the advanced undergraduate and first-year graduate level and must be passed not later than the beginning of the third year enrolled in the program. Within two years of entering the program, students must submit to the Graduate Committee their choices of research and advisor. Course work and research programs shall be planned with the advice and approval of the advisor. After passing the comprehensive exam and prior to or during the first semester of the fourth year enrolled in the program, a student must also take a candidacy exam which tests the ability to conduct research in a particular field, as well as the ability to present the results of that research in an organized and coherent manner.

## Course Descriptions

## Definition of Prefixes

AST-Astronomy; PHY-Physics; PHZ-Physics
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering.

AST 5215 Stellar Astrophysics (3). Topics in Stellar Astrophysics, in greater detail and depth than similar topics in AST 3213. Emphasis on current stellar structure, evolution models and the underlying observational data. Prerequisites: PHY 3107, PHY 3503, PHY 4324, PHY 4222 or equivalent. (F or S)
AST 5405 Extragalactic Astrophysics (3). Topics in extragalactic astrophysics, in greater detail and depth than similar topics in AST 3213. Emphasis on galactic structure and evolution, quasars and cosmology. Prerequisites: PHY 3107, PHY 3503, PHY 4324, PHY 4222 or equivalent. (For S)

AST 5507 Celestial Mechanics (3). Principles of classical Newtonian mechanics applied to the motions of planets, satellites, and interplanetary space probes. Prerequisites: PHY 4222 or equivalent. (F or S)
PHY 5115 Mathematical Physics I (3). Methods of solution for problems in mathematical physics: Variational principles, complex variables, partial differential equations, integral equations, and transforms. Prerequisites: MAC 3313, MAP 3302. (F)
PHY 5116 Mathematical Physics II (3). Additional solution methods in mathematical physics: Perturbation methods, Laplace's and Poisson's Equations, waves, special functions, vector fields, vector waves. Prerequisite: PHY 5115. (S)
PHY 5141 Intermediate Modern Physics I (3). Prepares advanced undergraduate and beginning graduate student research preparation in atomic, molecular, or optical physics. Topics may be adapted to students' research interests. Prerequisite: Permission of Instructor.
PHY 5142 Intermediate Modern Physics II (3). Continuation of advanced undergraduate and beginning graduate student research preparation in atomic, molecular, optical or nuclear physics. Topics may be adapted to students' research interests. Prerequisite: Intermediate Modern Physics I.
PHY 5156C Physics Modeling II (4). Expanding the modeling guided-inquiry approach in Physics Modeling I to topics beyond mechanics such as electricity, magnetism, light, or modern physics. May be repeated for credit. Prerequisites: PHZ 5155C and permission of the instructor.

PHY 5235 Nonlinear Dynamics and Chaos (3). Introduction to the universal behavior of classical systems described by nonlinear equations. Prerequisites: PHY 4222, MAA 4211. (F or S)
PHY 5240 Advanced Classical Mechanics (3). Advanced formulations of the equations of motion and their applications: the central field problem, rigid body dynamics, oscillations and continuous systems. Prerequisite: PHY 4222. (F)
PHY 5346 Advanced Electromagnetic Theory I (3). Advanced treatment of classical electromagnetism: Electrostatics, Green's function, Laplace's equation, multipole expansion, magnetostatics, Maxwell's equations, waves. Prerequisite: PHY 4324. (F)
PHY 5347 Advanced Electromagnetic Theory II (3). Additional topics in classical electromagnetism: Wave guides, radiating and diffracting systems, Kirchoff's integral for diffraction, covariant formulation of field equations. Prerequisite: PHY 5346. (S)
PHY 5446 Laser Physics (3). Principles of lasers and laser applications, including atom-field interactions, stimulated emission and dipole oscillators, optical resonators and electromagnetic modes, semi-classical laser theory, and specific laser systems. Prerequisite: PHY 4605. (F or S)

PHY 5466 The Physics of Music (3). Provides music technology majors a physical understanding of sound, sound generation and reproduction. Concentrates mainly
on physical principles and less on calculation. Prerequisite: Permission of Instructor.
PHY 5667 Nonperturbative Quantum Field Theory (3). Euclidean QFT, renormalization group, local gauge symmetry, lattice regularization, Wilson action, fermion fields, expansion schemes, numerical algorithms, hadron properties, recent developments. Prerequisite: PHY 4605.

PHY 5930 Seminar in Physics (1-3). A series of specialized lectures/seminars on selected topics in Physics/Astro-Physics. Prerequisite: Permission of the department.
PHY 5936 Special Topics Research (1-10). Participation in an original investigation in theoretical or experimental physics/astro-physics under direct faculty supervision. Prerequisite: Permission of the instructor.

PHY 5937, PHY 5938 Seminar in Special Topics (3). Seminar work under the supervision of a faculty member on subject material of mutual interest.
PHY 5940 Physics Graduate Teaching Workshop (1). The teaching of physics laboratories. Includes practice of lab experiments, use and adjustment of lab equipment and explanation of departmental grading policy. Supplemented by outside lectures on university policies. (F)
PHY 6524 Statistical Physics (3). Fundamental principles of statistical mechanics; fluctuations, noise and irreversible thermodynamics; kinetic methods and transport theory. Prerequisites: PHY 3503 and PHY 4222. (S)

PHY 6645 Advanced Quantum Mechanics I (3). Advanced topics in quantum mechanics: Quantized systems, relativistic quantum mechanics, potential scattering. Prerequisite: PHY 4605. (F)
PHY 6646 Advanced Quantum Mechanics II (3). Additional topics in advanced quantum mechanics: Collision theory, symmetry transformations, conservation laws, group theory. Prerequisite: PHY 6645. (S)

PHY 6651 Quantum Scattering Theory I (3). The investigation of atomic and electronic scattering processes: Potential scattering, long range potentials, electronatom collisions. Prerequisite: PHY 6645.
PHY 6652 Quantum Scattering Theory II (3). The mathematical investigation of scattering processes: Autoionization, fast vs. slow collisions, Regge poles, S and T matrices. Prerequisite: PHY 6651.
PHY 6668 Relativistic Quantum Field Theory I (3). Introduction to relativistic quantum fields: General formalism, Klein-Gordon field, Dirac field, vector fields, interacting fields, CPT theorem, reduction formulae, gauge theory. Prerequisite: PHY 6646.

PHY 6669 Relativistic Quantum Field II (3). Additional topics in relativistic quantum fields: perturbation theory, U matrix, Wick's theorem, dispersion relations, renormalization, Ward identity, renormalization group, path integral formalism. Prerequisite: PHY 6668.
PHY 6675 Quantum Theory of Many Particle Systems I (3). An introduction to the physics of many particle systems: Second quantization, Fock spaces, Boson and Fermion symmetry, Gell-Mann-Low theorem,
diagrammatic expansions, Goldstone theorem. Prerequisite: PHY 6646.

PHY 6676 Quantum Theory of Many Particle Systems II (3). Additional topics in the physics of many particle systems: Fermi gas, Bose condensation, Hartree-Fock approximation, random phase approximation, finite temperature formalism, hadrons. Prerequisite: PHY 6675.

PHY 6716 Advanced Biophysics (3). Thermodynamics, statistical physics, and the non-linear dynamics of selforganization will be used to investigate the molecular origin of life and neural pattern formation leading to consciousness.

PHY 6935 Graduate Research Seminar (1). Seminars presented by students, faculty, and visitors on a variety of topics of current research interest. Repeatable. Required every semester. (F and S)
PHY 6936 Advanced Topics in Physics (3). Advanced applications in the fields of Nuclear and Particle Physics, Astrophysics, Solid State Physics, Biophysics and Atomic Physics. Includes perturbations theory, statistical methods, and simulation methods. Repeatable for credit. Prerequisite: PHY 6646.
PHY 6939 Graduate Research (1-10). Research at the graduate level in theoretical or experimental physics under faculty supervision, repeatable. Prerequisite: Permission from supervising faculty.
PHY 6970 Thesis Research (1-10). Research toward completion of Master's Thesis. Repeatable. Prerequisite: Permission of the department. (F,S)
PHY 6971 Master's Thesis (3). Theoretical and/or experimental research leading to thesis. Prerequisite: Permission of major professor. (F,S)
PHY 7910 Dissertation Research (1-9). Students conduct dissertation research at the doctoral level in theoretical or experimental physics under faculty supervision. Prerequisite: Permission of the instructor. (F, S)

PHY 7981 Ph.D. Dissertation (1-12). Original research work towards completion of dissertation and presentation and defense of dissertation. Prerequisite: Permission of Major Professor and Doctoral Candidacy.
PHZ 5130 Theoretical Treatment of Experimental Data (3). Statistical analysis of physical processes and statistical tests, with particular emphasis on instrumentation-related problems. Mathematical modeling and computer simulation. Prerequisites: Undergraduate statistics course, or equivalent, or permission of the instructor.
PHZ 5155C Physics Modeling I (4). An inquiry physicsteaching approach incorporating physics education research. Emphasis on basics models in mechanics, scientific discourse, and student learning assessment. May be repeated for credit. Prerequisite: Permission of the instructor.

PHZ 5156 Computational Physics I (3). Physical systems by means of computer simulation. Monte Carlo, molecular dynamics, percolation, random systems, chaos, criticality, gauge fields. Prerequisites: PHY 5115 and PHY 5116.

PHZ 5157C Computational Physics II (3). Advanced computer simulation methods of physical systems. Application in chaos, nonlinear and random systems, criticality, field theory and practices. Prerequisite: PHZ 5156. Corequisites: PHY 5115 and PHY 5116.

PHZ 5234 Atomic and Molecular Collision Phenomena (3). Investigation of atomic and molecular collision phenomena: Kinetic theory, elastic scattering, inelastic scattering, excitation and ionization, heavy particle collisions. Prerequisites: PHY 4605 and PHY 4222. (F or S)

PHZ 5304 Advanced Nuclear Physics (3). The fundamental properties of nuclei, nuclear forces, nuclear models, radioactivity, weak processes, and nuclear reactions. Prerequisite: PHY 4604. Corequisite: PHY 4605. (F or S)

PHZ 5340 Particle Interactions and Detection (3). Subatomic particle detectors and the utilization of physics in practical instrumentation applications in medical physics. The course will include laboratory exercises using various detectors. Prerequisites: PHY 3107 or permission of Instructor.
PHZ 5370 Nanoscience (3). Overview of the nanoscience with emphasis on physical properties, such as electrical, magnetic and optical properties, of nanomaterials. Prerequisites: PHY 3106, PHY 3107.
PHZ 5405 Solid State Physics (3). Crystalline form of solids, lattice dynamics, metals, insulators, semiconductors, crystalline surfaces, and amorphous materials. Prerequisites: PHY 3107 or CHM 3411.
PHZ 5505 Low Energy Plasma Physics (3). The investigation of the kinetics of rarefied gases and thermal plasmas: Phase space, random currents, orbit theory, plasma sheaths, radiation, the pinch effect. Prerequisites: PHY 3503, PHY 4324, and PHY 4222.
PHZ 5506 Plasma Physics (3). An introduction to plasma fundamentals, the Boltzmann equation, the hydrodynamic equations, orbit theory, the interaction of electromagnetic waves with plasmas, the pinch effect and instabilities. Prerequisite: PHY 3049. (F or S)
PHZ 5606 Special Relativity (3). A detailed study of special relativity: Lorentz transformations, relativistic electrodynamics. Prerequisite: PHY 3107.
PHZ 5607 General Relativity (3). General relativity using differential geometry and tensor analysis. Topics include Einstein's field equations and their solutions, applications and observational tests. Black Holes and cosmology are also discussed. Prerequisites: PHY 4222 and PHY 4605.
PHZ 5705 Biomedical Physics (3). Physics principles applied to biology and medicine; transport through cell membranes, biochemical signaling, thermodynamics, neurons, biomechanics, biofluid flow, bioelectrical signals. Prerequisite: PHY 3107.
PHZ 5730 Biophysical Effects of Radiation (3). Biological effects resulting from interactions of radiation and matter for scientifically, technically, and medically oriented students. Prerequisite: PHY 3107.

PHZ 5732 Clinical and Medical Dosimetry (3). Practical patient dosimetry problems in radiation oncology. Irregular field calculations, two-and three-dimensional treatment planning, isodose distribution, dose rate brachytherapy planning. Prerequisite: PHY 3107.

PHZ 5734 Nuclear Medicine Physics (3). The nuclear physics principles of diagnostic and therapeutic applications of radionuclides, radiation beams, with lab activities in facility design, instrumentation essentials, quality assurance. Prerequisite: PHY 3107.
PHZ 5736 Therapeutic Radiological Physics (3). Production, application, and measurement of electromagnetic radiation and particle beams in therapeutic practice. Conceptual, instrumental, and methodological aspects of therapeutic radiology. Prerequisite: PHY 3107.

PHZ 5945 Clinical Experience in Medical Physics (3). Arranged through the Physics Department at local institutions e.g. hospitals, treatment centers, etc., this course places students in clinical medical physics facilities. Prerequisite: PHY 3107.
PHZ 6255 Molecular Biophysics (3). The use of theoretical physics techniques to investigate biological systems: Protein structure and dynamics, electron tunneling, nuclear tunneling, hemoglobin, photosynthesis, vision. Prerequisite: PHY 4605. (F or S)
PHZ 6326 Low Energy Nuclear Physics I (3). Introduction to the physics of nuclei and nuclear processes: Nuclear forces, scattering processes and nuclear models. Prerequisite: PHY 4605.
PHZ 6327 Low Energy Nuclear Physics II (3). Additional topics in nuclear physics: The shell and collective models, nuclear reactions and applications, scattering theory, entrance channel phenomena, rearrangement collision and breakup reactions. Prerequisite: PHZ 6326.
PHZ 6354 Introduction to Particle Physics (3). An introduction to modern particle theory: Elementary field theory, symmetries, quantum electrodynamics, quarkparton model, quantum chromodynamics, WeinbergSalam model. Prerequisite: PHY 6646.
PHZ 6355 High Energy Hadronic Physics (3). Physics of quark-gluon structure of strongly interacting matter. Introduces the basic methods of high energy hadronic and nuclear physics, the quark model of hadrons, and the partonic model of deep-inelastic scattering. Prerequisite: Graduate standing.
PHZ 6359 Quantum Gauge Field Theories (3). Basics in field quantization, nonabelian symmetries, the standard $\mathrm{SU}(3) \times S U(2) \times U(1)$ model, non-perturbative features, lattice regularization and numerical simulation. Prerequisites: PHY 4605, PHY 5346. (F or S)
PHZ 6396 Advanced Nuclear and Particle Physics (3). Nuclear and particle physics, nuclear forces, reactions and kinematics, deep inelastic scattering, partons QCD, nuclear and particle astrophysics, quark gluon plasma. Prerequisite: PHY 4604.
PHZ 6426 Advanced Solid State Physics (3). Electronic structures of solids and surfaces, electron-electron interaction, superconductivity, magnetism in solids, amorphous systems, glasses, polymers, percolation,
localization, phase transition, fractals. Prerequisites: PHY 4324 and PHY 4605. (F or S)
PHZ 6437C Surface Physics (3). An introduction to theoretical and experimental techniques AES (Auger Electron Spectroscopy), LEED (Low Energy Electron Diffraction), XPS (X-ray Photoelectron Spectroscopy), AFM (Atomic Force Microscopy) and STM (Scanning Tunneling Microscopy). Prerequisites: PHZ 5405 or permission of the instructor.
PHZ 6706 Physics of Cognitive Neuroimaging Methods I (3). Physical principles of data acquisition methods in cognitive neuroimaging, including techniques from nuclear medicine, electrophysiology, and magnetic resonance imaging.
PHZ 6707 Physics of Cognitive Neuroimaging Methods II (3). Physical principles of data analysis methods in cognitive neuroimaging, including image preprocessing, statistical modeling, brain connectivity techniques, and the visualization, interpretation, and reporting of results. Prerequisite: PHZ 6706.

## Psychology

William Pelham, Jr., Distinguished Professor and Chair Leila Allen, Instructor
Timothy Allen, Assistant Professor
Lisa Arango, Senior Instructor
Daniel Bagner, Associate Professor
Lorraine Bahrick, Professor
Valentina Bruk-Lee, Assistant Professor
Steve Charman, Associate Professor
H-T. Michael Chen, Instructor
Maricel Cigales, Senior Instructor and Associate Dean, College of Arts, Sciences and Education
Erika Coles, Clinical Assistant Professor
Jonathan Comer, Professor
Stefany Coxe, Assistant Professor
Anthony Dick, Associate Professor
Asia Eaton, Assistant Professor
Joan Erber, Professor Emerita
Jacqueline Evans, Assistant Professor
Gordon Finley, Professor Emeritus
Ronald Fisher, Professor
Leslie Frazier, Associate Professor and Director of Graduate Studies
Stacy Frazier, Associate Professor
Jami Furr, Visiting Clinical Assistant Professor
Jacob Gewirtz, Professor Emeritus
Raul Gonzalez, Associate Professor
Paulo Graziano, Assistant Professor
Anibal Gutierrez, Assistant Professor
Katie Hart, Assistant Professor
William Kurtines, Professor Emeritus
Mary Levitt, Professor Emerita
Lu Liang, Instructor
Robert Lickliter, Professor
Lindsay Malloy, Assistant Professor
Aaron Mattfeld, Assistant Professor
Dana McMakin, Associate Professor
Gary Moran, Professor Emeritus
Erica Musser, Assistant Professor
Eliza Nelson, Assistant Professor
Kristin Nichols-Lopez, Instructor, Associate Chair and Director of Undergraduate Studies
Janat Parker, Professor Emerita
Jeremy Pettit, Professor
Shannon Pruden, Associate Professor
Joseph Raiker, Assistant Professor
Bethany Reeb-Sutherland, Assistant Professor
Rachel Ritchie, Instructor
Jessica Robb, Clinical Assistant Professor
Suzanna Rose, Professor
Bennett Schwartz, Professor
Nadja Schreiber Compo, Associate Professor
Maria Shpurik, Lecturer
Fabian Soto, Assistant Professor
Dionne Stephens, Associate Professor
Melanie Stollstorff, Assistant Professor
Matthew Sutherland, Assistant Professor
Paige Telan, Senior Lecturer
Elisa Trucco, Assistant Professor
Chockalingam Viswesvaran, Professor
Miguel Villodas, Assistant Professor
Ryan Winter, Instructor
Chit Yuen Yi, Instructor

## Master of Science in Psychology: Major in Behavior Analysis

The Behavior Analysis area focuses on the experimental, theoretical, methodological, and applied analysis of behaviors of individuals, their antecedents and their consequences, and how the changes are produced that denote different types of learning or learning problems. The processes at issue have become efficient bases for understanding, and for changing, conduct problems and such behavioral disorders as are termed Developmental Disabilities, Autism and Asperger's syndromes. Students completing the M.S. degree, and having received the required amount of supervised hands-on experience with clients, may qualify to sit for the Board Certified Behavior Analyst (BCBA) examination.

The Behavior Analysis major consists of core, knowledge-based, courses and a selection of seminars for specialization and practical experience. Student research collaboration and idea sharing are often an intended byproduct of such courses. Activity in individual or partnered research projects is encouraged. Also encouraged are involvements in program events, regional and national conference attendance and presentations, and applied clerkships and internships. There are opportunities for students to gain firsthand experience in practice and internships with organizations providing applications and therapy.

## Admission Requirements*

To be admitted into the Master's degree program in Behavior Analysis, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submit Graduate Record Exam (GRE) scores.
3. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
4. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Secretary.
5. Receive approval from the Departmental Graduate Education Committee.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Master of Science in Behavior Analysis requires a minimum of 36 semester credits of graduate work beyond the baccalaureate. A maximum of 6 credits of postbaccalaureate course work may be transferred from another institution with the approval of the Advisory Committee.

## Required Courses

The Master's requires 36 credit hours beyond the Bachelor's degree. This includes 6 credits of departmental common core requirements for the M.S. degree. Students have the option of following either a thesis or a non-thesis (qualifying paper) option. Students planning to apply to a doctoral program must elect the thesis option.

1. Common core (statistics/methodology) courses (6
2. Behavior analysis content courses ( 15 credits drawn from the following list of 3 credit courses, and approved by the program director):
EAB $5098 \quad$ Proseminar in the Experimental Analysis of Behavior
EAB $5655 \quad$ Advanced Methods of Behavior Change
EAB 5797 Single-Case Research Methods
EAB 6707 Learning and Development
EAB 6717 Applications of Verbal Behavior for Autism and Asperger's Syndrome
EAB 6770 Behavioral Technologies
EAB $6780 \quad$ Ethical Code in Behavior Analysis
PSY 5939 Special Topics
3. Supervised research (3 credits)
4. EAB 6941 Practicum in Behavior Analysis (6 credits)
5. PSY 6971 Master's thesis or additional content course plus qualifying paper supervision (6 credits)

## Master of Science in Psychology: Major in Clinical Science in Child and Adolescent Psychology

The clinical science in child and adolescent psychology major is consistent with the clinical science model of clinical psychology training articulated by the Academy of Psychological Clinical Science. Clinical Science is defined as a "psychological science directed at the promotion of adaptive functioning; at the assessment, understanding, amelioration, and prevention of human problems in behavior, affect, cognition or health; and at the application of knowledge in ways consistent with scientific evidence." The emphasis on the term "science" underscores the commitment to evidence based approaches to the assessment and treatment of human problems, as well as the integration of research and theory of other relevant sciences. The emphasis on the term "science" also underscores that training students in clinical science focuses on training students for careers in which they skillfully produce, and/or apply scientific knowledge. The focus of the major is on child, adolescent and family clinical psychology within a multicultural context.

## Admission Requirements*

Students will apply and be admitted directly to the doctoral program in Clinical Science in Child and Adolescent Psychology based on the following criteria (applications will not be accepted and students will not be admitted for a terminal M.S. degree).

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 GPA or higher during the last two years of the undergraduate program and a combined score (verbal and quantitative) of 1120 or higher on the Graduate Record Exam.
3. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
4. Receive approval from the Department Graduate Education Committee.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Master of Science Major in Clinical Science requires a minimum of 36 semester credits of graduate work beyond the baccalaureate, including a non-thesis research project based upon the student's original research. A maximum of 6 credits of post-baccalaureate course work may be transferred from another institution with the approval of the Director of Clinical Training.

## Required Courses

In order to obtain their M.S., clinical science doctoral students will be required to complete 6 credits of departmental common core course requirements, along with more specialized content courses and a course involving directed independent effort, as listed below:

1. Common core requirements (6 credits of statistics/methodology courses)
PSY $5939 \quad$ Special Topics in Psychology: Quantitative Methods I
PSY $5939 \quad$ Special Topics in Psychology: Quantitative Methods II
2. Clinical Science core courses ( 9 credits)

CLP $5007 \quad$ Psychological Clinical Science I: Historical Perspectives and Current Controversies
CLP $5483 \quad$ Psychological Clinical Science II: Ecologies of Development and Theories of Psychopathology
PSY $6219 \quad$ Research Methods in Clinical Child Psychology
3. Clinical Science content courses ( 9 credits)

CLP 6471 Assessment and Treatment I: Internalizing Problems
CLP 6472 Assessment and Treatment II: Externalizing Problems
PSY 5246C Multivariate Analysis in Applied Psychological Research
4. PSY 5918 Supervised Research ( 6 credits)
5. CLP 6945 Clinical Practicum in Psychology (6 credits)
6. Non-thesis Master's Project consisting of an empirical paper based on the student's independent research, approved by the student's mentor and one additional reader, and submitted for publication

## Master of Science in Psychology: Major in Counseling Psychology

The Counseling Psychology Masters major area is committed to preparing future therapists, counselors, consultants, and researchers for the independent and licensed professional practice of counseling, psychotherapy, and psychotherapy research. The major offers students a solid foundation in psychology that focuses on evidence-based practices in mental health, mental health counseling, and mental health research. Opportunities for specializing in a range of clinical problems and diverse populations are offered through faculty guided research and supervised clinical training.

Completion of the major requirements leads to a Master of Science in Psychology and eligibility for a license to practice as a Mental Health Counselor (LMHC) in Florida. The major is designed to train practitioners and researchers to function in a variety of mental health settings in both the private and public sector. The core
curriculum is intended to engage students in the advanced study of psychology with a focus on developing applied counseling and therapeutic skills for working in multicultural environments with populations that range across the life span from childhood to later adulthood.

## Admission Requirements*

To be admitted into the Master's degree program in Counseling Psychology, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submit Graduate Record Exam (GRE) scores.
3. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
4. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Secretary.
5. Receive approval from the Departmental Graduate Education Committee.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Master of Science in Counseling Psychology requires a minimum of 60 semester credits of graduate work beyond the baccalaureate. A maximum of 6 credits of post-baccalaureate course work may be transferred from another institution with the approval of the Advisory Committee.

## Required Courses

The Counseling Psychology curriculum consists of 60 credit hours of graduate study, as required for certification, that includes coursework, clinical training, and either a thesis or non-thesis option. Students planning to apply to a doctoral program must elect the thesis option.

1. Common core (statistics/methodology/assessment) courses ( 9 credits)
2. Counseling Psychology content courses (36 credits drawn from the following list of 3 credit courses and approved by the program director):
CLP $5166 \quad$ Advanced Abnormal Psychology (Advanced Psychopathology)
CLP 5931 Ethical Code in Psychological Practices
CLP 6436 Introduction to Psychological Assessment
CLP 6498 Diagnosis and Treatment of Sexual Disorders
CYP 5534
CYP 6526
CYP $6536 \quad$ Principles and Methods of Psychological Consultation
CYP 6766 The Psychology of Cross Cultural Sensitization
CYP 6936 Current Issues in Community Psychology
DEP 5069 Applied Life Span Developmental Psychology
DEP $5405 \quad$ Proseminar in Psychology of Adulthood and Aging

PCO 5311 Theory, Research, and Treatment of Addictive Behavior
PCO 6206 Principles and Practices of Counseling and Psychotherapy

## PSY $5939 \quad$ Special Topics

3. Supervised clinical practicum/internship courses (9 credits)
4. PSY 6971 Master's thesis (thesis option) or additional practicum/internship courses and qualifying paper (non-thesis option) (6 credits)

## Master of Science in Psychology: Major in Developmental Science

Developmental science is concerned with the description and explanation of change over time in humans and other organisms. The Developmental Science area integrates a life-span orientation toward developmental science in an international and interdisciplinary multicultural urban context. Students majoring in the area complete core course requirements designed to facilitate a thorough grounding in research, theory, and methods across the lifespan, develop an area of specialization within or across the lifespan, and receive training in both basic and applied research in developmental science. The program is designed for individuals desiring intermediate graduate level professional training in lifespan developmental science, either to further career goals or in preparation for doctoral level graduate study.

Up to 36 credits taken as part of this M.S. degree will count toward fulfilling the Ph.D. requirements for students who successfully apply to transfer to the Developmental Science Ph.D. program. Students meeting the requirements for admission to the doctoral program may apply for a transfer upon completion of a master's thesis proposal approved by the thesis committee and the recommendation of their thesis advisor.

## Admission Requirements*

To be admitted into the Master's degree program in Developmental Science, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submit Graduate Record Exam (GRE) scores.
3. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
4. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Secretary.
5. Receive approval from the Departmental Graduate Education Committee.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Master of Science in Developmental Science requires a minimum of 36 semester credits of graduate work beyond the baccalaureate, including a thesis based upon the student's original research. A maximum of 6 credits of post-baccalaureate course work may be transferred from another institution with the approval of the student's advisor.

## Required Courses

Developmental Science MS students would be required to complete the 6 credits of departmental common core course requirements, along with more specialized content courses and a course involving directed independent effort, as listed below:

1. Common core requirements (6 credits of statistics/methodology courses)
2. Developmental Science content courses (15 credits drawn from the following list of 3 credit courses and approved by the program director):
CLP $5169 \quad$ Proseminar in Developmental
Psychopathology
CLP 6168 Psychopathology Across the Life Span
DEP $5056 \quad$ Current Issues in Life Span
DEP 5068 Applied Life Span Developmental Psychology
DEP 5058 Bio-Behavioral Development
DEP 5099 Proseminar in Infancy, Childhood, and Adolescence
DEP 5185 Emotional Learning and Its Reversal
DEP 5186 Special Topics in Developmental Psychology
DEP $5188 \quad$ Current Issues in Cognitive and Perceptual Development in Infancy
DEP $5315 \quad$ Proseminar in Parent-Child Relations
DEP $5405 \quad$ Proseminar in the Psychology of Adulthood and Aging
DEP $5608 \quad$ Theoretical Perspectives in Developmental Psychology
DEP 5725 Seminar in Psychosocial Development
DEP 5796 Developmental Methods
DEP 5930 Outreach Research
DEP 5936 Integrating Theory and Research in Developmental Science
DEP 6117 Psychology of Caregiving
DEP 6466 Cognitive Processes in Aging
DEP $6477 \quad$ Psychology of Social Processes in Aging
DEP 7096 Seminar in Psychology of Life-Span Social Development
EAB 5098 Proseminar in Behavior Analysis
EAB 6707 Learning and Development
PSY 5930 Qualitative Methods
PSY 5939 Special Topics
SOP $5081 \quad$ Psychological Influence on Health and Illness
3. Supervised research/independent study/field experience/internship (3 credits)
4. Electives (6 credits)
5. PSY 6971 Masters Thesis (6 credits)

## Master of Science in Psychology: Major in Industrial-Organizational Psychology

The Industrial Organizational (I/O) Psychology major focuses on issues such as the psychology of Human Resource Management, Group Behavior, Cultural Diversity in Organizations, Personality, Team Effectiveness, Personnel Selection, Leadership, Organizational Stress, and Training and Development. The major emphasizes a commitment both to research and application as a part of individual specialty area development. Students master a series of core courses
designed to provide a thorough grounding in theory, methodology, and content in applied and basic research in psychology. These courses are taught by faculty who are involved in research and practice in the relevant areas.

In addition, seminars reflecting the specialized foci of the Industrial-Organizational area faculty are offered. There are also opportunities for practice and occasional internships for students to gain firsthand experience in the application of psychological knowledge to real challenges of organizations. Students are also encouraged to participate in professional conferences.

## Admission Requirements*

To be admitted into the Master's degree program in I/O Psychology, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submit Graduate Record Exam (GRE) scores.
3. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
4. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Secretary.
5. Receive approval from the Departmental Graduate Education Committee.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Master of Science in Industrial and Organizational Psychology requires a minimum of 36 semester credits of graduate work beyond the baccalaureate. A maximum of 6 credits of post-baccalaureate course work may be transferred from another institution with the approval of the Advisory Committee.

## Required Courses

The Master's in I/O Psychology requires 36 credit hours beyond the Bachelor's degree. This includes 6 credits of departmental common core requirements for the M.S. degree. Students have the option of following either a thesis or a non-thesis option. Students planning to apply to a doctoral program must elect the thesis option.

1. Common core (statistics/methodology) courses plus an additional statistics/methods course (9 credits)
2. I/O content courses (12 credits drawn from the following 3 credit courses and approved by the program director):
INP $5095 \quad$ Proseminar in Industrial Psychology
INP $5136 \quad$ Psychology of Legal Consultation
INP 6090 Applied Psychology and Organizational Consulting
INP $6115 \quad$ Psychology of Culture and Organizations
INP 6216 Personnel Selection
INP 6235 Applied Psychology of Training and Development
INP 6611
INP 6940
PSY 5939
SOP 5058 Proseminar in Social Psychology

SOP $5616 \quad$ Social Psychology of Organizations
3. Supervised research/internship (3 credits)
4. Electives (6 credits)
5. PSY 6971 Masters thesis (thesis option) or additional content courses (non-thesis option) (6 credits)

## Master of Science in Psychology: Major in Legal Psychology

Legal psychology is a growing and popular field that sits at the nexus of psychology and law. This program offers students broad training in psychology and in-depth training in legal psychology as well as more traditional concentrations (e.g., social psychology, cognitive psychology). Research, professional, and pedagogical skills are strongly emphasized. Students may also obtain significant field experience in the legal system by participating in applied research, expert witness cases, providing assistance to trial consultants, and through other formal training experiences, such as collaborations with FIU's law school.

## Admission Requirements*

Students will apply to be admitted directly to the doctoral program in Legal Psychology based on the following criteria (applications will not be accepted and students will not be admitted for a terminal degree).

1. Hold a Bachelor's degree in a relevant discipline from an accredited college of university.
2. Have strong GPA during their undergraduate program and strong scores on the Graduate Record Exam.
3. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
4. Receive approval from the Departmental Graduate Education Committee.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Master of Science Major in Legal Psychology requires a minimum of 36 semester credits of graduate work beyond the baccalaureate, including a thesis research project based upon the student's original research. 9 credits of common core requirements are included in these requirements in order to meet the Board of Governors' Policy on degree structures.

## Required Courses

In order to obtain their M.S., Legal Psychology doctoral students will be required to complete 36 credit-hours of coursework, as listed below:

1. Common core requirements (9 credits of statistics/methodology courses)
2. Applied Legal Psychology core courses (9 credits from the following)
PSY $5939 \quad$ Special Topics in Psychology:
PSY $5939 \quad$ Special Topics in Psychology:

- Developmental Psychology and the Law

SOP 6098 Proseminar in Legal Psychology
PSY $5939 \quad$ Special Topics in Psychology:
PSY $5939 \quad$ Special Topics in Psychology: Child Witnesses

PSY $5939 \quad$ Special Topics in Psychology:
PSY 5939 Investigative Interviewing Special Topics in Psychology: Actual Innocence
3. Basic Psychology courses ( 9 credits from the following)
SOP 5058
SOP 6441
EXP 5099
EXP 5508 Applied Cognitive Psychology
Dev courses as relevant to students' research interests and approved by legal psychology faculty
4. PSY 5918 Supervised Research (9 credits), culminating in a Master's Project consisting of an empirical paper based on the student's independent research, approved by the student's mentor and at least two additional readers.

## Doctor of Philosophy in Psychology: Major in Clinical Science in Child and Adolescent Psychology

The clinical science in child and adolescent psychology major is consistent with the training model articulated by the Academy of Psychological Clinical Science. Clinical Science is defined as a "psychological science directed at the promotion of adaptive functioning; at the assessment, understanding, amelioration, and prevention of human problems in behavior, affect, cognition or health; and at the application of knowledge in ways consistent with scientific evidence." Emphasis on the term "science" underscores the commitment to evidence based approaches to the assessment and treatment of child and adolescent problems, as well as the integration of research and theory of other relevant sciences. Emphasis on the term "science" also underscores that training facilities careers in which scientific knowledge is skillfully produce, applied, or both. The focus of the clinical science major is on child, adolescent and family clinical psychology within a multicultural context.

Students admitted to the major are expected to maintain full-time status and to become involved in research from the onset of their entry into the program by participating in faculty research projects and by carrying out individual research under the guidance of one or several faculty members. Students also are guided and encouraged to publish their individual research projects, to seek their own external funding to help support their research, and to present their work at professional conferences. Students receive clinical and teaching opportunities as part of their graduate training, within the context of continued student advancement as clinical scientists in child and adolescent psychology.

## Admission Requirements*

To be admitted into the Clinical Science doctoral program, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submit Graduate Record Exam (GRE) scores.
3. Have completed an undergraduate or graduate research methods course as a prerequisite.
4. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
5. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Program Director.
6. Receive approval from the Departmental Graduate Education Committee.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 92 on the iBT TOEFL (equivalent to 580 in the TOEFL) is required.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Ph.D. in Psychology requires a minimum of 75 semester credits of graduate work beyond the baccalaureate, including a dissertation based on the student's original research. The Major in Clinical Science in Child and Adolescent Psychology requires an additional 15 credits of clinical practicum ( 90 credits total) and a year-long internship. We adhere to the UGS policy regarding credit transfer toward a doctoral degree. However, it is policy of the Clinical Science Program to require all students to participate in the core clinical science courses. Students may apply to transfer credits for courses that overlap substantively in learning objectives and content with core analytic courses or breadth requirements. Research and practicum credits may be considered for transfer as well.

## Required Courses

Clinical Science students are required to complete the 9 credits of departmental core course requirements established across majors in the Department, along with more specialized content courses, clinical practicum, and courses involving directed independent effort, as listed below, for a total of 90 credits:

1. Common core courses ( 9 credits comprised of the following Statistics/Methodology courses or other courses approved by the major area director):
PHC 6052 Biostatistics I
PSY $5939 \quad$ Special Topics in Psychology:
PSY $5939 \quad \begin{array}{ll}\text { Quantitative Methods I } \\ \text { Special Topics in Psychology: }\end{array}$ Quantitative Methods II
PSY 5246C Multivariate Analysis in Applied Psychological Research
2. Clinical science content courses ( 24 credits comprised of the following 3 credit courses):
CLP 5007 Psychological Clinical Science I: Historical Perspectives and Current Controversies
CLP $5483 \quad$ Psychological Clinical Science II: Ecologies of Development and Theories of Psychopathology
PSY $6219 \quad$ Research Methods in Clinical Child Psychology
PSY 5605 Proseminar: History and Systems of Psychology
CLP 6471 Assessment and Treatment I:

CLP 6472 Assessment and Treatment II:
Internalizing Problems Externalizing Problems
CLP 6473 Assessment and Treatment III: Developmental, Learning and Pediatric Disorders
CLP 6530 Dissemination and Implementation of Research
3. Breadth Requirements [9 credits drawn from the following list of 3 credit courses, or other courses approved by the major area director, to fulfill training in Biological Aspects of Behavior (3 credits); Cognitive and Affective Aspects of Behavior (3 credits); and Social Aspects of Behavior (3 credits)]:
CLP 6426 Neuropsychology
DEP 5058 Biological Basis of Behavior Development
DEP $5065 \quad$ Cognitive Development
EXP 5667 Cognitive Neuroscience
SOP 5058 Proseminar in Social Psychology
4. Advanced Analytic Requirement (3 credits drawn from the following list of 3 credit courses or other courses approved by the major area director):
PSY $5939 \quad$ Special Topics in Psychology: Structural Equation Modeling
PSY $5939 \quad$ Special Topics in Psychology: Categorical Data Analysis
PHC 6056 Longitudinal Health Data Analysis
PHC 6062 Systematic Reviews and Meta-Analysis
5. Electives (3 credits drawn from courses within or outside of the department, approved by the major area director, to facilitate depth of independent research)
6. Supervised Clinical Training (minimum 500 hours, 15 credits) comprised of the following:
CLP $6432 \quad$ Foundation Practicum I: Assessment
CLP $6947 \quad$ Foundations Practicum II: Treatment
CLP 6943 Advanced Clinical Practicum (9 credits)
7. PSY 5918 Supervised Research (12 credits)
8. Master's Project submitted for publication
9. Comprehensive Examination comprises a dissertation grant application and candidacy manuscript submitted for publication
10. PSY 7980 Ph.D. Dissertation ( 15 credits)
11. Internship

## Doctor of Philosophy in Psychology: Major in Cognitive Neuroscience

This program will train students to become experts in the study of the neuroscience of cognition and behavior. Students will explore the neurobiology of cognition with developmental, cognitive, and clinical neuroscience researchers in the areas of sensorimotor behavior and perception, language, memory, executive function, and substance abuse. The faculty in the program employ "under-the-skin" electrophysiological and functional imaging methodologies on humans, with a special emphasis on understanding typical and atypical development. The faculty also conduct research on birds and non-human primates. Students complete coursework in basic neuroscience, neuroanatomy, neuropsychology, and cognitive neuroscience, as well as a complement of courses in research methods, history, and systems, and statistics to complete their training as psychologists.

The program has a central focus in training of scholars and professors of cognitive neuroscience, which is a rapidly growing research area in Psychology. Thus, the primary goal of the program is to equip students with the skills necessary to function as academic and/or research psychologists. The program has a strong emphasis on learning basic neuroanatomy and physiology, cognitive neuroscience research methodologies and analytic skills, and neural bases of psychology and psychopathology. Students benefit from the diversity of faculty's areas of interest and expertise that converge to provide a wellrounded training program in cognitive neuroscience.

Hands-on research experience is an essential part of the training, and students become involved in research at an early point in their graduate training by participating in faculty research projects and by carrying out individual research under the guidance of one or several faculty members. Students will receive guidance in every aspect of conducting research, including developing ideas, designing and conducting studies, and dissemination, presenting papers at national conferences and publishing papers in scientific journals. In addition, we emphasize the students development in grant writing skills, a necessary component of a successful research career.

## Admission Requirements*

To be admitted into the Cognitive Neuroscience doctoral program, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submit Graduate Record Exam (GRE) scores.
3. Have completed an undergraduate or graduate research methods course as a prerequisite.
4. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
5. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Secretary.
6. Receive approval from the Departmental Graduate Education Committee.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 92 on the iBT TOEFL (equivalent to 580 in the TOEFL) is required.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Ph.D. in Psychology requires a minimum of 75 semester credits of graduate work beyond the baccalaureate, including a masters project and a dissertation based on the student's original research. A maximum of 36 credits may be transferred from a completed master's degree program with the approval of the program director.

## Required Courses

Cognitive Neuroscience doctoral students are required to complete 9 credits of departmental core course
requirements established across majors in the Department, along with more specialized content courses and courses involving directed independent effort, as listed below:

1. Common core courses ( 9 credits)

Statistics/Methodology courses ( 9 credits minimum)
2. Cognitive Neuroscience Content Courses (15 credits drawn from the following 3 credit courses and approved by the major area director):
DEP 5058 Biological Basis of Behavior Development
EXP $5667 \quad$ Cognitive Neuroscience
EXP 5508 Applied Cognitive Psychology
EXP 5527 Memory and Consciousness
ZOO 5785 Advanced Neurobiology
PSB $6247 \quad$ Biological Bases of Behavior
PSB 6215 Human Neuroanatomy
CBH 5256 Animal Cognition
CLP 6426 Neuropsychology
PHZ $6706 \quad$ Physics of Cognitive Neuroimaging Methods I
PHZ $6707 \quad$ Physics of Cognitive Neuroimaging Methods II
3. Supervised research/independent study/field experience/internship courses (18 credits)
4. Electives ( 12 credits approved by the major area director)
5. Master's Project (6 credits supervised research)
6. Comprehensive exam
7. PSY 7980 Ph.D. Dissertation ( 15 credits)

## Doctor of Philosophy in Psychology: Major in Developmental Science

Developmental science is concerned with the description and explanation of change over time in humans and other organisms. The Developmental Science area integrates a life-span orientation toward developmental science in an international and interdisciplinary multicultural urban context. Students are expected to master a series of core course requirements designed to facilitate a thorough grounding in theory, methodology, and content in both basic and applied research in developmental science. A number of seminars reflecting the specialized foci of the program are also offered. Students have the opportunity to specialize in any phase of the lifespan or on any issues or topics that span phases of the lifespan and to focus on basic or applied research.

Students admitted to the program are expected to maintain full-time status throughout their four years in the doctoral program and to become involved in research at an early point in their graduate training by participating in faculty research projects and by carrying out individual research under the guidance of one or several faculty members. Students are also guided and encouraged to publish their individual research projects and to present their work at professional conferences. They are provided opportunities for teaching as part of their graduate training.

## Admission Requirements*

To be admitted into the Developmental Science doctoral program, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submit Graduate Record Exam (GRE) scores.
3. Have completed an undergraduate or graduate research methods course as a prerequisite.
4. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
5. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Secretary.
6. Receive approval from the Departmental Graduate Education Committee.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 92 on the iBT TOEFL (equivalent to 580 in the TOEFL) is required.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Ph.D. in Psychology requires a minimum of 75 semester credits of graduate work beyond the baccalaureate, including a dissertation based on the student's original research. A maximum of 36 credits may be transferred from a completed masters degree program with the approval of the program director.

## Required Courses

Developmental Science doctoral students are required to complete the 9 credits of departmental core course requirements established across majors in the Department, along with more specialized content courses and courses involving directed independent effort, as listed below:

1. Common core courses ( 9 credits)

Statistics/Methodology courses (9 credits minimum)
2. Developmental science content courses ( 18 credits drawn from the following 3 credit courses and approved by the program director):
CLP $5169 \quad$ Proseminar in Developmental Psychopathology
CLP 6168 Psychopathology Across the Life Span
DEP 5056 Current Issues in Life Span
Development
DEP 5068 Applied Life Span Developmental Psychology
DEP 5058 Bio-Behavioral Development
DEP 5099 Proseminar in Infancy, Childhood, and Adolescence
DEP $5186 \quad$ Special Topics in Developmental
DEP $5188 \quad$ Current Issues in Cognitive and Perceptual Development in Infancy Proseminar in Parent-Child Relations Proseminar in the Psychology of Adulthood and Aging
DEP 5315
DEP 5405
DEP 5608
DEP 5725
DEP 5796
DEP 5930

DEP 5936

DEP 6117
DEP 7096 Seminar in Psychology of Life-Span Social Development
EAB $5098 \quad$ Proseminar in Behavior Analysis
EAB 6707 Learning and Development
EXP 5667 Cognitive Neuroscience
PSY $5930 \quad$ Qualitative Methods
PSY $5939 \quad$ Special Topics
SOP $5081 \quad$ Psychological Influence on Health and Illness
3. Supervised research/independent study/field experience/internship courses (18 credits)
4. Electives ( 9 credits approved by the program director)
5. Master's Project (6 credits approved by the program director)
6. Comprehensive exam
7. PSY 7980 Ph.D. Dissertation ( 15 credits)

## Doctor of Philosophy in Psychology: Major in Industrial-Organizational Psychology

The Industrial Organizational (I/O) Psychology major focuses on issues such as the psychology of Human Resource Management, Group Behavior, Cultural Diversity in Organizations, Personality, Team Effectiveness, Personnel Selection, Leadership, Organizational Stress, and Training and Development. Program requirements include core courses that provide a strong knowledge base and a selection of optional seminars that allows specialization and applied experience. Idea exchange and research collaboration among students are goals of many of these courses. These courses are taught by faculty who are involved in research and practice in the relevant areas.

In addition to masters and doctoral dissertation projects, activity in a variety of research projects is highly encouraged. Involvement with I/O program events, applied internships, conference attendance and presentations is also encouraged.

## Admission Requirements*

To be admitted into the I/O Psychology doctoral program, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program submit Graduate Record Exam (GRE) scores.
3. Have completed an undergraduate or graduate research methods course as a prerequisite.
4. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
5. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Secretary.
6. Receive approval from the Departmental Graduate Education Committee.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language

Testing System (IELTS). A total score of 92 on the iBT TOEFL (equivalent to 580 in the TOEFL) is required.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Ph.D. in Psychology requires a minimum of 75 semester credits of graduate work beyond the baccalaureate, including a dissertation based on the student's original research. A maximum of 36 credits may be transferred from a completed masters degree program with the approval of the Advisory Committee.

## Required Courses

Industrial/Organizational Psychology doctoral students are required to complete the 9 credits of departmental core course requirements established across majors in the Department, along with more specialized content courses and courses involving directed independent effort, as listed below:

1. Common core courses (9 credits)

Statistics/Methodology courses ( 9 credits minimum)
2. Substantive I-O content courses ( 21 credits drawn from the following 3 credit courses and approved by the program director):
INP $5095 \quad$ Proseminar in Industrial Psychology
INP $5136 \quad$ Psychology of Legal Consultation
INP 6090 Applied Psychology and Organizational Consulting
INP 6115 Psychology of Culture and Organizations
INP 6216 Personnel Selection
INP 6235 Applied Psychology of Training and Development
INP $6611 \quad$ Organizational Stress
INP 6940 Strategies and Methods of Applied Psychological Research
PSY $5939 \quad$ Special Topics
SOP 5058 Proseminar in Social Psychology
SOP 5616 Social Psychology of Organizations
3. Electives ( 9 credits with approval from I/O program director)
4. Supervised research/internship ( 15 credits)
5. Master's Project ( 6 credits approved by the program director)
6. Comprehensive exam
7. PSY 7980 Ph.D. Dissertation ( 15 credits)

## Doctor of Philosophy in Psychology: Major in Legal Psychology

The Legal Psychology major area is focused on issues related to the overlap between psychology and law, including areas such as: jury decision-making, judicial instructions, eyewitness testimony, and detecting deception. The program is research-oriented, with the goal of training students to conduct research in academic, government, or legal consulting settings. Research in this area revolves mostly around two traditional areas of psychology: cognitive and social psychology. As such, training is provided in these basic areas of psychology, along with training in methodology and statistics, and in related areas of law, and most notably, the overlap between law and psychology.

Program requirements include seminar courses in basic psychological processes (e.g. cognition, social psychology), statistics and methodology, and the law. While taking courses, students conduct independent research and collaborate with other faculty and students. Students who are interested in consulting also have the opportunity to work in a consulting setting. Students are encouraged to work on projects with a variety of colleagues. In addition to taking formal courses, students also have the opportunity to participate in weekly, informal research meetings with other students and faculty.

## Admission Requirements*

To be admitted into Legal Psychology doctoral program, a student must:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Have a 3.0 average or higher during the last two years of the undergraduate program and submit Graduate Record Exam (GRE) scores.
3. Have completed an undergraduate or graduate research methods course as a prerequisite.
4. Arrange to have three letters of recommendation evaluating the applicant's potential for graduate work sent to the Psychology Graduate Program Director.
5. Send a brief essay stating reasons for interest in the program and career goals to the Psychology Graduate Secretary.
6. Receive approval from the Departmental Graduate Education Committee.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 92 on the iBT TOEFL (equivalent to 580 in the TOEFL) is required.
*These are minimum requirements. Admission is competitive.

## Degree Requirements

The Ph.D. in Psychology requires a minimum of 75 semester credits of graduate work beyond the baccalaureate, including a dissertation based on the student's original research. A maximum of 36 credits may be transferred from a completed masters degree program with the approval of the Advisory Committee.

## Required Courses

Legal Psychology doctoral students are required to complete the 9 credits of departmental core course requirements established across majors in the Department, along with more specialized content courses and courses involving directed independent effort, as listed below:

1. Common core courses ( 9 credits)

Statistics/Methodology courses ( 9 credits minimum)
2. 6 courses (total of 18 credits) on basic psychology, applied legal psychology approved by the program director):
CJE 5024
CJL 6418
CJL 6422 Advanced Seminar in Criminal Law and Procedure
CJL $6558 \quad$ Legal Issues in Juvenile Justice

CLP 5185
CLP 6395
CLP 6438
DEP 5068
DEP 5099
EXP 5099
EXP 5527
EXP 5508
INP 5095
INP 5136
INP 6115
INP 6940
POS 6286
POS 6612
PSY 5939
SOP 5058
SOP 6098
SOP 6441
SOP 6752
LAW 6310
LAW 6112
LAW 6114
LAW 6330
LAW 6710
LAW 6381
LAW 6363
LAW 7549
LAW 6714
LAW 6253
LAW 7308
LAW 6720
LAW 6555
LAW 6313
LAW 6234
LAW 6235
6235 Women and the Law
3. Electives (6 credits approved by the student's graduate advisor)
4. Supervised research ( 18 credits)
5. Master's Project
6. Comprehensive Examination
7. PSY 7980 Ph.D. Dissertation ( 15 credits)

## Graduation Requirements

A grade of " B " or higher must be obtained in all courses with a cumulative average of 3.0 or higher in the 90 credits; the program requirements must be completed, and a dissertation must be completed and accepted by the University.

## Admissions Procedures for Non-Psychology Majors

Applicants to the program who are not psychology majors may be accepted conditionally until they meet the category requirements, listed below, early in their graduate career. A maximum of nine semester hours credit earned in the non-degree seeking student category exclusive of prerequisite undergraduate courses may be applied to graduate degree requirements. The undergraduate course requirements are designed to make certain that students accepted into the graduate program have a broad base of dependable psychological knowledge and acquaintance
with the basic methodologies upon which the discipline is founded.
Category A. Satisfactory completion of one psychology laboratory or research methods course.
Category $B$. Satisfactory completion of introductory upper division statistics.

Deadline for review of completed applications is December 15 for fall admission.

## Juris Doctor/Master of Science in Psychology Joint Degree Program

Under the joint degree program, a student can obtain both degrees in less time than it would take to obtain each degree if pursued consecutively. Essential criteria relating to the joint degree program are as follows:

1. Candidates for the program must meet the entrance requirements for and be accepted by both Colleges. Both Colleges must be informed by the student at the time of application to the second program that the student intends to pursue the joint degree.
2. The joint degree program is not open to students who have already earned one degree.
3. For law students, enrollment in the M.S. program is required no later than the completion of 63 credit hours in the J.D. program. For M.S. students, enrollment in the J.D. program is required no later than the third semester after beginning the M.S. program. For purposes of this paragraph, a summer session is counted as half a semester.
4. A student must satisfy the curriculum requirements for each degree before either degree is awarded. The College of Arts, Sciences and Education will allow 9 credit hours toward the M.S. degree for successful completion of 9 credit hours of upper level law school electives from a list of courses approved by the Chair of the Department of Psychology. These 9 credit hours of law classes will be in lieu of 9 hours of courses required for the M.S. degree with the specialization in Legal Psychology as approved for each student by the Legal Psychology faculty committee, but not to include the required statistics classes of Proseminars. If the student is pursuing a non-thesis M.S. with the specialization in Legal Psychology, 6 of the 9 credit hours of law classes will be in lieu of the six credit hours normally allotted to the thesis. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the J.D. degree for courses taken in the M.S. curriculum upon completion of the M.S. degree curriculum with a grade point average of 3.0 or higher.
5. A student enrolled in the joint degree program may begin the student's studies in either College, but fulltime law students must take the first two semesters of law study consecutively and part-time students must take the first three semesters of law study consecutively. Students admitted to one College but electing to begin study in the other College under the joint degree program may enter the second College thereafter without once again qualifying for admission so long as they have notified the second College before the end of the first week of the first semester in the second College and are in good academic standing when studies commence in the second College.
6. A student enrolled in the joint degree program will not receive either degree until the student has satisfied all of the requirements for both degrees, or until the student has satisfied the requirements of one of the degrees as if the student had not been a joint degree candidate.
7. Students in the joint degree program will be eligible for the graduate teaching assistantships and research assistantships in the College of Arts, Sciences and Education on the same basis as other M.S. students, subject to the guidelines and restrictions set by the College of Arts, Sciences and Education.

## Non-Thesis Track with a Specialization in Legal Psychology

The new non-thesis track culminating in the award of a Master of Science in Psychology, with a specialization in Legal Psychology, from the College of Arts, Sciences and Education complements the joint degree program that awards a Master of Science from the College of Arts, Sciences and Education and a Juris Doctor degree awarded by the College of Law. Essential criteria relating to this non-thesis option are as follows:

1. The non-thesis track is available only to graduate students who are admitted to the joint J.D./M.S. program. Admission requirements to that program are outlined above. Students entering the J.D./M.S. program will be placed on the non-thesis track.
2. Students on the non-thesis track may change to the thesis track with approval from the Director of the Legal Psychology Program and the Chair of the Psychology Department.
3. Except for the thesis requirement, the requirements for the M.S. degree, as specified by the Legal Psychology Program and the Psychology Department, apply to all students in the non-thesis track. As currently outlined, students must complete 9 hours of statistics classes, 12 hours of core Legal Psychology classes, and 9 hours of electives. Nonthesis track students must complete these requirements, plus 6 hours of additional electives. Unless otherwise specified, any changes made to the M.S. curriculum in the future will apply equally to thesis and non-thesis track students.
4. As outlined in the joint degree program proposal, 9 hours of credit toward the M.S. degree may be allowed for upper level law school electives from a list of courses approved by the Chair of the Department of Psychology. These law school classes will be in lieu of 9 hours of credit as approved for each student by the Legal Psychology Graduate Committee, but not to include the required statistics classes or Proseminars.
5. In lieu of a thesis, students must complete a comprehensive critical review paper that includes both legal and psychological analysis of a chosen topic. Students must complete this paper no later than the last semester of the student's coursework. Students must have taken all required courses by the end of the term during which they complete the critical review paper. At least two faculty members of either the Department of Psychology or the College of Law will review the paper and must agree on satisfactory completion.
6. Students on the non-thesis track are required to take at least 3 credit hours of Supervised Research (PSY 5918).

## Courses

List of proposed courses in the College of Law that may be taken for credit toward the M.S. in Psychology (with specialization in Legal Psychology)
LAW $6310 \quad$ Alternative Dispute Resolution 2-3
LAW 6112 Criminal Procedure 3
LAW 6114 Advanced Criminal Procedure 3
LAW 6330 Evidence 3-4
LAW 6710 Family Law 2-3
LAW 6381 Interviewing and Counseling 2
LAW 6363 Trial Practice 2-4
LAW 7549 Employment Discrimination 3
LAW 6714 Children and the Law 2-3
LAW 6253 Comparative Criminal Law 2-3
LAW 7308 Complex Litigation 2-3
LAW 6720 Health Law 2-3
LAW 6555 Law and Economics 2-3
LAW 6313 Negotiation and Mediation 2-3
LAW 6234 Race and the Law 2-3
LAW 6235 Women and the Law 2-3

## Course Descriptions <br> Definition of Prefixes

CBH-Comparative Psychology and Animal Behavior; CLPClinical Psychology; CYP-Community Psychology; DEPDevelopmental Psychology; EAB-Experimental Analysis of Behavior; EDP-Educational Psychology; EXPExperimental Psychology; INP-Industrial and Applied Psychology; LIN-Linguistics; PCO-Psychology for Counseling; PSB-Psychobiology; PSY-Psychology; SOPSocial Psychology

CBH 5256 Animal Cognition (3). Survey of comparative cognition between humans and other animals. Major topics include perception, attention, learning, memory, reasoning, tool use, and language. Prerequisites: Graduate standing or permission of the instructor.

CLP 5007 Psychological Clinical Science I: Historical Perspectives and Current Controversies (3). This course overviews clinical child psychology, including (a) history and philosophy of psychological clinical science and (b) challenges and controversies related to bridging science and service. Prerequisite: Graduate standing.
CLP 5165 Psychopathology (3). This course will provide a comprehensive introduction to the literature on psychopathology with a focus on understanding its relationship to other areas of psychology. Prerequisite: Graduate standing.

CLP 5166 Advanced Abnormal Psychology (3). Advanced study of the causes, psychopathology manifestations, and social and personal consequences of behavior disturbance. Emphasis is placed on the critical examination of current research on the biological, psychological, and social aspects of these disorders. Clinical approaches to diagnosis, course, and prognosis in the contemporary mental health context (including 'practicum' assignments if feasible) are covered.
CLP 5169 Proseminar in Developmental Psychopathology (3). A comprehensive review of topics in
developmental psychopathology including history, scope, methods, individual and contextual influences, developmental course, long-term outcomes, and resilience. Prerequisites: Graduate standing or permission of the instructor.
CLP 5175 Personality Dynamics (3). A review of different approaches to the study of personality. Prerequisites: Successful completion of a course in theories of personality, or equivalent. Permission of the instructor.
CLP 5185 Current Issues in Mental Health (3). A critical, intensive examination of selected, important issues in mental health. Emphasis is given to the empirical study of contemporary problems related to the making of mental patients; planning, programming, and administering mental health services; political, ethical, and legal constraints on the operation of mental health facilities; interdisciplinary cooperation among helping and human service professionals; and evaluation of preventive care and treatment services. Prerequisites: Abnormal Psychology or permission of the instructor.
CLP 5483 Psychological Clinical Science II: Ecologies of Development and Theories of Psychopathology (3). This course provides an overview of theories of clinical child psychology, including (a) ecologies of development as related to psychopathology and (b) theories of development psychopathology. Prerequisites: Graduate standing, CLP 5007.
CLP 5931 Ethical Code in Psychological Practice (3). Ethical principles, rules, procedures of Psychologists. Clinical application and incorporation of the principles into professional interactions. Ethical reasoning is emphasized.
CLP 6168 Psychopathology Across the Life-Span (3). Exploration of the causes of psychopathology from a lifespan developmental orientation and implications for theories of personality. Prerequisites: CLP 5166 and permission of the instructor.
CLP 6375 Clinical Psychology (3). Introduction to the science-profession of clinical psychology, as it is applied to preventing, diagnosing and treating maladaptive or deviant human behavior and relationships. Prerequisites: Admission to the Graduate Program in Psychology or Education and permission of the instructor.
CLP 6395 Forensic Psychology (3). This course surveys the practical and ethical issues surrounding the interface between clinical psychology and the law. Prerequisites: CLP 4144, CLP 6168, or equivalent of either.
CLP 6426 Neuropsychology (3). Introduces students to basic foundations and some advanced concepts in Neuropsychology, with a focus on clinical applications. Topics covered will include functional neuroanatomy, brain disorders across the lifespan, and assessment of neuropsychological functions. Prerequisite: Permission of the instructor.
CLP 6432 Foundation Practicum I (3). This course provides a comprehensive introduction to the principles of psychological assessment and measurement in children and hands on practice in the administration of selected cognitive tests. Prerequisite: Graduate standing.

CLP 6436 Introduction to Psychological Assessment (3). This course provides instruction in the principles and
methods underlying the administration, construction and evaluation of psychological tests and measures. Prerequisite: Graduate standing.
CLP 6437 Behavioral Assessment in Childhood (3). Standardized tests and inventories for the behavior assessment of infants, children, and adolescents will be surveyed. Prerequisites: Proseminar courses and second year graduate standing.
CLP 6438 Clinical Psychological Assessment (3). Supervision and didactic material will facilitate continued growth in psychological assessment for Ph.D. students. The focus is on selection, administration, and interpretation of psychological tests. Prerequisites: CLP 6432, CLP 6947, permission of the instructor.
CLP 6449 Career Development in Adolescence and Adulthood (3). An overview of career development and other life factors relevant to life stages from adolescence and beyond. Issues related to theory, research and application will be reviewed. Prerequisite: Graduate standing.
CLP 6471 Assessment and Treatment I: Internalizing Problems (3). Provides an in-depth examination of the evidenced-based assessments used in the psychological evaluation and treatment for children and adolescents with internalizing problems. Prerequisite: CLP 5007.
CLP 6472 Assessment and Treatment II: Externalizing Problems (3). Provides an in-depth examination of the evidenced-based assessments used in the psychological evaluation and treatment for children and adolescents with externalizing problems. Prerequisite: CLP 5007.
CLP 6473 Assessment and Treatment III: Developmental, Learning and Pediatric Disorders (3). Provides an overview of theory, research, and evidencedbased practices relevant for evidence based assessment and intervention for use with developmental, learning and pediatric disorders. Prerequisite: CLP 5007.
CLP 6498 Diagnosis and Treatment of Sexual Disorders (3). Clinical examination of sexual functioning, emphasizing disorders of gender identity, paraphilias and other dysfunctions and intimacy problems. Prerequisites: Graduate standing or permission of the instructor. Corequisites: SOP 3772 or equivalent.
CLP 6530 Dissemination and Implementation of Research (3). Addresses the increasing need to bridge research and practice to inform a new generation of effective services that are accessible to the large numbers of children and families in need.
CLP 6625 Clinical Supervision in Mental Health Counseling (1-20). Supervised experience in clinical supervision techniques and methods. Prerequisite: Master's degree.
CLP 6943 Advanced Clinical Practicum (1-20). Allows students to practice clinical skills through participation in interactive classroom exercises while gaining clinical experience. Prerequisite: Clinical Practicum (CLP 6945).
CLP 6945 Clinical Practicum in Psychology (1-3). Supervised experience in clinical techniques and methods. Prerequisites: Graduate standing and permission of the instructor.

CLP 6947 Foundations Practicum II (Treatment) (3). This course provides a comprehensive introduction to the principles of psychological treatments for children and adolescents, with applied practice and supervision in psychotherapy techniques. Prerequisites: PSY 5939 (Foundation Practicum I: Assessment).
CLP 6948 Clinical Internship (1-3). Clinical Internship in Psychology for Ph.D. candidates who have completed the Clinical Practicum and at least 45 graduate credit hours. Prerequisites: Graduate standing and permission of the instructor, CLP 6945.

CLP 6949 Advanced Clinical Internship (1-20). Advanced clinical internship is the second semester of internship. Students receive supervision in advanced clinical techniques and personal and professional development. Prerequisites: Graduate standing and permission of instructor.
CYP 5534 Groups as Agents of Change (3). Theory and practice in utilizing groups as agents of change or development in communities and organizations. Didactic presentation and structured exercises focus on relevant issues. Students design and implement problem-focused interventions, using class as client system.
CYP 5954 Community Psychology Field Experiences II (5). Same orientation and description as Field Experience I. Students in this course will be able to pursue their work with community institutions in more depth. Prerequisite: Students enrolled in this course must have completed Community Psychology Field Experiences I.

CYP 6526 Psychological Methods of Program Evaluation (3). Development of skills for the psychological assessment monitoring and evaluation of human service programs with emphasis on the application of basic principles of behavioral science research in the field, exclusive of public school settings.

CYP 6536 Principles and Methods of Psychological Consultation (3). An analysis of the basic psychological approaches underlying consultation, with special emphasis on the practical application of the processes of learning, cognition, and interpersonal relations to techniques of consulting with various 'target' agencies, individual clients, and other professionals in community settings. Prerequisites: Graduate standing at FIU or permission of the instructor.
CYP 6766 The Psychology of Crosscultural Sensitization in a Multicultural Context (3). A series of weekly seminars to increase student sensitivity to working with clients from different cultural backgrounds. The objectives of the course are: (1) facilitating student awareness of cultural differences and their impact on social and human services delivery systems, (2) identifying the student's own personal cultural biases and values when interacting with culturally different persons, and (3) teaching students to develop culturally appropriate intervention skills.
CYP 6936 Current Issues in Community Psychology (3). An intensive analysis of contemporary theoretical, practical, and professional aspects of the field of Community Psychology. Topics discussed may lead to the graduate project required of each student. Prerequisites: Admission to graduate study in psychology (other
graduate students admitted by permission of the instructor).

DEP 5056 Issues in Life-Span Developmental Psychology: Infancy through Old Age (3). A in-depth survey of theories, issues, methods, and data in life-span developmental psychology through the entire age range. Prerequisites: DEP 3001 or DEP 4464, or their equivalents, are recommended.
DEP 5058 Biological Basis of Behavior Development (3). Introduction to theory and research underlying behavioral development. Covers such pre-and post-natal determinants as evolution, genetics, neuroendocrines, as well as social development, behavioral ecology, and sociobiology. Prerequisites: Graduate standing or permission of the instructor. Corequisite: Proseminar courses.

DEP 5065 Cognitive Development (3). An overview of cognitive development, with a focus on the theories, experimental evidence, and milestones in cognitive development. Topics include the development of attention, perception, memory, problem solving, categorization, concepts, language, reasoning, theory of mind, metacognition, and executive function. Prerequisites: Graduate standing or permission of the instructor.

DEP 5068 Applied Life Span Developmental Psychology (3). This course is designed to acquaint the student with various applications in life-span developmental psychology. An overview of general issues and areas of application is offered, and specific applications are considered. Prerequisites: Graduate standing or permission of the instructor.
DEP 5099 Proseminar in Infancy, Childhood, and Adolescence (3). Provides a comprehensive review of issues in perceptual, cognitive, social, emotional, and personality development from infancy through adolescence. Prerequisites: Graduate standing or permission of the instructor. Corequisite: Proseminars.
DEP 5118 Current Issues in Cognitive and Perceptual Development in Infancy (3). Provides an in-depth analysis of current issues, methods, research and theory of cognitive and perceptual development during the first year of life. Special emphasis on object and event perception, memory, and imitation. Prerequisites: Two courses in developmental psychology -any level recommended.

DEP 5185 Emotional Learning and its Reversal (3). Theoretical analyses and methodological issues in the study of emotional learning. Prerequisites: Graduate standing or permission of the instructor.
DEP 5315 Proseminar in Parent-Child Relations (3). Provides an overview of key issues in parent-child relations including culture, socialization/genetics, fatherhood, timing, adoption, work, effects of children on parents, and parent training. Prerequisites: Graduate standing or permission of the instructor.
DEP 5325 Proseminar in Identity Development (3). This class uses foundational identity theories and concepts to understand cross cultural development and psychological outcomes at an advanced level. Prerequisite: Graduate standing.

DEP 5344 Psychology of Moral Development (3). An introduction to the literature on moral development. Review and discussion of recent developments in this area. Prerequisites: Graduate standing or permission of the instructor.
DEP 5405 Proseminar in Psychology of Adulthood and Aging (3). A comprehensive review of topics in adulthood and aging including: biological changes, social processes, work, family, cognition, memory, personality, and psychopathology. Prerequisites: Graduate standing or permission of the instructor.
DEP 5608 Theoretical Perspectives in Developmental Psychology (3). The focus of this course is on the major paradigms, models, and theories that have been influential in developmental psychology, both historically and contemporaneously. Meta-theoretical issues, paradigmatic influences, and specific theories are considered. Prerequisites: Graduate standing or permission of the instructor.
DEP 5725 Seminar in Psychosocial Development (1). This course is designed to develop research skills and competencies in the area of psychosocial development. The emphasis of the course is on involvement in original research. Prerequisite: Permission of the instructor. Corequisites: Senior undergraduate or graduate standing.
DEP 5796 Methods of Developmental Research (3). Survey of issues and methods at all stages of life-span developmental research including theory, methods, design, and data reduction. Prerequisites: Graduate standing or permission of the instructor. Corequisite: Proseminars.
DEP 5936 Theory and Research Experience in Developmental Science (3). An advanced seminar that integrates research in the lab with readings and discussion of current issues, theory, and methods in developmental science. May be repeated. Prerequisites: Graduate standing and permission of instructor. Corequisites: Independent research in a developmental lab (PSY 5918 or PSY 6971).
DEP 6117 Psychology of Caregiving (3). An advanced seminar focusing on one or more topics in depth and requiring literature reviews and research design. Topics may include timing of parenthood, adoption, and fatherhood.
DEP 6145 Psychology of Culture and Childhood (3). Extensive cross-cultural readings will serve as the focus for seminar discussion of cultural influences on children's biological, motor, perceptual, cognitive, social, and personality development. Prerequisites: Graduate standing or permission of the instructor.
DEP 6186 Social Development and Learning (3). Theories and facts of socio-emotional development, learning, and the acquisition and maintenance of social relationships in early life are examined critically. Prerequisites: DEP 2000 or DEP 2001 or equivalent.
DEP 6465 Psychology of Culture and Aging (3). An intensive examination of cultural influences on social and psychological aging processes including minority aging and involving seminar discussion and independent projects. Prerequisite: Graduate standing.

DEP 6466 Cognitive Processes in Aging (3). An intensive analysis of the background and recent developments in the area of age changes and age differences in intellectual functioning and learning memory processes. Prerequisite: DEP 5405.

DEP 6477 Psychology of Social Processes in Aging (3). An intensive analysis of the background and recent developments in theoretical models of social development, personality processes, and social processes in the older adult. Prerequisite: DEP 5405.
DEP 6645 Cognition and Language (3). Course covers the acquisition of cognitive processes and language, and their interdependence. Theory and research focusing on innate vs. learned aspects are discussed. Prerequisites: Graduate standing or permission of the instructor.
DEP 6936 Current Literature in the Psychology of Infancy, Childhood, and Adolescence (3). This seminar will present and evaluate current research articles in the major journals in infant, child, and adolescence psychology. Prerequisite: Second year graduate standing.
DEP 6937 Current Literature in the Psychology of Adulthood and Aging (3). This seminar will present and evaluate current research articles in the major journals in the psychology of adulthood and aging. Prerequisite: Second year graduate standing.
DEP 6945 Life-span Developmental Psychology Practicum (3). This is an individually tailored program where students will work in an agency on a specific problem or project, culminating in a final written report. Prerequisite: Second year graduate standing.
DEP 7069 Seminar in Life-Span Cognitive Developmental (3). This graduate seminar will examine, through intensive reading and seminar discussion, the major theories, issues and empirical research on cognitive growth, change and decline from infancy through old age. Prerequisites: Two courses in Developmental Psychology (any level).
DEP 7096 Seminar in Psychology of Life-Span Social Development (3). This course includes a consideration of general issues and discussion of the application of lifespan models to selected topics development. Prerequisites: Graduate standing or permission of the instructor.
EAB 5098 Proseminar in the Experimental Analysis of Behavior (3). An advanced survey of the principles of respondent and operant conditioning and the bases of action in both social and non-social settings. Prerequisites: EAB 3002, EAB, 4034, or equivalents.
EAB 5655 Advanced Methods of Behavior Change (3). An intensive study of selected methods of modifying human behavior, emphasizing the applications of the principles of respondent and operant conditioning, as well as those derived from modern social learning theories. Practice and role playing opportunities are provided in behavior therapy, relaxation therapy, behavior modification, biofeedback or similar behavioral approaches. Prerequisites: EAB 4794, CLP 4374, CYP 4144; enrollment in an authorized program; equivalent background; or permission of the instructor.
EAB 5797 Single-Case Research Methods (3). Intensive study of designs, strategies, and methods of single-case
behavioral research. Prerequisites: Graduate standing or permission of the instructor.
EAB 6707 Learning and Development (3). A survey of the application of the principles, methods, and applications of experimental behavior analysis to various life-span segments and developmental themes. Prerequisites: Proseminar in Behavioral Analysis or an undergraduate EAB course (EAB 3002, EAB 4034, or EAB 4794).
EAB 6717 Applications of Verbal Behavior for Autism and Asperger Syndrome (3). Verbal behavior is analyzed by function. Structural and developmental issues as well as implications for language training and ethical application to autistic populations are integrated throughout. Prerequisite: Graduate standing.
EAB 6770 Behavioral Technologies (3). Evaluating interventions, staff training, managing treatment teams, as well as, data-based evaluation of teaching procedures, behavior outcomes and team member performance. May be taken twice for credit. Prerequisite: Graduate standing.
EAB 6780 Ethical Code in Behavior Analysis (3). Ethical issues in clinical Behavior Analysis are examined including selecting behavior targets, monitoring intervention success and transferring control to existing environmental contingencies. Prerequisite: Graduate standing.
EAB 6941 Practicum in Applied Behavior Analysis (3). This course provides students with supervised experience in designing and implementing behavior plans. May be repeated once. Prerequisites: EAB 5655, EAB 6707.

EDP 6935 Special Topics in Educational Psychology (VAR). An intensive analysis of a particular topic in educational psychology. Students must have topics approved by the instructor prior to registration. Open only to advanced and graduate students in the College of Education.
EXP 5099 Proseminar in Experimental Psychology (3). Provides a comprehensive review of current research and theory in areas such as learning, memory, cognition, sensation, and perception. Prerequisites: Graduate standing or permission of the instructor.
EXP 5406 Theories of Learning (3). The major theoretical systems of learning are covered, with the intent of determining how well each accounts for the phenomena of learning. Emphasis is placed on exploring the controversial issues raised by extant theories, and the experimental resolution of these theoretical controversies. The impact of theory on current thinking about learning is considered.
EXP 5508 Applied Cognitive Psychology (3). Covers the basic theories of cognitive psychology perception, attention, memory, learning, knowledge, with emphasis on application to real-world problems. Prerequisite: Graduate standing.
EXP 5527 Memory and Consciousness (3). The relation of memory and consciousness is explored with emphasis on issues of current research and theoretical work from both a cognitive and a neuropsychological perspective. Prerequisite: Graduate standing.
EXP 5667 Cognitive Neuroscience (3). Investigation of the relation between mind and brain. Discuss literature
from both patient studies and from the growing research in neuroimaging. Prerequisite: Graduate standing.

EXP 7747 Practicum in Causal Modeling (3). Introduction to linear structural relations models, emphasizing logical and practical problems in inferring causation for experimental and correlational research designs.

INP 5095 Proseminar in Industrial Psychology (3). Provides coverage of industrial and personnel psychology topics such as job analysis, personnel recruitment and selection, legal aspects of employment, performance appraisal, and training design and evaluation. Prerequisites: Acceptance to Master's or Ph.D. program in Psychology.
INP 5136 Psychology of Legal Consultation (3). Practice in basic non-clinical areas in which psychologists assist attorneys, including jury selection, surveys, and simulations. Prerequisites: SOP 6098 or equivalent.
INP 6090 Applied Psychology and Organizational Consulting (3). An overview of the organizational consulting process, including proposal development, managing projects and client relationships, ensuring information integrity, and understanding ethical issues. Prerequisite: Graduate standing.
INP 6115 Psychology of Culture and Organizations (3). An overview of theory and research examining the psycho-social environment of organizations, including the factors that shape organizational cultures and climate, along with the implications for workplace motivation, morale, and productivity. Prerequisite: Graduate standing.
INP 6216 Personnel Selection (3). Characteristics of Personnel Selection systems used in organizations. Validity generalization, utility, applicant reactions, and legal cases pertaining to employee selection. Prerequisites: Proseminar in I/O and graduate level statistics course.
INP 6235 Applied Psychology of Training and Development (3). In-depth study of principles of behavior and attitude change in organizations. Topics include organization analysis, program design and implementation, and evaluation of results. Prerequisites: Acceptance to M.S. or Ph.D. program in Psychology and SOP 5616.
INP 6611 Organizational Stress (3). This seminar examines conceptualizations, causes, consequences, and correlates of stress, strain, and coping in the workplace.
INP 6940 Strategies and Methods of Applied Psychological Research (3). A practicum course in the psychological research strategies and the application of computers in the analyses of psychological data.

LIN 5701 Psychology of Language (3). An overview of the psychology of language and the psychological 'reality' of linguistic structure. Behavioristic vs. cognitive views of psycho-linguistics are examined. Consideration is given to the biological bases of language and thought, language acquisition, and language pathology.
PCO 5251 Couples and Family Systems (3). An overview of theory, research, and treatment issues related to couples and family systems. The course covers
relevant techniques, training, and professional issues. Prerequisite: Graduate standing.
PCO 5252 Theory and Techniques in Couples and Marital Therapy (3). An overview of the theories and techniques used in couples and marital therapy with an examination of treatment approaches and evidence-based practice. Consideration of clinical issues and problems.
PCO 5253 Theory and Techniques in Family Therapy (3). An examination of the major theories and techniques used in family therapy with an in-depth exploration of the skills and strategies used for treating clinical issues from multiples perspectives.
PCO 5311 Theory, Treatment, and Research of Addictive Behavior (3). An overview of theory, treatment, and research findings pertaining to the process and development of addictive behavior. This course covers treatment issues related to substance abuse disorders. Prerequisite: Graduate standing.

PCO 5750 Contemporary Issues in Family Life and Process (3). An examination of selected issues that are faced during the development and life cycle of the family. Family intergenerational history and sociocultural factors will be explored.

PCO 6206 Principles \& Practices of Counseling \& Psychotherapy (3). Examination of the principles \& practices of counseling and psychotherapy derived chiefly from cognitive behavioral psychology. Prerequisite: Graduate standing.
PCO 6254 Principles and Practices in Couples and Family Therapy (3). An examination of the principles and practices used in couples and family therapy. Counseling skills and practical issues related to couples and family therapy will be examined.
PSB 5115 Introduction to Psychophysiology: Basics of Electroencephalography and Event-Related Potentials (3). This course introduces students to the concepts, theory, and methods of human psychophysiology with a specific focus on electroencephalography (EEG) and event-related potentials (ERPs). Prerequisite: Permission of the instructor.
PSB 6215 Human Neuroanatomy (3). Survey of human spinal, brainstem, subcortical, and cortical neuroanatomy with reference to physiology and disease. Prerequisite: Permission of the instructor.
PSB 6247 Biological Bases of Behavior (3). Advanced survey of biological bases of behavior. Topics include neuroanatomy, functional organization and electrochemical processes of the nervous system, and neural bases of learning and memory. Prerequisites: Graduate standing or permission of the instructor.
PSB 6350 Cognitive Neuroimaging Methods I (3). Data acquisition methods and their psychological application in cognitive neuroimaging, including techniques from nuclear medicine, electrophysiology, and magnetic resonance imaging.
PSB 6351 Cognitive Neuroimaging Methods II (3). Data analysis methods and psychological applications in cognitive neuroimaging, including image pre-processing, statistical modeling, brain connectivity techniques, and the
visualization, interpretation, and reporting of results. Prerequisite: PSB 6350.
PSY 5206C Fundamentals of Design of Experiments (3). CRD and RCB designs. Latin square designs. Factorial, nested and nested-factorial experiments. Fixed, random and mixed models. Split-plot designs. Covariance analysis. Prerequisites: STA 2122 and 3123, or their equivalents.
PSY 5246C Multivariate Analysis in Applied Psychological Research (3). Covers basic techniques of multivariate analysis, emphasizing the rationale and applications to psychological research. Includes multiple regression, Hotellings T, MANOVA, principal component analysis, and factor analysis. Prerequisites: STA 3123 or equivalent; linear algebra recommended.
PSY 5605 Proseminar: History and Systems of Psychology (3). An examination of the historical foundations of modern psychology and survey of current systems and schools of psychology. Prerequisites: Graduate standing or permission of the instructor.
PSY 5908 Directed Individual Study (VAR). Under the supervision of an instructor in the graduate degree program, the graduate student delves individually into a topic of mutual interest which requires intensive and profound analysis and which is not available in a formal offering. May be repeated once. Prerequisite: Permission of the instructor.
PSY 5918 Supervised Research (VAR). Research apprenticeship under the direction of a research professor or a thesis advisor. Prerequisite: Full graduate admission.
PSY 5930 Qualitative Research Methods in Development Psychology (3). Review recent developments in qualitative research methods. The focus will be on the application of these methods to research on human development. The interpretation of qualitative and quantitative methods will be stressed.
PSY 5939 Special Topics in Psychology (3). Special topics will be announced in advance.
PSY 6219 Research Methods in Clinical Child Psychology (3). An in-depth examination of research methods used in clinical child psychology, with an emphasis on intervention research. Prerequisites: CLP 5007; CLP 5483.
PSY 6919 Current Research Topics in Psychology (3). An overview of current theory and research in psychology with a focus on the research process. Case studies illustrate the development of research programs designed to advance theory in psychology. Prerequisite: Graduate standing.
PSY 6945 Teaching of Psychology (1). An introduction to the art of college teaching and specifically the art of teaching psychology. It is designed for first-year graduate students to provide instruction and support for teaching college classes. Prerequisite: Graduate standing.
PSY 6956 Psychology Field Experience (VAR). Placement of students in applied settings for the purpose of developing community-based experience in the application of theoretical and methodological approaches. Prerequisite: Graduate standing.

PSY 6971 Master's Thesis in Psychology (3-6). Supervised research on an original research project submitted in partial fulfillment of Master's degree requirement.
PSY 7940 Supervised Teaching in Psychology (1). Supervised teaching under the guidance of faculty advisor. May be repeated only three times. Prerequisite: Doctoral graduate study.
PSY 7980 Ph.D. Dissertation (1-12). Supervised research on an original research project submitted in partial fulfillment of doctoral degree requirements. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
SOP 5058 Proseminar in Social Psychology (3). An indepth examination of the role of social psychology in the social sciences and the major substantive problems as they relate to contemporary societal issues. Minimum Prerequisites: An introductory course in social psychology or its equivalent.
SOP 5081 Psychological Influences on Health and Illness (3). Provides a comprehensive review of theory, research, and interventions in the field of health psychology. Prerequisites: Graduate standing or permission of the instructor.
SOP 5316 Theories and Methods of Cross-Cultural Research (3). An intensive analysis of contemporary theories and methods of cross-cultural research in psychology including topics such as: culture as a research treatment, differential incidence of personality traits, the use of ethnographies, 'etic' vs. 'emic' distinction. Prerequisites: Graduate standing or permission of the instructor.
SOP 5616 Social Psychology of Organizations (3). The application of concepts and theories from social psychology and sociology to the organizational setting. Emphasis will be on role theory, value formation and the operation of norms, including their development and enforcement. Formal and informal organization structure, power and authority concepts, and leadership theories will be covered. Communication processes and networks and their effects on task accomplishment and satisfaction will be included.
SOP 5726 Proseminar on the Psychology of Stereotyping, Prejudice, and Discrimination (3). This class uses social psychology theory and concepts to understand stereotyping, prejudice, discrimination, and minority experience at an advanced level. Prerequisite: Graduate standing.
SOP 6098 Proseminar in Legal Psychology (3). The application of psychological research methods and psychological knowledge to contemporary issues in criminal and civil litigations. Prerequisite: Graduate standing.
SOP 6441 Seminar in Social Cognition (3). Provides a critical review of current theory and research on social cognition and its relationship to stereotyping, persuasion, attribution, and social perception. Prerequisite: Graduate standing.
SOP 6752 Psychology of Juries (3). A review of psychological research on juries and jury decision-making.

Emphasis is placed on the critical analysis of jury research and relevant case law. Prerequisite: Graduate standing.

## Certificate Programs

## Graduate Certificate in Biodiversity Conservation and Management

Joel Heinen, Director, Earth and Environment

The Graduate Certificate in Biodiversity Conservation and Management draws on areas of strength within the Department of Earth and Environment and the Department of Biological Sciences (College of Arts and Sciences) to provide students with specialized knowledge about managing and conserving the earth's biological resources. It is designed for students who seek careers in agencies that manage and conserve biological resources, for people in the private sector who seek specialized knowledge in this area, for educators seeking advanced training, or for others interested in the topic. The certificate is managed by the Department of Earth and Environment and the Biodiversity and Conservation Certificate Committee. This certificate program is open to degree-seeking students only.

## Admission Requirements

Students must have an earned bachelor's degree with a minimum of a 2.75 in the last 60 credits of their upper division coursework. Students must be in good academic standing. Students should have completed a minimum of 2 courses in general biology and one course in ecology as a prerequisite to the program.

## Program Requirements

Students are required to take 15 credit hours of graduate level course work outlined below. Other related courses may be approved subject to consideration by the program director and committee on a case by case basis.

1. Foundational EVR $5409 \quad$ Advanced Conservation Biology 3
2. Conservation Sciences and Management, 6 credits total
Take two courses from this list:
PCB $5046 \quad$ Plant Conservation Biology 3
EVR $5069 \quad$ Wetland Ecology and Management 3
EVR $5376 \quad$ Advanced Ecology and Management of Invasive Species
SWS 5305 Advanced Soil Resources Analysis 3
3. Integrated Biological Resources Management, 6 credits total
Take two courses from this list:
PCB 5418C Advanced Marine Protected Areas 4
BOT 5816 Ethnobotany 3
EVR $6360 \quad$ Protected Area Management 3
EVR $6406 \quad$ U.S. Endangered Species Management 3
EVR 6330 Tropical Ecosystems Management 3

## Graduate Certificate in Cognitive Neuroscience

Anthony Dick, Director, Psychology
Prem Chapagain, Physics
Sean Hermanson, Philosophy
Robert Lickliter, Psychology
Kinsuk Maitra, Occupational Therapy
Wei-Chiang Lin, Biomedical Engineering
Elaine Ramos, Communication Sciences \& Disorders
Jamie Theobald, Biological Sciences
The Graduate Certificate in Cognitive Neuroscience is designed to advance the scientific education and professional development of students through coursework covering a broad range of areas of neuroscience. The 15credit program specifically will provide students with an interdisciplinary background in cognitive psychology/cognitive science and neuroscience. The curriculum concentrates on teaching theory and methodology for conducting and understanding research in cognitive neuroscience and its potential application to education and clinical practice. This certificate program is open to degree-seeking students only.

## Admission Requirements

1. Matriculation into a graduate program or baccalaureate degree from an accredited institution of higher education (or equivalent) with a minimum 3.0 GPA in the last two years of undergraduate work;
2. Current resume or curriculum vitae;
3. Official academic transcript

## Program Requirements

There are two Core Course Categories, Cognitive Neuroscience and Neuroscience, from which students must take one course each ( 6 credits). The remaining 9 credits can be taken from the listed Electives or from the remaining courses in the Core Course categories. Additional courses may be accepted for the certificate with approval of the Program Director.

Core Requirement 1: Cognitive Neuroscience (3
credits)

DEP 5058 | Biological Basis of Behavior |
| :--- | :--- |
| Development |

EXP $5667 \quad$ Cognitive Neuroscience 3

PHI 5931 Advanced Topics in Philosophy of Mind
and Cognitive Science

Core Requirement 2: Neuroscience ( 3 credits)
BME 5505C Engineering Foundation of Medical Imaging Instrument 3
PHY 6716 Advanced Biophysics 3
ZOO 5785 Advanced Neurobiology 3
Electives: (Up to 9 Credits)
CHM 5305 Graduate Biological Chemistry 3
EXP 5508 Applied Cognitive Psychology 3
EXP 5527 Memory and Consciousness 3
OTH 5524 Adaptation of Human Occupation and Environment for Neuromotor Disorders I 3
OTH 5438 Adaptation of Human Occupation and Environment for Neuromotor Disorder II 3
PCB 5835
Neurophysiology
3
PCB 5835L Neurophysiology Lab 1
SPA $6410 \quad$ Aphasia and Related Disorders 3

ZOO 5745 Advanced Neuroanatomy 3

## Graduation Requirements

The graduate certificate program requires that students maintain a cumulative GPA of 3.0 or higher and earn a " B " or better in all courses counted toward the certificate.

## Graduate Certificate in Environmental Studies

Krish Jayachandran, Director, Earth and Environment
Coordinating Committee
Mahadev Bhat, Economics and Earth and Environment
Suzanne Koptur, Biology
Rod Neumann, Global and Sociocultural Studies
Laura Ogden, Global and Sociocultural Studies
Ray Scattone, Earth and Environment
This graduate certificate is an interdisciplinary program focused on various environmental issues that is analogous to the undergraduate Certificate in Environmental Studies. This certificate program is open to degree-seeking students only. It is aimed primarily at graduate students in Politics and International Relations, Economics, and Global and Sociocultural Studies as well as those doing an environmental concentration or track in graduate programs in Tourism, Liberal Studies, Journalism, Education (particularly Parks and Recreation Management), and Latin American Studies. The Certificate Program provides an analytic basis for understanding local, regional and global environmental problems and their solutions.

## Certificate Requirements

The Graduate Certificate in Environmental Studies requires 15 graduate credit hours as follows:
Two Core Courses: (6)
EVR 5006 Environmental Science and Sustainability
RLG 5183 Religion, Nature, and Globalization
Three Environmental Electives from the following: (9)
ANG 5267 Environmental Anthropology
SYD $5045 \quad$ Population and Society
INR $5352 \quad$ Environment and Security
EVR 5061 South Florida Ecology: Field Studies
EVR 5320 Environmental Resource Management
EVR 5355 Environmental Resource Policy
EVR $6360 \quad$ Protected Area Management
EVR 6300 Topics in Urban Ecology
EVR $6406 \quad$ U.S. Endangered Species Management
EVR 6067 Tropical Forest Conservation/Utilization
EVR 6330 Tropical Ecosystem Management
GIS 5050 Environmental GIS
EVR 5935 Special Topics in Environmental Studies
EVR 5907 Research and Independent Study
LEI $5605 \quad$ Philosophical and Social Basis of Parks and Recreation
HMG 6706 Environmental Management for Tourism
EDF 6766
SYD 6901 Migration and Environment
INR 6056 Environment and Development
LAA 6551 Sustainable Landscapes

EVR 7322
ECP 6305

## Graduate Certificate in Geographic Information Systems

Jeffrey Onsted, Director, Earth and Environment
Coordinating Committee
Zhaohui Jennifer Fu, Library GIS-RS Center
Jennifer Gebelein, Earth and Environment
Hugh Gladwin, Global and Sociocultural Studies
Assefa Melesse, Earth and Environment
Keqi Zhang, Earth and Environment
Xin Jin, Civil and Environmental Engineering
A Geographic Information System (GIS) is a set of computer hardware and software used to organize, manipulate, and analyze maps and spatial data. GIS is a rapidly developing technology that can be applied to many areas of the natural sciences, social sciences, engineering, and planning.

The Graduate Certificate in Geographic Information Systems provides students with an interdisciplinary background in GIS. The program consists of graduate level courses in Geographic Information Systems and related subjects offered by the departments of Biology, Civil and Environmental Engineering, Computer Science, Earth and Environment, Global and Sociocultural Studies, Public Administration, and Statistics. This certificate program is open to degree-seeking students only.

For more information, contact the Program Director, Dean Whitman: phone: (305) 348-3089; email: whitmand@fiu.edu, or visit the GIS Center website: http://gis.fiu.edu.

## Admission Requirements

Applicants must satisfy all minimum requirements as specified by the University Graduate School for admission into Graduate Programs.

In addition, the applicant must satisfy the following minimum requirements:

1. A bachelor degree in engineering or natural or social sciences or a bachelor degree in arts or humanity or languages plus either 1) minimum GRE score of 1000 (combined Quantitative and Verbal score) or 2) or at least two years of professional experience in relevant fields, such as Computer Science, Engineering, Earth Sciences, Information Science, International Relations, Environmental Studies, Economics/MBA, Landscape Architecture, Urban Planning, Biology, or Public Health.
2. Basic proficiency with computers.

## Prescribed Courses and Other Requirements

The certificate program will require 15 graduate level credits (5 courses) distributed as follows:

Required Courses: (One course from each of the following 3 categories)

1. Introduction to GIS

CGN 5320 GIS Applications for Civil and Environmental Engineering
GIS 5050 Environmental GIS

Students who demonstrate prior GIS course work or substantial GIS work experience may substitute this requirement with 3 elective credits from the courses listed below with approval of the Program Director.

## 2. Intermediate/Advanced GIS

CGN 6325 Advanced GIS for Civil and Environmental Engineering
EVR $5044 \quad$ Advanced GIS and Environmental Data Analysis
GLY $5758 \quad$ GIS and Spatial Analysis for Earth
Sciences
SYA 6356 GIS and Social Research or equivalent

## 3. Remote Sensing

GLY 5754 Applied Remote Sensing in Earth Sciences or equivalent
Electives: ( 6 credits out of the following)
COP 6727 Advanced Database Systems
EVR 6268 Remote Sensing in Hydrology
EVR 7056 GIS Water Resources
EVR $7329 \quad$ Watershed Analysis and Management
GIS 5620 Surveillance, Intelligence, and
GIS 5935
International Relations
Topics in GIS
MET $5412 \quad$ Remote Sensing in Meteorology
PCB 5328 Spatial Ecology
PAD 6710 IT and E-government
PAD 6717 GIS Applications for Urban Management or equivalent
or
Additional intermediate/advanced GIS courses under Category 2 Required Courses,
or
Other GIS-related courses approved by the Program Director in consultation with the Coordinating Committee. Up to 3 credits of a graduate level statistics or data analysis course may be counted towards the Certificate requirements with approval of the Program Director.

## Graduate Certificate in Marriage and Family Therapy

Lisa Arango, Director, Psychology
The Graduate Certificate in Marriage and Family Therapy offered through the Department of Psychology, is a 15credit program that offers advanced education and specialized training in Marriage and Family Therapy. The curriculum concentrates on teaching theory, skills, and techniques for conducting therapy with couples and families within multicultural populations. Students will also gain knowledge and understanding of the legal and ethical guidelines in couples and family therapy, and sociocultural issues that impact families.

The curriculum will fulfill partial educational requirements for licensure as a Marriage and Family Therapist by the Florida Board of Clinical Social Work, Marriage and Family Therapy, and Mental Health Counseling. Courses from this program can also be applied as elective courses for students in the Counseling Psychology Masters Program offered through the Department of Psychology. This certificate program is open to both degree- and non-degree seeking students.

## Admission Requirements

Students applying for the Graduate Certificate in Marriage and Family Therapy must meet the following requirements for admission in addition to submitting the application:

1. Hold a bachelors degree or equivalent from an accredited college or university;
2. Have a minimum GPA of 3.0 on a 4.0 scale during the last two years of upper division coursework;
3. Statement of intent;
4. Two letters of recommendation;
5. Current resume; and
6. Official academic transcript.

## Program Requirements

The graduate certificate program requires that students maintain a GPA of 3.0 or higher for successful completion of the program and earn a " $B$ " or better in all courses of the certificate.
Semester I

| PCO 5251 | Couples and Family Systems | 3 |
| :---: | :---: | :---: |
| And one of the following: |  |  |
| PCO 5750 | Contemporary Issues in Family Life and Process | 3 |
| CYP 6766 | The Psychology of Crosscultural Sensitization in a Multicultural Context | 3 |
| $\begin{aligned} & \text { Semester II } \\ & \text { PCO } 5253 \end{aligned}$ | Theory and Techniques in Family Therapy | 3 |
| PCO 5252 | Theory and Techniques in Couples and Marital Therapy | 3 |
| And one of the following: |  |  |
| PCO 6254 | Principles and Practices in Couples and Family Therapy | 3 |
| LAW 6710 | Family Law |  |

## Graduate Certificate in Mathematics

Zhenmin Chen, Director, Mathematics and Statistics<br>Coordinating Committee<br>Laura DeCarli, Mathematics and Statistics<br>Zhongming Wang, Mathematics and Statistics

The Graduate Certificate in Mathematics offers advanced training to those seeking to prepare themselves to teach college-level. This certificate requires 18 credits of graduate mathematics courses and fits well within the graduate programs of the Department of Mathematics and Statistics. It will give unique opportunities to the students to enrich and deepen their understanding of advanced mathematics. This certificate program is open to both degree- and non-degree seeking students.

## Admission Requirements

The admission into the program requires the following:

1. An MS degree in a related discipline such as Math Education, Statistics, Physics, Economics;
2. Successful completion of undergraduate courses such as Multivariable Calculus, Differential Equations, Linear Algebra; and
3. Approval of the Certificate Committee.

## Certificate Requirements

The 18 credits required for the certificate include any graduate mathematics course offered by the Department of Mathematics and Statistics. The following courses are recommended:

| MAD 5405 | Numerical Methods | 3 |
| :--- | :--- | :--- |
| MAP 5255 | Mathematical Scientific Computation | 3 |
| MAP 5316 | Ordinary Differential Equations | 3 |
| MAP 5317 | Advanced Differential Equations for |  |
|  | Engineers | 3 |
| MAS 5145 | Applied Linear Algebra | 3 |
| MAP 5204 | Optimization and Linear Algebra | 3 |

# Graduate Certificate in Water, Environment and Development Studies 

Assefa M. Melesse, Chair, Earth and Environment<br>Coordinating Committee<br>Shlomi Dinar, Politics and International Relations<br>Janvier Gasana, Environmental and Occupational Health<br>René Price, Earth and Environment<br>Mike Sukop, Earth and Environment

The goal of the Graduate Certificate in Water, Environment, and Development Studies is to provide students with a multidisciplinary education in the occurrence, characteristics, and management of water resources in South Florida and internationally. Students will learn about the natural occurrence and dynamics of surface and ground water, the key biological and chemical factors affecting water resource quality, and the fundamental linkages between water and development. The graduate certificate program promotes an integrated understanding of the theoretical and practical elements of water resources management. This certificate program is open to degree-seeking students only.

## Certificate Requirements

The Graduate Certificate Program requires the successful completion of 15 credit hours of graduate course work. Students must maintain an average GPA of 3.0 or above and must earn a "C" or above in all courses counting toward the certificate. All students in the program are required to take one foundation course and at least one course from both the natural science and social science lists below. The remaining 6 credits may be satisfied with any combination of approved courses listed below.

## Required Foundation Course

EVR 5332 Integrated Solutions for Water in Environment and Development

## Natural Science, Engineering, and Public Health Courses

(all students must take at least one)
PCB $4301 \quad$ Freshwater Ecology
EVR $5219 \quad$ Water Resources Assessment 3
EVS 5145 Ecotoxicology 3
GLY 5245 Water-Rock Interaction 3
GLY 5266 Stable Isotope Biogeochemistry 3
PCB 5307 Limnology 3
EVR 5320 Environmental Resources Management 3
GLY 5827 Hydrogeology 3
BOT 5406 Algal Physiology 3

ENV 5517* Design of Wastewater Treatment Plants 3
ENV 5666* Water Quality Management 3
GLY 5754 Applied Remote Sensing in the Earth Sciences

3
CHM 5765
GLY 5826
GLY 5827
GLY 5828
EVR 5905

EVR 7056
CWR 6125
CHM 6340*
CWR 5140C*
ENV 6615
GLY 6896
EVR 7329
Aquatic Chemistry
Hydrogeologic Modeling 3
Hydrogeology 3
Chemical Hydrogeology and Solute Transport
Independent Study 3
(or any other independent study from other departments)
GIS in Water Resources 3
Groundwater Hydrology 3
Organic Geochemistry 3
Ecohydrology 3
Environmental Impact Assessment 3
Advanced Topics in Hydrology
Watershed Analysis and Management
*Engineering graduate courses are offered for graduate students with a relevant engineering background or other students meeting needed prerequisites and applicable criteria. Students must confirm their eligibility, in advance to any registration, with either the Civil and Environmental Engineering Graduate Program Director and the responsible instructor.

## Social Science and Public Health Courses

(all students must take at least one)
CPO $5036 \quad$ Politics of Development 3
SYD $5045 \quad$ Population and Society 3
INR 5352 Environment and Security 3
EVR 5355 Environmental Resource Policy 3
ANG 5267 Environmental Anthropology 3
INR 5409 International Law I 3
SYP 5447 Development and Post-Development 3
INR 5507 International Organizations 3
INR 5607 International Relations and
Development
3
INR 6056 Environment and Development 3
SYD 6236 International Migration and Refugees
PHC 6315 Introduction to Environmental Health 3
EVR 7322 Methods of Sustainable Resource Management
PHC $6410 \quad$ Health Behavior and Public Health 3
$\begin{array}{ll}\text { PHC } 6425 & \text { Legal and Regulatory Aspects of } \\ & \text { Environmental Health }\end{array}$
PHC $6520 \quad$ Public Health Aspects of Foodborne Diseases 3
PHC $6115 \quad$ Global Perspectives of Env Health in the
Caribbean and Latin America

## Seminar Requirements

Students are expected to attend at least five seminars during each semester that they are enrolled in the Certificate Program. Early in each semester, students will be provided with a schedule of water-related seminars offered in departments across campus. The departments of Biology, Chemistry and Biochemistry, Civil and Environmental Engineering, Earth and Environment, Environmental and Occupational Health, Global and Sociocultural Studies, and Politics and International Relations each sponsor seminar series that commonly include water-related topics.

Students are also required to give a presentation on a water-related theme in a departmental seminar or professional conference.

## Graduate Certificate in Women's and Gender Studies

## Core Faculty:

Yesim Darici, Director, Center for Women's and Gender Studies and Associate Professor of Physics
Maya Boutaghou, Assistant Professor, Women's and Gender Studies/Modern Languages
Victoria Bums, Visiting Assistant Professor, Women's and Gender Studies
Asia Eaton, Assistant Professor, Women's and Gender Studies/Psychology
Suzanna Rose, Associate Provost for Advance Women, Equity and Diversity and Professor, Women's and Gender Studies/Psychology

## Affiliated Faculty:

Mohamad G. Alkadry, Public Administration
Irma de Alonso, Economics
Joan Baker, English
Marissa Ball, Green Library
Diana Barratt, Herbert Wertheim College Medicine
Lynne Barrett, English
Whitney Bauman, Religious Studies
Pascale Bécel, Modern Languages
Michelle Beer, Philosophy
Judith Bernier, Center for Labor Studies and Research
Ana Maria Bidegain, Religious Studies
Heather Blatt, English
Nurhayat Bilge, Communication
Claire Brault, Politics and International Relations
Cheryl Brewster, College of Medicine
Eric Carpenter, College of Law
Phillip Carter, English
Aya Chacar, College of Business
Cynthia Chinelly, English
Cyra Akila Choudhury, Law
Maricel Cigales, Psychology
Ellen Cohn, Criminal Justice
Nadja Shreiber Compo, Psychology
Alexandra Cornelius, History/African and African Diaspora Studies
Carol Damian, Art and Art History/Frost Museum
Debra Davis, School of Computing and Information Sciences
Kathryn DePalo, Politics and International Relations
Nathalie Desrayaud, College of Communication, Architecture + The Arts
Maria Donoso, Earth and Environment
Denise Duhamel, English
Joyce Elam, University College
Juliet Erazo, Global and Sociocultural Studies
Andrea Fanta, Modern Languages
Maria Fernandez, Teaching and Learning
Joyce Fine, College of Arts, Sciences and Education
Leslie Frazier, Psychology
Rebecca Friedman, History
Annette Fromm, Frost Art Museum
Jose Gabilondo, Law
Evelyn Gaiser, Biological Sciences/SERC
Meg Gardinier, College of Arts, Sciences and Education
Jenna Gibbs, History

Marin Gillis, Herbert Wertheim College of Medicine
Erica Gollub, Robert Stempel College of Public Health and Social Work
María Asunción Gómez, Modern Languages
Christine Gudorf, Religious Studies
Kimberly Harrison, English
Kat Hart, Psychology
Gail Hollander, Global and Sociocultural Studies
Tometro Hopkins, English
Cecile Houry, Robert Stempel College of Public
Health and Social Work
Armeen Irani, Counseling and Psychological Services
Susan Jacobson, School of Communication and Journalism
Mariamah Jaiteh, African and African Diaspora Studies
Sherry Johnson, History
Hilary Jones, African and African Diaspora Studies and History
Tara Kai, English
Suman Kakar, Criminal Justice
Barbara King, Teaching and Learning
John "Jack" Kleban, College of Business
Suzanne Koptur, Biological Sciences
Tatiana Kostadinova, Politics and International Relations
Angela Laird, Physics
Hilary Landorf, Global Learning Initiatives
Shane Landrum, History
Abe Lavender, Global and Sociocultural Studies
Valentina Lee, Psychology
Yuan Liu, Chemistry and Biochemistry
Maria del Mar Logrono, History
Oscar Loynaz, University Health Services
Ana Luszczynska, English
Purnima Madhivanan, Epidemiology
Sarah Mahler, Global and Sociocultural Studies
Peggy Maisel, Law
Lindsay Malloy, Psychology
Jennifer Matey, Philosophy
Kathleen McCormack, English
Jaroslava Miksovska, Chemistry and Biochemistry
Aurora Morcillo, History
Michaela Moura-Kocoglu, Women's and Gender Studies
Fauzia Nausheen, Herbert Wertheim College of Medicine
Marilys Nepomechie, College of Communication,
Architecture + The Arts
Adis Orta, School of Social Work
Janewa Osei-Tutu, College of Law
Okezi Otovo, African and African Diaspora Studies and History
Claire Oueslati-Porter, Global and Sociocultural Studies
Ebru Ozer, College of Communication, Architecture + The Arts
Alpesh Patel, Art and Art History
Vrushali Patil, Global and Sociocultural Studies
Valerie Patterson, Public Administration
Samantha Paustian Underdahl, College of Business
Marifeli Perez-Stable, Global and Sociocultural Studies
Joyce Peterson, History
Mary Lou Pfeiffer, Honors College
Mihaela Pintea, Economics
Monika Piotrowska, Philosophy
Semma Pissaris, College of Business
Teresa Ponte, School of Communication and Journalism
Bianca Premo, History
Rene Price, Earth and Environment

Shannon Pruden, Psychology
Jean Rahier, African and African Diaspora Studies and Global and Sociocultural Studies
Jennifer Rehage, Earth and Environment/SERC
Jennifer Richards, Biological Sciences
Laurie Richardson, Biological Sciences
Leslie Richardson, Undergraduate Education
Rachel Ritchie, Psychology
Ana Roca, Modern Languages
Meri-Jane Rochelson, English
Heather Russell, English
Juan Saiz, Criminal Justice
Rebecca Salokar, Politics and International Relations
Laurie Shrage, Philosophy
Renne Silverman, Modern Languages
Caroline Simpson, Physics
Linda Spears-Bunton, College of Arts, Sciences and Education
Dionne Stephens, Psychology
Judith Stiehm, Politics and International Relations
Kerry Stone, College of Law
Andrew Strycharski, English
John Stuart, College of Communication, Architecture + The Arts
James Sutton, English
Uma Swamy, Chemistry and Biochemistry
Samantha Syms, Herbert Wertheim College of Medicine
Richard Tardanico, Global and Sociocultural Studies
Paige Telan, Psychology
Vishodana Thamotharan, STEM Transformation Institute
Juan Torres-Pou, Modern Languages
Mary Jo Trepka, Robert Stempel College of Public Health and Social Work
Yuk Ching Tse Dinh, Chemistry
Gisela Vega, Multicultural Programs/LGBT Initiatives
Chantalle Verna, History
Ligia Collado Vides, Biological Sciences
Carleen Vincent-Robinson, Criminal Justice
Chunlei "Peggy" Wang, College of Engineering and Computing
Ophelia Weeks, Biology
Judith Williams, Chaplin School of Hospitality and Tourism Management
Kirsten Wood, History
Wensong Wu, Mathematics and Statistics
Yi Xiao, Chemistry and Biochemistry
Hitomi Yoshio, Modern Languages
Susanne Zwingel, Politics and International Relations
The Women's and Gender Studies Graduate Certificate provides students the opportunity to integrate scholarship about women and gender differences into a coherent program of graduate study, i.e., for a Masters and Ph.D. in a variety of disciplines or as a free standing program of graduate study. This certificate program is open to both degree- and non-degree seeking students. For more information, go to: http://casgroup.fiu.edu/wstudies and click on "Academics".

## Certificate Requirements

## Eligibility

1) All graduate students in an M.A. or Ph.D. program at FIU are eligible to apply to this program. The Women's and Gender Studies Center encourages graduate students from all colleges to participate.
2) Students with a Baccalaureate degree from an accredited university may be admitted to the graduate certificate program as a non-degree seeking student.
3) Undergraduate students in their senior year may take graduate level courses to complete their graduate certificate as a post-baccalaureate certificate.

## Admissions Requirements

Students applying for the Graduate Certificate in Women's and Gender Studies must meet the following requirements for admission in addition to submitting the application:

1) Have a minimum GPA of 3.0 on a 4.0 scale during the last two years of upper division coursework;
2) Statement of intent;
3) Two letters of recommendation;
4) Current resume;
5) Official academic transcript.

Certificate candidates must complete a total of 15 credit hours at the $\mathbf{5 0 0 0}$ level or higher. $\mathbf{6}$ credit hours from the core +9 credit hours from the list of graduate level electives $=15$ credit hours:

## Core I Requirement ( 3 credits) <br> WST 5507 Feminist Theory

Core II Requirement (3 credits)
Choose one of the following courses or any other graduate level WST course:
WST $5935 \quad$ Special Topics in Women's Studies
WST $5936 \quad$ Women and Leadership
WST $5905 \quad$ Independent Study
WST $5946 \quad$ Women's Studies Internship

## Graduate Level Electives (9 credits)

Choose from approved list of graduate level Women's and Gender Studies electives. These include:
FIL $4881 \quad$ Hispanic Culture: Women and Film
RLG 5184 Sexuality, Religion and Social Change
RLG 5435 Feminist Theory and Religion
RLG 5144 Women and Religion
SYD $5708 \quad$ Advanced Race, Gender, Sexuality: Entanglements Across Time and Space
For more options, please see our current full list of approved courses on our website: http://womenstudies.fiu.edu/academics/current-course-offeringsl.
Students may apply up to three credit hours of thesis or dissertation research to the certificate if the research has a prominent focus on women and gender.

# College of Arts, Sciences and Education 

## Dean

Associate Dean, Faculty
Associate Dean, Undergraduate Studies
Associate Dean, Graduate Studies Maureen A. Donnelly Associate Dean, Research and Engagement
Associate Dean, Associate Provost, Office to Advance Women, Equity \& Diversity
Assistant Dean, Director of Liberal Studies

Michael R. Heithaus William T. Anderson

Maricel Cigales

Michael Maunder

Suzanna Rose
Jeremy D. Rowan

Interim Executive Director and Associate
Dean, School of Environment, Arts, and Society

Evelyn Gaiser
Interim Executive Director and Associate
Dean, School of Integrated Science and Humanity Education and Human
Development
Laura Dinehart

## Chairpersons and Program Directors:

Biological Sciences
Chemistry and Biochemistry
Earth and Environment
English
Forensic Science
Liberal Studies
Linguistics
Mathematics and Statistics
Philosophy
Physics
Psychology
Teaching and Learning
Women's and Gender Studies

Steven F. Oberbauer Yong Cai René M. Price Heather Russell Jose R. Amirall Jeremy D. Rowan Tometro Hopkins Abdelhamid Meziani Paul R. Warren
Bernard S. Gerstman
William E. Pelham, Jr.
Lynne D. Miller Yesim Darici

## Faculty

Adelman, Andrea, Ph.D. (University of Miami), Instructor, Early Childhood Education
Akens, Catherine, Ed.D. (Florida International University), Assistant Professor (Courtesy Appointment), Higher Education, Leadership and Professional Studies
Aladro, Gerardo, Ph.D. (Pennsylvania State University), Associate Professor, Mathematics and Statistics
Allen, Leila M., Ph.D. (University of California Irvine), Instructor, Psychology
Allen, Timothy A., Ph.D. (University of California Irvine), Assistant Professor, Psychology
Allen-Hermanson, Sean J., Ph.D. (University of Toronto), Associate Professor, Philosophy
Almirall, Jose R., Ph.D. (University of Strathclyde, Scotland), Professor, Chemistry and Biochemistry and Director, International Forensics Research Institute
Amorin, Jacqueline, Ph.D. (University of Florida), Instructor, English
An, Dongmei, M.S. (Mississippi State University), Senior Instructor, Mathematics and Statistics

Anderson, William T., Ph.D. (Swiss Federal Institute of Technology, Zurich), Professor, Earth and Environment and Associate Dean, College of Arts, Sciences and Education
Arango, Lisa L., Ph.D. (Florida International University), Senior Lecturer, Psychology
Arneson, Eric, Ed.D. (Florida International University), Instructor (Courtesy Appointment), Leadership and Professional Studies
Autry, Cari E., Ph.D. (University of Florida), Clinical Assistant Professor, Recreational Therapy, Leadership and Professional Studies
Baez, Benjamin, Ph.D. (Syracuse University), Professor, Higher Education, Leadership and Professional Studies
Bagner, Daniel M., Ph.D. (University of Florida), Associate Professor, Psychology
Bahrick, Lorraine, Ph.D. (Cornell University), Professor, Psychology
Baker, Joan L., Ph.D. (University of Washington), Associate Professor, English
Bang, Hyejin, Ph.D. (University of Minnesota), Associate Professor, Recreation and Sport Management, Leadership and Professional Studies
Baraloto, Christopher J., Ph.D. (University of Michigan), Associate Professor, Biological Sciences and Director, International Center for Tropical Botany
Barantovich, Martha, Ph.D. (Florida International University), Senior Instructor, Social Foundations of Education, Leadership and Professional Studies
Barbetta, Patricia, Ph.D. (Ohio State University), Associate Professor, Special Education, Teaching and Learning
Barbieri, Manuel A., Ph.D. (Universidad Nacional de San Luis, Argentina), Associate Professor, Biological Sciences
Barrett, Lynne M., M.F.A. (University of North CarolinaGreensboro), Professor, English
Becker, David A., Ph.D. (Massachusetts Institute of Technology), Associate Professor, Chemistry and Biochemistry
Beer, Michelle C., Ph.D. (University of Pittsburgh), Associate Professor, Philosophy
Bejar, Elizabeth, Ph.D. (Boston College), Assistant Professor (Courtesy Appointment), Higher Education and Vice President for Academic Affairs, Leadership and Professional Studies
Bekker, Leonid, M.S. (Florida International University), Senior Instructor, Mathematics and Statistics
Bennett, Bradley C., Ph.D. (University of North Carolina-Chapel Hill), Professor, Biological Sciences and Earth and Environment
Bennett, Kyle, Ed.D. (Florida Atlantic University), Assistant Professor, Special Education, Teaching and Learning
Bentley-Baker, Dan B., M.F.A. (Florida International University), Senior Lecturer, English
Berk, Lynn, Ph.D. (Purdue University), Professor Emerita, English
Berry, John P., Ph.D. (Cornell University), Associate Professor, Chemistry and Biochemistry
Bhat, Mahadev G., Ph.D. (University of TennesseeKnoxville), Professor, Earth and Environment
Bigger, Charles H., Ph.D. (Florida State University), Professor Emeritus, Biological Sciences
Bishop-Von Wettberg, Eric J., Ph.D. (Brown University), Assistant Professor, Biological Sciences

Bishop-Von Wettberg, Kristin L., Ph.D. (Brown University), Instructor, Biological Sciences
Blanton, Linda, Ed.D. (Indiana University), Professor Emeritus, Special Education, Teaching and Learning
Blatt, Heather E., Ph.D. (Fordham University), Assistant Professor, English
Bleiker, Charles, Ph.D. (Stanford University), Associate Professor, Early Childhood Education, Teaching and Learning
Bliss, Leonard, Ph.D. (Syracuse University), Professor Emeritus, Statistics and Research Design, Leadership and Professional Studies
Bliss, Linda, Ph.D. (University of North CarolinaGreensboro), Visiting Instructor, Leadership and Professional Studies
Boeglin, Werner U., Ph.D. (University of Basel, Switzerland), Professor, Physics
Bone, Richard A., Ph.D. (University of West Indies, Jamaica), Professor, Physics
Boswell, Kevin Mershon, Ph.D. (Louisiana State University), Assistant Professor, Biological Sciences
Bracken-Grissom, Heather, Ph.D. (University of Louisiana at Lafayette), Assistant Professor, Biological Sciences
Bray, David B., Ph.D. (Brown University), Professor, Earth and Environment
Breaux, Chet, Ph.D. (University of Louisiana at Lafayette), Instructor, English
Brew, Eric, Ph.D. (Arizona State University), Associate Professor, Science Education, Teaching and Learning
Brinn, Richard, Ph.D. (University of Sao Paulo State), Senior Lecturer, Biological Sciences
Brookes, David T., Ph.D. (Rutgers University), Assistant Professor, Physics
Bruk-Lee, Valentina, Ph.D. (University of South Florida), Assistant Professor, Psychology
Burgman, Robert J., Ph.D. (George Mason University), Assistant Professor, Earth and Environment
Burkepile, Deron E., Ph.D. (Georgia Institute of Technology), Assistant Professor, Biological Sciences
Burns, James, Ed.D. (George Washington University), Assistant Professor, Curriculum and Instruction, Teaching and Learning
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Sutherland, Matthew T., Ph.D. (University of New Mexico), Assistant Professor, Psychology
Sutton, James M., Ph.D. (Yale University), Associate Professor, English
Swamy, Uma, Ph.D. (Arizona State University), Senior Lecturer, Chemistry and Biochemistry
Tachim Medjo, Theodore, Ph.D. (University of Paris), Professor, Mathematics and Statistics
Tcheugoue Tebou, Louis Roder, Ph.D. (University of Metz, France), Professor, Mathematics and Statistics
Telan, Paige, Ph.D. (Florida International University), Senior Lecturer, Psychology
Terenzi, Fiorella, M.S. (Universita' degli Studi, Milan, Italy), Instructor, Physics
Theobald, Jamie C., Ph.D. (University of Washington), Assistant Professor, Biological Sciences
Thirunarayanan, M.O., Ph.D. (Arizona State University), Associate Professor, Learning Technologies, Teaching and Learning
Thominet, Luke, Ph.D. (Wayne State University), Assistant Professor, English
Thompson, Ellen, Ph.D. (University of Maryland), Associate Professor, English
Tracey, Martin L., Ph.D. (Brown University), Professor, Biological Sciences
Trexler, Joel C., Ph.D. (Florida State University), Professor, Biological Sciences and Director, Marine Science Program
Troxel, Tiffany, Ph.D. (Florida International University), Director, Sea Level Solutions Center
Trucco, Elisa M., Ph.D. (State University of New York at Buffalo), Assistant Professor, Psychology
Tsalikis, Maria, Ed.D. (Florida International University), Senior Instructor, Literacy Education, Teaching and Learning
Tse-Dinh, Yuk-Ching, Ph.D. (Harvard University), Professor, Chemistry and Biochemistry and Director, Biomolecular Sciences Institute
Underwood, Sonia M., Ph.D. (Clemson University), Assistant Professor
Van Hamme, Walter V., Ph.D. (University of Ghent, Belgium), Professor, Physics and Interim Executive Director, School of Integrated Science and Humanity
Villamor, Enrique, Ph.D. (Washington University), Professor, Mathematics and Statistics
Villodas, Miguel T., Ph.D. (San Diego State University), Assistant Professor, Psychology
Viswesvaran, Chockalingam, Ph.D. (University of Iowa), Professor, Psychology
Vos, Robert, Ed.D. (Rutgers University), Associate Professor Emeritus, Learning Technologies, Teaching and Learning
Wade, Julie M., Ph.D. (University of Louisville), Assistant Professor, English
Walter, Maureen S., M.S. (Florida International University), Senior Instructor, Biological Sciences
Wang, Wei, Ph.D. (Brown University), Assistant Professor, Mathematics and Statistics
Wang, Xiaotang, Ph.D. (University of lowa), Associate Professor, Chemistry and Biochemistry
Wang, Xuewen, Ph.D. (Iowa State University), Associate Professor, Physics
Wang, Zhongming, Ph.D. (Iowa State University), Assistant Professor, Mathematics and Statistics

Warren, Paul R., Ph.D. (University of WisconsinMadison), Associate Professor and Chairperson, Philosophy
Wartzok, Douglas, Ph.D. (The Johns Hopkins University), Professor, Biological Sciences
Watson, Donald, Ph.D. (University of Virginia), Professor Emeritus, English
Webb, James R., Ph.D. (University of Florida), Professor, Physics
Weeks, Ophelia I., Ph.D. (Howard University), Professor, Biological Sciences
Weir, Donna M., Ph.D. (University of California-Berkeley), Associate Professor, English
Weitz, Barbara S., M.S. (Florida International University), Instructor, English
Wells, Jeffrey D., Ph.D. (University of Illinois at Chicago), Associate Professor, Biological Sciences
Whiddon-Willoughby, Melody, Ph.D. (Florida International University), Clinical Assistant Professor, Educational Psychology, Leadership and Professional Studies
Whitman, Dean, Ph.D. (Cornell University), Associate Professor, Earth and Environment
Wick, Shelley, Ph.D. (Florida International University), Instructor, English
Wicks, Cayce, M.A. (Florida International University), Instructor, English
Winkle, Stephen A., Ph.D. (University of CaliforniaBerkeley), Associate Professor, Chemistry and Biochemistry
Winter, Ryan J., Ph.D. (City University of New YorkGraduate Center), Instructor, Psychology
Wlodarczyk, Anna, M.S. (Rutgers University), Senior Instructor, Mathematics and Statistics
Wnuk, Stanislaw F., Ph.D. (Adam Michiewicz University, Poland), Professor, Chemistry and Biochemistry and Associate Dean, Robert Stempel College of Public Health and Social Work
Wolff, Robert M., Ph.D. (Ohio State University), Professor Emeritus, Recreation and Sport Management, Leadership and Professional Studies
Wu, Wensong, Ph.D. (University of South Carolina), Assistant Professor, Mathematics and Statistics
Xerohemona, Kiriake K., Ph.D. (University of Miami), Senior Lecturer, Philosophy
Xiao, Yi, Ph.D. (Nanjing University, China), Assistant Professor, Chemistry and Biochemistry
Yang, Yi Zhi, M.S. (Florida International University), Senior Instructor, Mathematics and Statistics
Yavas, Feryal, Ph.D. (University of Kansas), Senior Lecturer, English
Yavas, Mehmet S., Ph.D. (University of Kansas), Professor, English
Yi, Chit Yuen, Ph.D. (West Virginia University), Instructor, Psychology
Yribarren, Lynn, Ed.D. (Florida International University), Senior Instructor, Literacy Education, Teaching and Learning
Zahedi-Jasbi, Hassan, Ph.D. (University of CaliforniaRiverside), Associate Professor, Mathematics and Statistics
Zhang, Keqi, Ph.D. (University of Maryland), Professor, Earth and Environment and International Hurricane Center
Zhang, Yuying, Ph.D. (University of Maine), Assistant Professor, Biological Sciences

Zhu, Ping, Ph.D. (University of Miami), Associate Professor, Earth and Environment and International Hurricane Center
Zhu, Yifu, Ph.D. (University of Virginia), Professor, Physics
Zuniga, Noel E., Ph.D. (University of Paris XI-Orsay), Lecturer, Mathematics and Statistics
Zweibel, John A., Ph.D. (Columbia University),
Associate Professor, Mathematics and Statistics

# College of Business <br> Alvah H. Chapman, Jr., Graduate School of Business 

Acting Dean<br>Senior Associate Dean

Associate Dean, Chapman Graduate School
Associate Dean, International Program
Walfried Lassar
Assistant Dean for Undergraduate Affairs
Executive Director, Development
Executive Director, Operations and Strategic Initiatives
Executive Director, Executive and Professional MBA Programs
Director, Undergraduate Advising
Director, School of Accounting
Director, Ph.D. Programs
Director, Jerome Bain Real Estate
Institute and the Tibor and Sheila Hollo
School of Real Estate
William Hardin Luisa Perez
Director, Marketing and Communication

Jose Aldrich

Ruth Ann McEwen

Sumit Kundu Richard Klein
Sergio Tigera
Sara Lipman
Angel Burgos
Kelly G. Ferguson Ruth Ann McEwen Ruth Ann McEwen

Interim Director, Career Management
Services John Nykolaiszyn
Department Chairs:

| Finance | Shahid Hamid |
| :--- | ---: |
| Information Systems and Business |  |
| Analytics |  |
| Management and International |  |
| Business William Newburry <br> Marketing Anthony Miyazaki |  |

## Mission Statement

The Chapman Graduate School in the College of Business exists to create enduring educational value for our students, for our alumni, and for the business, professional, and academic communities we serve.
For our students-whom we prepare to succeed in a rapidly changing, technology-driven global business environment;
For our alumni-to whom we provide opportunities for continuing professional development and a legacy that appreciates as our excellence grows;
For the business and professional communities-to whom we offer knowledgeable graduates, educational programs, research, and collaborative projects; For the academic community-to whom we bring new knowledge through high-quality research and the development of future scholars.

The Alvah H. Chapman Jr., Graduate Business School is a school distinguished among urban public business schools as a center for global business education, technology, and research. Our most noteworthy teaching and research expertise lies in the business arenas linking South Florida, Latin America, and the world economy.

The College itself offers undergraduate, graduate, professional education, customized training, and executive education programs to enterprises around the world. While continuing to meet the needs of students in the South Florida community, we are intensifying our educational
service delivery to international students and enterprises, especially those in Latin America.

In all of our programs, we strive to instill in students a profound understanding of the changing nature of international business in an integrated and digital global economy. We ensure they are well versed in the impact information technology is having on how enterprises are organized and managed and on how products and services are created and marketed. We provide them with a solid grasp of business processes, the ability to think critically and to solve problems ethically, and the sense to conduct themselves with integrity and within the context of social and environmental responsibility. We foster their commitment to life-long learning in a dynamic, complex, and competitive world.

Our faculty engage in basic and applied research and in instructional development to contribute not only to the general knowledge base in the field of business but also to the ways in which this knowledge is created and shared. The College boasts a state-of-the-art information technology infrastructure that enables us to provide leading edge instruction and research, including online course delivery. At the same time, our IT investment supports our ongoing curricular innovation in related fields like enterprise-wide computing and logistics.

## Organization

The College is organized into the Alvah H. Chapman, Jr., Graduate School of Business, the School of Accounting, the Tibor and Sheila Hollo School of Real Estate, and the Departments of Finance, Information Systems and Business Analytics, Management and International Business, and Marketing.

The College also houses several centers of excellence dedicated to teaching, research, and service. These include the Jerome Bain Real Estate Institute, the Ryder Center for Supply Chain Systems, the Knight Ridder Center for Excellence in Management, the Office of Professional Education, the Office of Executive and Professional Education, and the Global Center for Entrepreneurship and Innovation.

## Graduate Programs

Through its Chapman Graduate School, the College of Business offers academic programs leading to the degrees of Doctor of Philosophy in Business Administration (PhD), Master of Business Administration (MBA), Master of International Business (MIB), Master of Accounting (MACC), Master of Science in Finance (MSF), Master of Science in International Real Estate (MSIRE), Master of Science in Information Systems (MSIS), Master of Science in Health Informatics and Analytics (MSHIA), Master of Science in Human Resource Management (MSHRM), and Master of Science in Marketing (MSM). In addition, the school offers programs leading to a Certificate in Healthcare Management.

## Ph.D. Program

The Chapman School offers a Ph.D. in Business Administration. The objective of this degree program is to prepare students for a career in academia by building their understanding of the substantive domains and literature within their selected areas of concentration. It provides them with the methodological and analytical tools required
for executing research and creating knowledge. It develops their skills in formulating, conducting, and communicating quality research. In the process, it also fosters their ability to teach effectively.

The Ph.D. program typically requires a minimum of four years of full-time study. The first two years involve coursework and summer projects. The remaining two years focus on completion of a dissertation. Students will take a minimum of 16 courses (with a minimum of six courses in their chosen area of concentration). Students also will complete summer research projects under faculty supervision.

## Areas of Concentration

Accounting, Management Information Systems, Marketing, Finance, and Management, which includes the sub-areas:

- Strategic Management
- Entrepreneurship
- International Business and International Management
- Human Resource Management
- Organizational Behavior
- Hospitality Management


## Ph.D. Admission Requirements

All qualified students are encouraged to apply to the program, regardless of their sex, age, race, color, creed, handicap, marital status, or national or ethnic origin. Applications are accepted from prospective students with a broad variety of educational backgrounds, including areas like business, liberal arts, and the sciences. Those students selected for the Ph.D. program must demonstrate strong evidence of ability, scholarly interest, and success.

Applicants should submit the following:

1. A completed application form and processing fee.
2. Three letters of recommendation.
3. Official transcripts from all institutions in which the applicant has completed any undergraduate and graduate course work.
4. All applicants are required to have taken either the GMAT or GRE within five years of their application. A GMAT score (or its GRE equivalent) of 600 or higher and a 3.0 GPA or better in post-secondary education is desired, although some applicants falling short of these desired scores and grades have been accepted into our program. Those with GMAT score below 500 or its GRE equivalent score will NOT be considered for admission. For more information about how to covert a GRE score into its GMAT equivalent, go to: http://www.ets.org/gre/comparison.
5. A formal statement of purpose for seeking the doctoral degree and specific reasons for applying to Florida International University.
6. A curriculum vitae.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Such applicants also should review the "General Admission Requirements for Foreign Students" in the "Admission" section of this catalog.

The College admits a new class of doctoral students every year during the Fall semester.

Complete applications must be received by January 15. Acceptance decisions for fall admission are typically made not later than April.

Applicants are considered once all the required documents have been received.

## Degree Requirements

General degree requirements for all candidates for a Ph.D. in Business Administration include:

1. Successful completion of all required coursework.
2. Successful completion of a comprehensive examination at the end of this coursework.
3. Successful completion of a doctoral dissertation.

## Financial Aid

Applicants to the doctoral program may request financial aid by completing the appropriate form. Stipends requiring a mixture of research and teaching are also available. These stipends may include both a cash award and a tuition waiver, depending upon the applicant's qualifications. If you wish to apply for a stipend include this request with your application documents.
Note: The programs, policies, requirements, and regulations listed in this catalog are subject to continual review in order to meet the needs of the University's various publics and to respond to the mandates of the State Board of Education and the Florida Legislature. Changes may be made without advance notice. Please refer to the "General Information" section of this catalog for the University's policies, requirements, and regulations.
For more information please refer to our website: http://business.fiu.edu or call (305) 348-1746.

## Master's Degree Programs

The Chapman Graduate School of Business aims to provide a high quality graduate educational experience rooted in our Miami location and focused on the unique requirements for doing business in a global and interconnected market.

## Application Procedures

To apply for admission to graduate study in the Chapman Graduate School, prospective students must:

1. Submit a Graduate Application for Admission to the Graduate Admissions Office. The application form can be accessed online at (http://gradschool.fiu.edul). The admission process may take as long as two months after the University receives a student's application, depending upon the time involved in obtaining transcripts and test scores. Students are encouraged to apply early.
2. Have a copy of the official transcripts of all previously earned college or university credits sent from the formerly attended institution(s) to the Chapman's Graduate Admissions Office. Copies submitted directly by student applicants will not be accepted.
3. Submit scores, if applicable, on the Graduate Management Admissions Test (GMAT) or Graduate Record Examination (GRE), administered by the Educational Testing Service (ETS), Box 966, Princeton, New Jersey 08540. Scores must be submitted by the ETS. Registration forms will be mailed upon request. Have the ETS submit TOEFL scores as well, if applicable. For additional
requirements, consult individual program offices listed below.

## Transfer Credit

A student may receive permission to transfer up to a maximum of six semester hours of graduate credit towards his/her degree program, if:

1. The courses were taken at the graduate level at an accredited college or university;
2. The courses were not introductory or survey in nature;
3. The student earned grades of " B " or higher in the courses;
4. The courses are judged by the Department Chair, College Dean, Graduate School Dean, and program manager to be relevant to the student's graduate program;
5. The credits were not used toward another degree; and
6. The credits were completed within six years immediately preceding the College's awarding of the degree. Credits are not transferable until the student has earned 15 semester hours in a Chapman School graduate degree program.

## Degree Requirements

To be eligible for a Master's degree, a student must:

1. Satisfy all University requirements for a Master's degree;
2. Satisfy required prerequisites;
3. Meet the requirements of his or her graduate "Course of Study." This "Course of Study" is developed by the student and his or her graduate advisor or degree program director following his or her admission to a program and is approved by the appropriate Department Chair, Academic Advisor, or Program Director.
4. Complete the required courses in the specific graduate program in which he/she is enrolled.
5. Earn a minimum average of "B" (3.0) in all approved courses in the student's approved course of graduate study.

No courses in which a graduate student earns a grade below "C" may be counted towards any Master's degree program in the Chapman School. However, all approved undergraduate and graduate course work a graduate student takes will be counted in computing his or her grade point average, including courses in which he or she has earned a "D" or "F" grade. To improve a grade, please refer to the University Forgiveness Policy under General Information.

Faculty have the discretion to administratively drop students who do not attend the first class of a course.

## Time Limit

All work applicable to a Master's degree, including transfer credit, must be completed within six years immediately preceding the awarding of the degree.

## Study Abroad Programs

Graduate students in the College may earn a maximum of three (3) credit-hours for study abroad programs unless otherwise prescribed by their degree program.

## Dual Degree Programs

The Chapman School has developed a series of dual degree programs with universities in Asia, Europe, and Latin America whereby partial credit is given by both institutions for academic work carried out in each respective program. This leads to the possibility of obtaining two Masters degrees, one from each partner institution, in less time and with fewer credits than if the two degree programs were taken sequentially.

## Joint Degree Programs

Approval has been obtained for students in one of the Chapman School's Masters programs to qualify for a joint degree program with other Chapman School programs (e.g., MBA and MS in Finance) as well as with other university graduate programs (e.g., Joint MBA-JD program). See below for more information.

## Scholarships

The Chapman Graduate School of Business has set aside funds from operations and donations to the School to support a limited program of scholarships destined to cover tuition and fees for our International MBA, Master of International Business, and other value-added Master's degree programs. These scholarships are limited. Priority will be given to students who are admitted to a program and exhibit extraordinary academic merit in addition to financial hardship. For more information, interested students and candidates should contact the respective Program Manager.

## Master of Business Administration (MBA)

The College offers four programs leading to the MBA degree. Each program is designed to meet different student needs. The MBA programs are: the Executive MBA, the Professional MBA, the Flex MBA, and the International MBA.

An overview of each of these programs is provided below. For specific degree requirements in each program, please contact the program office or director.

## Executive Master of Business Administration (EMBA)

The Executive Master of Business Administration (EMBA) degree program is designed for working business professionals at the director level and above. FIU's Executive MBA delivers unique graduate level experiences that broaden executives' horizons and prepares them for new and expanding responsibilities.

The curriculum includes 4 eight-hour interdisciplinary courses that synthesize concepts and techniques from a variety of business disciplines to address a variety of complex and ambiguous issues senior manages typically face. It is a rigorous hands-on program where we focus on:

- application rather than theory,
- learning by doing rather than lecturing, and
- critical thinking in addition to quantitative analysis.

It is a distinctive program for a select number of qualified students who see their "body-of-work" as unfinished.

Program participants earn their MBA degree without interrupting their careers. Structured so that all requirements can be completed in eighteen months, the program is offered on Saturdays at the FIU complex at 1101 Brickell in the heart of Miami's financial district. The EMBA program incorporates these unique features:

- An interdisciplinary curriculum specifically designed for executives and strategic decision-making
- Leadership \& Innovation Project teams focus curriculum in each semester on application not theory
- Class meetings every other Saturday focus on discussions not lectures
- Small class of 25 +/- of nominated candidates provides opportunity to learn from a diverse and highly select group of peers
- Access to a professional executive coach
- Interact with top notch experienced faculty and international business executives
- International Research that includes a one-week residency abroad
- Professional staff provides logistical support that caters to the needs of participating executives


## Admission Requirements

The Executive Master of Business Administration (EMBA) program considers students' work experience, industry knowledge and management skills as strengths in a candidate's qualifying portfolio. Candidate's professional maturity and managerial experience are highly considered in the admission selection process because the EMBA program at FIU fosters students' ability to contribute realworld experiences to add value to overall student learning in this competitive degree program.

To be eligible for admission to the EMBA program in the Chapman Graduate School of Business, applicants must meet the following qualifications:

1. Hold a bachelor degree or equivalent from either a U.S. regionally accredited college or university or the equivalent degree from institutions outside the U.S. in addition to being in good standing with all previously attended colleges and universities; and
2. Have eight years of demonstrated professional full time work experience, with five of those in management.
Additional Requirements:
3. Resume describing current and past responsibilities, leadership and management experience highlights and, if any, demonstrated accomplishments in the application of quantitative and analytical skills;
4. Statement of purpose (short essay) describing how the program fits within your personal and career goals. The essay will be evaluated for applicants' effective and succinct writing skills;
5. Two letters of recommendation from employers and/or faculty who can attest to applicants' motivation to succeed in EMBA program at FIU; and
6. International graduate student applicants whose studies were completed outside of the U.S. must demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version or 213 on the computer based version of the test of English as a Foreign Language) or 6.5 overall on the

International English Language Testing System (IETLS).
Applicants are encouraged to provide any additional documentation to strengthen their application portfolio. Examples of documentation include: Master's degree in any discipline other than an MBA, law degree, professional certifications (i.e. CPA, CFA, SHRM, etc.), GMAT or GRE scores, specialized leadership experience or training documentation that the applicant is part of a "fast track" or "high potential" management group at their organization, or any other similar evidence.

Candidates with diverse backgrounds are encouraged to apply. While all applications will be evaluated based on a full review of the application portfolio, we desire students with an undergraduate upper division grade point average (GPA) of 3.0.

Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

For additional information about this value-added program, call the EMBA office at (305) 779-7897 or email emba@fiu.edu.

## Degree Requirements

In order to complete the EMBA, students must successfully complete:

- 1 week residency at beginning of program and 1 week residency at end of program,
- 4 eight-credit-hour interdisciplinary courses,
- 4 one-credit-hour leadership courses,
- 3 three-credit-hour experiential courses (International research, Innovation Projects, Corporate Simulation),
- Total of 45 credit hours

The following courses and sequence are required for the EMBA:

## Semester I

GEB 6368 Navigating in a Globalizing World 8
MAN 6891 Leadership Development Seminar I 1

## Semester II

GEB 6529
Creating Economic and Social Value
MAN 6892
Semester III
GEB 6528
MAN 6893
Semester IV
GEB 6896
MAN 6898

## Semester V

MAN 6675
MAN 6057
Special Topics in International Business 3 Managing Innovation
Corporate Simulation
MAR $6816 \quad$ Corporate Simulation 3

## Residencies

- Residency One - Second week in August: Teamwork, Curriculum overview, Leadership, Personal Development, and Innovation Project brainstorming
- Residency Two - Fall Semester of second year: International Research Course and Company visits. Students choose to attend one of the 7-day Business

Innovation in a Global Economy programs, hosted by the 8 universities around the world who are members of our EMBA Consortium on Business Innovation

- Residency Three - last week in March of last semester Intensive interactive Corporate simulation


## Professional Master of Business Administration (PMBA)

Designed for the working professional with a minimum of four years of full time professional work experience, the Professional MBA program offers a fast-paced, intense program in which you can network with your peers and learn from each other in a dynamic environment.
The PMBA program incorporates these unique features:

- Complete the MBA in approximately eighteen months;
- Study in convenient locations : Downtown on Brickell, FIU at I-75, or online;
- Study with, learn from and network with a diverse group of peers in a lock-step program;
- Strengthen leadership, team building and interpersonal skills;
- Enjoy a high level of customer service, catering to the needs of participating professionals;
- Have access to personalized career services.


## Admission Requirements

The Professional Master of Business Administration (PMBA) program considers students' work experience, industry knowledge, management skills and undergraduate education as strengths in candidate's qualifying portfolio. Candidate's professional maturity, and managerial experience are highly considered in the admission selection process because the PMBA program at FIU fosters students' ability to contribute real-world experiences to add value to the overall student learning in this competitive degree program.

To be eligible for admission to the PMBA program in the Chapman Graduate School of Business, applicants must meet the following qualifications:

1. Hold a bachelor degree or equivalent from either a U.S. regionally accredited college or university or the equivalent degree from institutions outside the U.S. in addition to being in good standing with all previously attended colleges and universities; and
2. Have four years of demonstrated professional full time work experience (without GMAT or GRE scores) OR two years of professional full time work experience with GMAT or GRE scores;

Additional Requirements:

1. Resume describing current and past responsibilities, leadership and management experience highlights and, if any, demonstrated accomplishments in the application of quantitative and analytical skills;
2. Statement of purpose (short essay) describing how the program fits within your personal and career goals. The essay will be evaluated for applicants' effective and succinct writing skills;
3. Two letters of recommendation from employers and/or faculty who can attest to applicants' motivation to succeed in PMBA program at FIU; and
4. International graduate student applicants whose studies were completed outside of the U.S. must demonstrate proficiency of the English language by
presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version or 213 on the computer based version of the test of English as a Foreign Language) or 6.5 overall on the International English Language Testing System (IETLS).
Applicants are encouraged to provide any additional documentation to strengthen their application portfolio. Examples of documentation include: master degree in any discipline other than an MBA, law degree, professional certifications (i.e. CPA, CFA, SHRM, etc.), GMAT or GRE scores, specialized leadership experience or training documentation that the applicant is part of a "fast track" or "high potential" management group at their organization, or any other similar evidence.

Candidates with diverse backgrounds are encouraged to apply. While all applications will be evaluated based on a full review of the application portfolio, we desire students with an undergraduate upper division grade point average (GPA) of 3.0 and a GMAT score of 500 or equivalent GRE.

Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

For additional information about this value-added program, please contact the PMBA office at (305) 7797897 or email PMBA@fiu.edu.

## Degree Requirements

In order to complete the PMBA, students must successfully complete 14, three-credit hour courses for a total of 42 credit hours and three Professional Development Seminars.
The following courses are required for the PMBA:
ACG $6026 \quad$ Accounting for Managers
FIN $6446 \quad$ Competitive Strategy
QMB 6357C Business Analysis for Decision Making
MAN 6608 International Business
MAN 6245 Organizational Behavior
or
MAN 6209 Organization Design and Behavior
MAR 6805 Marketing Management in the Global Environment
FIN 6406 Corporate Finance
BUL 6810 Legal Environment of Business
MAN $6830 \quad$ Organizational Information Systems
ACG 6175 Financial Reporting \& Analysis
MAN $6501 \quad$ Operations Management
FIN $6644 \quad$ Global Financial Strategy
MAR $6816 \quad$ Corporate Simulation
MAN 6726 Strategic Management
Professional Development Seminars I, II, and III
Each of the Professional Development Seminars will focus on soft skills such as leadership, team building, oral presentation, writing skills and career exploration.
Seminars will be mandatory, non-credit.

## Professional Master of Business Administration: Healthcare Management Track (PMBA/HM)

Designed for the early to mid-level working professional with a minimum of two years professional work experience, the Professional MBA in Healthcare Management program offers a fast-paced, intense program in which you gain the necessary skills for a management career in various health services organizations.

The PMBA program incorporates these unique features:

- Complete the MBA in approximately eighteen months;
- Study in convenient locations: FIU Downtown on Brickell, FIU at I-75, or online;
- Study with, learn from and network with a diverse group of peers in lock-step program;
- Strengthen critical thinking, leadership, team building and interpersonal skills;
- Enjoy a high level of customer service, catering to the needs of participating professionals;
- Have access to personalized career services;


## Admission Requirements

To be eligible for admission to the Professional MBA Program in the Chapman Graduate School, students must:

1. Hold a Bachelor's degree from an accredited college or university;
2. Have a minimum upper division grade point average (GPA) of 3.0;
3. Demonstrate at least two years of professional work experience;
4. Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version) or 6.5 overall on the International English Language Testing System (IETLS);
5. Provide two letters of recommendation from professional contacts;
6. Provide a personal statement on the motivation to attend the program, including personal and career goals;
7. Be in good standing with all previously-attended colleges and universities.

Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission. For more information about this program, please contact the Healthcare MBA office at (305) 7797900 or visit http://healthcaremba.fiu.edu.

## Degree Requirements

Students must successfully complete 14, three-credit hour courses for a total of 42 credit hours and three non-credit Professional Development Seminars.

The following courses are required for the PMBA/HM:

| BUL 6810 | Legal Environment of Business |
| :--- | :--- |
| MAN 6095 | Management of Healthcare |
| Organizations in the 21 ${ }^{\text {st }}$ Century |  |
| MAN 6501 | Operations Management |
| MAN 6245 | Organizational Behavior |

MAN 6XXX
MAR 6805
MAN 6830
ACG 6026
BUL 6XXX

MAN 6726
FIN 6406
MAN 6XXX
MAN 6974
ACG 6175

Management of Healthcare Finance and Reimbursement
Marketing Management in the Global Environment Organizational Information Systems Accounting for Managers Healthcare Fraud and Abuse Law and Regulation Strategic Management Corporate Finance Managerial Decision-Making in Health Economics Master's Project in Management

Professional Development Seminars I, II, and III
Each of the Professional Development Seminars will focus on soft skills such as leadership, team building, oral presentation, writing skills, health analytics, and career development. There will be team-building activities which include classroom exercises in group decision-making and problem-solving. Challenging outdoor exercises will be included to help participants build the skills they will need to work together in the program and to succeed in today's team-based organizations. Students will also work with a presentation and writing skills coach to improve the communication and writing skills that are critical to managerial success.

Seminars will be mandatory, non-credit.

## Professional Development Seminar I

Team Building, writing and oral presentation skills,
excel, leadership, and innovation
Professional Development Seminar II
Presentation Skills, accounting boot camp, quantitative
boot camp, lean enterprise training and certification
Professional Development Seminar III
Lean enterprise training and certification

## Professional Master of Business Administration: Jamaica for Executives

## Program Features:

- Completed in twenty months
- Classes offered on Sundays in Kingston, Jamaica
- Lock-step


## Admission Requirements

To be eligible for admission to the Professional MBA Program in the Chapman Graduate School, students must:

1. Hold a Bachelor's degree from an accredited college or university;
2. Have a minimum upper division grade point average (GPA) of 3.0;
3. Demonstrate at least four years of professional work experience;
4. Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version) or 6.5 overall on the International English Language Testing System (IETLS);
5. Provide two letters of recommendation from professional contacts;
6. Provide a personal statement on the motivation to attend the program, including personal and career goals;
7. Be in good standing with all previously-attended colleges and universities.
Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

## Degree Requirements

In order to complete the PMBA, students must successfully complete 14 , three-credit hour courses for a total of 42 credit hours and the International Trip.

The following courses are required for the PMBA:

## Core

ACG 6026 Accounting for Managers
ACG 6175 Financial Reporting and Analysis
BUL 6810 Legal Environment of Business
FIN $6406 \quad$ Corporate Finance
FIN 6644 Global Financial Strategy
MAN 6057
MAN 6245 Organizational Behavior
MAN 6501 Operations Management
MAN 6608
MAN 6726
MAN 6830 Organization Information Systems
MAR $6805 \quad$ Marketing Management in the Global Environment
MAR $6816 \quad$ Corporate Simulation
QMB 6357C Business Analysis for Decision Making
International Trip to Miami, FL

## Flexible Master of Business Administration (Flex-MBA)

We have designed the Flex-MBA for those just entering the work force with an undergraduate major other than business as well as those with less than four years of professional work experience. This is a fast-paced and intense program where you will network with your peers and learn from each other in a professional environment. The Flex-MBA program incorporates the following unique and flexible features:

- Have the option of taking two or four courses a semester.
- Program is offered in three formats, in-person class sessions, blended-learning format, and a fully-online format (Corporate MBA).
- For in-person and blended two required elective courses allow you to graduate with a specialization in International Business, Leadership \& Entrepreneurship, Marketing, Real Estate Management, Finance, or other areas. For fully online two required elective courses allow you to graduate with a specialization in International Business, Finance, or Human Resources.
- For in-person and blended you can select two additional elective courses during the duration of the program and earn a concentration in International Business, Leadership \& Entrepreneurship, Marketing, Real Estate Management, Finance, or other areas, which is reported
on your permanent transcript record. For fully online you can select two additional elective courses during the duration of the program and earn a concentration in International Business, Finance, or Human Resources.
- Study with, learn from, and network with a diverse group of peers in a program that the offers all required courses in the prescribed sequence.
- Strengthen leadership, team building and interpersonal skills.
- Have access to personalized career services


## Admission Requirements

The Flex Master of Business Administration (Flex-MBA) program considers students' work experience, industry knowledge, management skills and undergraduate education as strengths in candidate's qualifying portfolio. Candidate's professional maturity, and managerial experience are highly considered in the admission selection process because the Flex-MBA program at FIU fosters students' ability to contribute real-world experiences to add value to the overall student learning in this competitive degree program.

To be eligible for admission to the Flex-MBA program in the Chapman Graduate School of Business, applicants must meet the following qualifications:

1. Hold a bachelor degree or equivalent from either a U.S. regionally accredited college or university or the equivalent degree from institutions outside the U.S. in addition to being in good standing with all previously attended colleges and universities; and
2. Have four years of demonstrated professional full time work experience (without GMAT or GRE scores) OR two years of professional full time work experience with GMAT or GRE scores;
Additional Requirements:
3. Resume describing current and past responsibilities, leadership and management experience highlights and, if any, demonstrated accomplishments in the application of quantitative and analytical skills;
4. Statement of purpose (short essay) describing how the program fits within your personal and career goals. The essay will be evaluated for applicants' effective and succinct writing skills;
5. Two letters of recommendation from employers and/or faculty who can attest to applicants' motivation to succeed in Flex-MBA program at FIU; and
6. International graduate student applicants whose studies were completed outside of the U.S. must demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version or 213 on the computer based version of the test of English as a Foreign Language) or 6.5 overall on the International English Language Testing System (IETLS).

Applicants are encouraged to provide any additional documentation to strengthen their application portfolio. Examples of documentation include: master degree in any discipline other than an MBA, law degree, professional certifications (i.e. CPA, CFA, SHRM, etc.), GMAT or GRE scores, specialized leadership experience or training documentation that the applicant is part of a "fast track" or "high potential" management group at their organization, or any other similar evidence.

Candidates with diverse backgrounds are encouraged to apply. While all applications will be evaluated based on a full review of the application portfolio, it is desirable that candidates have an upper division grade point average (GPA) of 3.0 and a GMAT score of 500 or equivalent GRE.

Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

For additional information about this value-added program, call the Flex-MBA office at (305) 779-7897 or email pmba@fiu.edu.

## Degree Requirements

In order to complete the Flex-MBA, students must successfully complete 14, three-credit hour courses for a total of 42 credit hours and three Professional Development Seminars.

The following courses are required for the PMBA:

| QMB 6357 | Quantitative Analysis |
| :--- | :--- |
| MAN 6245 | Organizational Behavior |
| ACG 6026 | Accounting for Managers |
| FIN 6446 | Competitive Strategy |
| FIN 6406 | Corporate Finance |
| MAR 6805 | Marketing Management in the Global |
|  | Environment |
| ACG 6175 | Financial Reporting \& Analysis |
| MAN 6830 | Organizational Information Systems |
| MAN 6726 | Strategic Management |
| MAN 6501 | Operations Management |
| BUL 6810 | Legal Environment of Business |
| MAR 6816 | Corporate Simulation |
| Elective (in specialization area) |  |
| Elective (in specialization area) |  |
| Professional Development Seminars I, II, and III |  |

Each of the Professional Development Seminars will focus on soft skills such as leadership, team building, oral presentation, writing skills and career exploration.
Seminars will be mandatory, non-credit.

## International Master of Business Administration (IMBA)

The IMBA (International MBA) degree program features an MBA curriculum with an international business focus. This value-added program has been especially designed for students and professionals interested in pursuing a career in international business. For students from outside the U.S., it represents an opportunity for them to prepare for executive positions in the U.S. as well as in other parts of the world. For students in the U.S. who would like to pursue business leadership in international businesses, it provides an integrated perspective of international business issues and the knowledge they need to succeed in a rapidly evolving, global economy.

Given the Chapman School's Miami location and expertise in Latin American and Caribbean business, the program is particularly valuable for those who want to secure executive positions in the Americas.
The IMBA program incorporates these unique features:

- An MBA curriculum that can be completed in 12 months;
- Day-time classes five days per week;
- Global and multicultural perspective throughout;
- Language classes in Spanish, Portuguese, Mandarin Chinese, and Advanced Business English for nonnative speakers;
- Have access to personalized career services;
- Opportunity to participate in study abroad programs and attend;
- Professional development seminars focused on leadership, team-building skills, oral and written presentation skills, and career preparation.


## Admission Requirements

To be eligible for admission to the International MBA Program in the Chapman Graduate School, students must:

1. Hold a Bachelor's degree from an accredited college or university;
2. Show high promise of success in graduate studies as determined by the faculty based upon a minimum score of 500 on the Graduate Management Admission Test (GMAT) or submits official Graduate Record Exam (GRE) scores. If the applicant has already completed a graduate degree from an accredited university with a minimum grade point average (GPA) of 3.0 , or is entering a business master's program under a special agreement for admissions with specific foreign universities, he or she would be eligible for a GMAT or GRE waiver at the discretion of the faculty director;
3. Have a minimum upper division grade point average (GPA) of 3.0 ;
4. Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version) or 6.5 overall on the International English Language Testing System (IETLS);
5. Be in good standing with all previously-attended colleges and universities.
Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

Students may also be eligible to pursue joint degree programs with the Master of Science in Finance (MBA/MSF), the Master of Science in Information Systems (MBA/MSIS), the Master of International Business (MBA/MIB), the Master of Science in Human Resource Management (MBA/MSHRM), the Master of Science in International Real Estate (MBA/MSIRE), the College of Law (MBA/JD), and the Master of Arts in Latin American and Caribbean Studies (MBA/MALACS).

For more detailed information about the IMBA program, please contact the program manager at (305) 348-6880 or by email imba@fiu.edu.

## Degree Requirements

In order to complete the IMBA, students must successfully complete 14, three-credit hour courses; 1, one-credit hour course, Colloquium in Managing Organizational Ethics; three Professional Development Seminars; and two, threecredit hour electives for a total of 49 credit hours.
The following courses are required for the IMBA:

## Core

QMB 6357C Business Analysis for Decision Making

ACG 6026
MAN 6608
MAN 6830
MAN 6245
FIN 6406
MAN 6974
MAN 6703
MAN 6501
MAR 6805

BUL 6810
ACG 6175
FIN 6644
MAN 6726
MAR 6816
ENT 6116
MAN 6601
IMBA Elective

## Electives

MAN 6930
GEB 6941C Graduate Internship

Any course offered in the Summer term in any of the business disciplines.
Each of the Professional Development Seminars will focus on soft skills such as leadership, team building, oral presentation, writing skills and career exploration. There will be team-building activities which include classroom exercises in group decision-making and problem-solving. Challenging outdoor exercises will be included to help participants build the skills they will need to work together in the program and to succeed in today's team-based organizations. Students will also work with a presentation and writing skills coach to improve the communication and writing skills that are critical to managerial success.
Seminars will be mandatory, non-credit.
Professional Development Seminar I
Team Building - Ropes Course
Career Development
Leadership

## Professional Development Seminar II

Presentation Skills
Professional Development Seminar III Writing Skills

## Global MBA Programs

The Chapman Graduate School also offers the Professional MBA for Jamaican and Executives program in Jamaica (PMBA) and Professional MBA programs (PMBA) in Panama and the Dominican Republic. Curriculum and admission requirements are identical to those of the PMBA respectively. For more information about these programs, please contact the Program Manager at (305) 348-3468.

## Master of International Business (MIB)

The MIB program is a specialized degree focused on the key skills, behaviors and techniques required for students to succeed in the international marketplace. Although
global in nature, it emphasizes the knowledge and abilities that are specific to doing business in The Americas. It is aimed at people who already possess a significant business background (academic and/or practical), and who wish to deepen their understanding of international business practices and opportunities.

MIB students also benefit from studying in South Florida, particularly since Miami is a major center for international trade and finance and a gateway linking the Americas to the world. The MIB faculty is adept at blending theoretical understanding with practical application. A variety of teaching/learning approachesincluding case studies, lectures, team projects and presentations, executive guest lectures, and simulationskeep classes relevant and interesting. The global character of the MIB program is inherent in its curriculum and in the diverse nationalities of the students enrolled in it. Because of the diversity of our student body, students continually share and learn from their multinational perspectives and experiences. In addition to the international business expertise of its faculty, the program features lectures and seminars by multinational, foreign, and U.S.-based corporate business leaders.
Its key features include:

- The only international degree in the College of Business (COB) in which participants are required to have a business background;
- Choose to study in one of two formats - at the Modesto Maidique Campus or online.
- Emphasis on the global aspect of business;
- Participation in seminars, conferences and field trips conducted by the Knight Ridder Center for Excellence in Management, and the Global Entrepreneurship Center;
- Possibility of earning a second (MBA) degree at one of our partner institutions;
- Participation in a series of workshops focused on leadership, interpersonal and communication skills;
- A high level of personal service and support;
- Have access to personalized career services.


## Admission Requirements

The Master of International Business (MIB) program considers students' work experience, industry knowledge, management skills and undergraduate education as strengths in candidate's qualifying portfolio. Candidate's professional maturity, and managerial experience are highly considered in the admission selection process because the MIB program at FIU fosters students' ability to contribute real-world experiences to add value to the overall student learning in this competitive degree program.

To be eligible for admission to the MIB program in the Chapman Graduate School of Business, applicants must meet the following qualifications:

1. Hold a bachelor degree or equivalent in Business Administration or related area (e.g. Marketing, Finance, and International Business) or equivalent degree from either a U.S. regionally accredited college or university or the equivalent degree from institutions outside the U.S. in addition to being in good standing with all previously attended colleges and universities; and
2. Show high promise of success in graduate work based on the Graduate Management Admission Test (GMAT) or demonstrate at least four years of professional full time work experience. Applicants providing GRE scores will be considered on an individual basis. If the applicant already completed a graduate degree from a regionally accredited university with a 3.0 grade point average (GPA), or is entering a business master's program under a special agreement for admissions with specific foreign universities, he or she would be eligible for a GMAT or GRE waiver at the discretion of the faculty director.
Additional Requirements:
3. Resume describing current and past responsibilities, leadership and management experience highlights and, if any, demonstrated accomplishments in the application of quantitative and analytical skills;
4. Statement of purpose (short essay) describing how the program fits within your personal and career goals. The essay will be evaluated for applicants' effective and succinct writing skills;
5. Two letters of recommendation from employers and/or faculty who can attest to applicants' motivation to succeed in MIB program at FIU; and
6. International graduate student applicants whose studies were completed outside of the U.S. must demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version or 213 on the computer based version of the test of English as a Foreign Language) or 6.5 overall on the International English Language Testing System (IETLS).
Applicants are encouraged to provide any additional documentation to strengthen their application portfolio. Examples of documentation include: master degree in any discipline other than an MBA, law degree, professional certifications (i.e. CPA, CFA, SHRM, etc.), GMAT or GRE scores, specialized leadership experience or training documentation that the applicant is part of a "fast track" or "high potential" management group at their organization, or any other similar evidence.

Candidates with diverse backgrounds are encouraged to apply. While all applications will be evaluated based on a full review of the application portfolio, we desire students with an undergraduate upper division grade point average (GPA) of 3.0 and a GMAT score of 500 or equivalent GRE.

Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

For additional information about the MIB program please contact the program manager at (305) 348-3279 or by email to mib@fiu.edu.

## Degree Requirements

In order to complete the MIB, students must successfully complete 11, three-credit hour courses and 1, three-credit hour elective for a total of 36 credit hours.

The following courses are required for the MIB:
MAN 6930
Master's Seminar in Management
MAN 6606 International Business Environment
ACG 6206

FIN 6644
MAN 6617
MAR 6158
BUL 6850
MAN 6635
MAN 6679
MAN 6601
GEB 6941C
MAN 6678
MAN 6675
MAN 6758
MAN 6446
ISM 6316

MAN 6167 Leadership in a Global Environment
Elective (must be international content and approved by academic department)

## Dual-Degree Students

Students from our international partner schools have the opportunity to earn a dual degree: an MBA from their home institutions and an MIB from Florida International University. Students in this program complete one year towards their MBA degree at their home institutions, and then attend the MIB program during their second year to complete both degrees. Students in the program also have the opportunity to remain in the U.S. for an additional twelve months under the Optional Training Program.
For more information about this program, please contact the program manager at mib@fiu.edu.

## Other Master's Program

The Chapman School offers a variety of Master of Science and professional master's degree programs: Master of Accounting, Executive Master of Science in Taxation, Master of Science in Finance, Master of Science in International Real Estate, Master of Science in Information Systems, and Master of Science in Human Resource Management. These programs are described in the respective departmental pages of this catalog or at: http://business.fiu.edu.

## Master of Accounting/Master of Business Administration Joint Degree Program

The School of Accounting and the IMBA program in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University offer a joint degree program culminating in both a Master of Accounting (MACC) and a Master of Business Administration. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree.
3. Domestic undergraduate non-accounting degree holders; and international degree holders, regardless of major, will take the following courses, for a saving of 15 credits:

- 34 credits at the 6000 -level from the IMBA
- 15 credits at the 5000 -level from the MACC
- 30 credits at the 6000 -level from the MACC

4. Domestic undergraduate accounting degree holders from AACSB accredited universities, may petition to waive the 5000-level MACC courses, for a saving of an additional 15 credits.
5. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. Directors of the MACC and MBA degree programs may adjust these exact course requirements as a result of future changes to the MACC or MBA curriculums.
6. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.

## Master of Business

Administration/Master of Arts in Latin American and Caribbean Studies Joint Degree Program
The Alvah H. Chapman Jr. Graduate School of Business and the Latin American and Caribbean Center at Florida International University have approved a joint degree program culminating in both a Master of Business Administration degree (MBA), awarded by the College of Business, and a Master of Arts in Latin American and Caribbean Studies degree (MALACS), administered by the Latin American and Caribbean Center (LACC) for the College of Arts and Sciences. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. Essential criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. Business Administration students must apply and be admitted by no later than the semester in which they are expected to complete 18 pre-core and core credit hours in the MBA program. MALACS students must apply and be admitted by no later than the semester in which they are expected to complete 18 credit hours in that program.
3. Candidates must satisfy all requirements for each degree. Twelve (12) credit hours from the MBA curriculum pre-core and core requirements may count toward the MALACS degree to satisfy MALACS concentration requirements. Nine (9) credit hours from the MALACS course offerings may be applied to satisfy MBA elective requirements. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MALACS courses transferred to meet MBA elective credit must be 6000 or 7000 level courses approved by the

University Curriculum Committee and be from the approved MALACS course list in the social science disciplines of anthropology, economics, environmental studies, history, international relations, Latin American and Caribbean Studies (interdisciplinary), political science, or sociology. The Dean of the Chapman Graduate School of Business (or his/her delegate) has final authority on the approval of which courses may be transferred to meet MBA elective requirements.
4. Based on existing MBA and MALACS curriculums, specifics on the transfer of credits include the following. Participants in the joint degree program will obtain a MALACS concentration in International Business. Four MBA pre-core or core courses (12 credits) may be transferred to meet the student's MALACS concentration requirements. Students who have not taken MAN 6910 Research Methods in Management as an MBA elective course will be required to take a MALACS-approved social science research methods course as one of their first MALACS courses. With the 12 credit transfer from the MBA program, to obtain the MALACS degree, the student will be required to take the MALACS gateway interdisciplinary course LAS 6003 Survey of Latin America and the Caribbean ( 3 credits), the MALACS required data analysis course LAS 6930 Latin American and Caribbean Data Analysis (3 credits), one additional course in the MALACS concentration of International Business (the social science research methods course may meet this requirement) (3 credits), three additional courses in at least two MALACS concentrations other than International Business ( 9 credits), and a MALACS graduation exit option ( 6 credits), for a total of 24 MALACS credits. Candidates for the MALACS degree must also meet MALACS language proficiency requirements. With the 9 credit transfer from the MALACS program, to obtain the MBA degree, the student will be required to take all MBA pre-core, core, and professional development seminar courses, plus one MBA elective, for a total of 46 MBA credits. Directors of the MBA and MALACS degree programs may adjust the exact course numbers and titles required for degree completion as a result of future changes to the MBA or MALACS curriculums.
5. If the joint degree candidate chooses the thesis exit option for the MALACS degree, the thesis must address a Latin American or Caribbean business or management issue. The thesis committee must be chaired by a College of Arts and Sciences faculty member. Furthermore, the thesis committee must have at least one member from both the College of Business and College of Arts and Sciences. Thesis committee co-chairs with faculty members from both colleges are recommended. Candidates selecting a MALACS exit option other than the thesis must follow the procedures established by the MALACS program. MALACS will establish the necessary thesis, internship, independent study, or directed research course numbers to allow Graduate School of Business faculty to participate in MALACS exit options for joint degree students.
6. Candidates accepted to the joint degree program may begin their studies in either program first. All candidates must register for classes during the
regular registration period for the respective program. Additionally, joint degree students must register for a course or courses in their second degree no later than the semester commencing the second half of their first degree program.
7. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate. Subject to prior approval, graduate students are normally allowed six (6) credit hours from graduate level courses offered by other units of the University as counting toward single degrees.
8. Candidates in the joint degree program will be eligible for the graduate teaching assistantships, graduate research assistantships, and scholarships in the Chapman Graduate School of Business and LACC on the same basis as other graduate students, subject to the guidelines and restrictions set by either program.
9. Future changes to the joint MBA/MALACS degree program must be endorsed by the College of Business Faculty Curriculum Committee and Associate Dean of the Chapman Graduate School of Business; the College of Arts and Sciences Faculty Curriculum Committee and Dean of the College of Arts and Sciences; and approved by the University Curriculum Committee, Graduate Council, the Faculty Senate, Dean of the University Graduate School, and the Provost.

For additional information, contact the Evening MBA office at (305) 348-3256 or the Latin American and Caribbean Center (LACC) at (305) 348-2894.

## Master of Business Administration/Juris Doctor Joint Degree Program

Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. Essential criteria relating to the joint degree program are as follows:

1. Candidates for the program must meet the entrance requirements for and be accepted by both Colleges. Both Colleges must be informed by the student at the time of application to the second program that the student intends to pursue the joint degree.
2. The joint degree program is not open to students who have already earned one degree.
3. For law students, enrollment in the MBA program is required no later than the completion of 63 credit hours in the JD program. For MBA students, enrollment in the JD program is required no later than the third semester after beginning the MBA program. For purposes of this paragraph, a summer session is counted as half a semester.
4. A student must satisfy the curriculum requirements for each degree before either degree is awarded. The College of Business will allow 12 credit hours of upper level business and commercial law courses to be credited toward both the M.B.A. and J.D. degrees. These 12 credit hours of law classes will be in lieu of the Legal Environment of Business course (3 credit hours) and three of the elective courses (totaling 9 credit hours) required for the M.B.A. degree. A student may obtain a concentration in the M.B.A.
program in accordance with the College of Business curriculum requirements for concentrations. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the J.D. degree for courses taken in the M.B.A. curriculum upon completion of the M.B.A. degree curriculum with a grade point average of 3.0 or higher.
5. A student enrolled in the joint degree program may begin the student's studies in either College, but fulltime law students must take the first two semesters of law study consecutively and part-time law students must take the first three semesters of law study consecutively. Students admitted to one College but electing to begin study in the other College under the joint degree program may enter the second College thereafter without once again qualifying for admission so long as they have notified the second College before the end of the first week of the first semester in the second College and are in good academic standing when studies commence in the second College.
6. A student enrolled in the joint degree program will not receive either degree until the student has satisfied all of the requirements for both degrees, or until the student has satisfied the requirements of one of the degrees as if the student had not been a joint degree candidate.
7. Students in the joint degree program will be eligible for the graduate teaching assistantships and research assistantships in the College of Business on the same basis as other MBA students, subject to the guidelines and restrictions set by the College of Business.

For additional information, contact the Evening MBA office at (305) 348-3256 or the Law School Admissions Office at (305) 348-8006.

## Master of International Business/Juris Doctor Joint Degree Program

The faculties of the College of Law and the College of Business at Florida International University have approved a joint degree program culminating in both a Juris Doctor degree, awarded by the College of Law, and a Master of International Business degree, awarded by the College of Business. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. Essential criteria relating to the joint degree program are as follows:

1. Candidates for the program must meet the entrance requirements for and be accepted by both Colleges. Both Colleges must be informed by the student at the time of application to the second program that the student intends to pursue the joint degree.
2. The joint degree program is not open to students who have already earned one degree.
3. For law students, enrollment in the MIB program is required no later than the completion of 63 credit hours in the JD program. For MIB students, enrollment in the JD program is required no later than the time that the student has completed one-half of the MIB curriculum.
4. A student must satisfy the curriculum requirements for each degree before either degree is awarded. The

College of Business will allow 9 credit hours of upper level international and comparative law courses to be credited toward both the MIB and JD degrees. These 9 credit hours of law classes will be in lieu of the International Business Law course (3 credit hours) and any two other courses (totaling 6 credit hours) in the MIB curriculum. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the JD degree for courses taken in the MIB curriculum upon completion of the MIB degree curriculum with a grade point average of 3.0 or higher.
5. A student enrolled in the joint degree program may begin the student's studies in either College, but fulltime law students must take the first two semesters of law study consecutively and part-time law students must take the first three semesters of law study consecutively. Students admitted to one College but electing to begin study in the other College under the joint degree program may enter the second College thereafter without once again qualifying for admission so long as they have notified the second College before the end of the first week of the first semester in the second College and are in good academic standing when studies commence in the second College.
6. A student enrolled in the joint degree program will not receive either degree until the student has satisfied all of the requirements for both degrees, or until the student has satisfied the requirements of one of the degrees as if the student had not been a joint degree candidate.
7. Students in the joint degree program will be eligible for the graduate teaching assistantships and research assistantships in the College of Business on the same basis as other MIB students, subject to the guidelines and restrictions set by the College of Business.

For additional information, contact the MIB office at (305) 348-3279 or the Law School Admissions Office at (305) 348-8006.

## Master of International Business/Master of Arts in International Studies Joint Degree Program

The Department of Politics and International Relations and The Alvah H. Chapman Jr. Graduate School of Business at Florida International University offer a joint degree program culminating in both a Master in International Business (MIB), and a Master of Arts in International Studies (MAIS). Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already graduated with either degree. MIB or MAIS students must apply and
be admitted no later than the second to last semester in which they are expected to complete their original degree requirements, including the comprehensive examination for the MAIS degree.
3. Candidates must satisfy all requirements for each degree. The two degrees will have four common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. Courses transferred to meet elective credits must be 5000 or 6000 level courses. Directors of the MAIS and MIB degree programs may adjust these exact course requirements as a result of future changes to the MAIS or MIB curriculums.
3.1. To obtain the MIB degree, MAIS students who have successfully completed the required 36 credits must, additionally, complete 24 credit hours in the MIB program as follows:

| MAN 6617 | Managing Global Production and |  |
| :--- | :--- | :--- |
|  | Technology | 3 |
| MAR 6158 | International Marketing | 3 |
| MAN 6635 | International Business Policy | 3 |
| MAN 6679 | Master's Project in International |  |
|  | Business | 3 |
| MAN 6601 | International Management | 3 |
| FIN 6644 | Global Financial Strategy | 3 |
| ACG 6255 | International Accounting | 3 |
| MAN 6930A | Master's Seminar in Management 1 1 |  |
| MAN 6930B | Master's Seminar in Management 2 1 |  |
| MAN 6930C | Master's Seminar in Management 3 1 |  |

In order to satisfy the 36 credits hours required by the MIB program, 12 credit hours will be transferred from the MAIS program as follows:
INR 5017 Approaches to Area Studies 3
INR 5409 International Law 3
Elective 1
3
Elective 2
3
3.2. To obtain the MAIS degree, MIB students who have successfully completed the required 36 credits must, additionally, complete 24 credit hours in the MAIS program as follows:

INR 6706
INR 5615 Research Design and International Relations
GEO 6473
INR 5609
INR 5017
Field course 1
Field course 2
Political Economy of International
Relations Space, Place and Identity
Contemporary Dynamics of International Relations
Approaches to Area Studies3

Field course 3
In order to satisfy the 36 credits hours required by the MAIS program, 12 credit hours will be transferred from the MIB program as follows:
MAN 6606 International Business Environment 3
BUL 6850 International Business Law 3
Elective 1
Elective 2
3
All MAIS students coming into the MIB program will be required, during the first month of classes, to take a 16 -hour workshop in Accounting and a 16 -hour workshop in Quantitative Methods. The purpose of these workshops is to ascertain that students have
the necessary background in both of these fields. Students must pass each workshop with at least a B grade (there is no charge for this workshop). Otherwise, they must register, and pay the corresponding tuition for the Accounting class (ACC 6026) and/or the Quantitative methods class (QMB 6357) in the Evening MBA program, and earn a grade of $B$ or higher.
4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.

## Master of International Business/Master of Business Administration Joint Degree Program

The MIB and MBA programs in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University are proposing a joint degree program culminating in both a Master of Business Administration degree (MBA), and a Master of International Business (MIB). Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MIB students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. The two degrees will have four common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MIB courses transferred to meet MBA elective credit and vice versa must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MIB degree programs may adjust these exact course requirements as a result of future changes to the MBA or MIB curriculums.
3.1. To obtain the MIB degree, MBA students who have finished their core courses, must complete a total of 36 credit hours as follows:

| In the MIB program (24 credits hours): |  |  |
| :--- | :--- | ---: |
| ACG 6255 | International Accounting |  |
| MAN 6617 | Managing Global Production and |  |
|  | Technology | 3 |
| MAR 6158 | International Marketing | 3 |
| MAN 6606 | International Business Environment 3 |  |
| or |  |  |
| International Business Elective |  |  |
| International Business Elective |  |  |
| MAN 6679 | Master's Project in International |  |
|  | Business | 3 |
|  | 3 |  |

MAN 6601
MAN 6930A
MAN 6930B
MAN 6930C

International Management Master's Seminar in Management 11 Master's Seminar in Management 21 Master's Seminar in Management 31

From the MBA program (12 credit hours) will be transferred as follows:

| BUL 6810 | Legal Environment | 3 |
| :--- | :--- | ---: |
| FIN 6644 | Global Financial Strategy | 3 |
| MAN 6726 | Strategic Management | 3 |
| MAN 6606 | International Business Environment | 3 |
| or |  |  |
| International Business Elective |  |  |
| (the one different from MIB program) |  |  |

3.2. To obtain the MBA degree, MIB students who have finished their core courses, must complete a total of 46 to 55 credits hours (depending on prerequisites) as follows:
From the MBA program (34-43 credit hours): Three prerequisite courses, unless waived (9) credits
ACG 6026 Accounting for Managers
ECP 6705 Managerial Economics
QMB 6357C Business Analysis for Decision Making
MAN 6209 Organizational Design and Behavior

FIN 6406 Corporate Finance 3
ACG 6175 Financial Reporting and Analysis 3
MAN $6830 \quad$ Organization Information Systems 3
MAN 6501 Operations Management 3
MAR $6816 \quad 3$
MAR 6805 Marketing Management in the Global Environment 3
$\begin{array}{lll}\text { MAN } 6703 & \text { Colloquium in Managing } \\ & \text { Organizational Ethics }\end{array}$
MAN 6356 PDS I 1
MAN 6357 PDS II 1
MAN 6358 PDS III 1
Elective 13
Elective 23
Elective 3
From the MIB program (12 credit hours) will be transferred as follows:

| BUL 6850 | International Business Law | 3 |
| :--- | :--- | ---: |
| FIN 6644 | Global Financial Strategy | 3 |
| MAN 6606 | International Business Environment 3 |  |
| MAN 6635 | International Business Policy | 3 |

4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 70-79 credit hours (depending on prerequisites) to get both degrees. Without the joint degree program students will need to take 82-91 credit hours (depending on prerequisites) to get both degrees. Thus, MBA students who have taken twelve credits of MIB common courses may obtain an MIB degree with an additional 24 credits. MIB students who have taken twelve credits of the MBA classes, may obtain an MBA degree with an additional 34-43 credits (depending on prerequisites).

For additional information, contact the MIB office at (305) 348-3279 or the Evening MBA office at (305) 348-3256.

## Master of Science in Finance/Master of Business Administration Joint Degree Program

The Department of Finance and the MBA program in the Alvah H. Chapman, Jr. Graduate School of Business at Florida International University offer a joint degree program culminating in both a Master of Business Administration degree (MBA), and a Master of Science in Finance degree (MSF). Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program uses existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MSF students must apply and be admitted by no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. To obtain the MSF degree, the student will be required to take eleven (11) finance courses. This includes the two finance courses in the MBA core program, plus nine finance courses from the MSF fast track program, for a total of 33 credit hours. Three of the nine MSF courses will be used to satisfy part of the elective requirements of the MBA program. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements. The two degrees will have 5 common courses. Courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSF courses transferred to meet MBA elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MSF degree programs may adjust these exact course requirements as a result of future changes to the MBA or MSF curriculums.
4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 73 credit hours to get both degrees. Without the joint degree program students will need to take 88 credit hours to get both degrees. Thus, MBA students who have taken nine credits of MSF common courses may obtain an MSF degree with only an additional 18 credits. MSF students who have taken six credits of MBA core finance courses may obtain an MBA degree with only an additional 40 credits.
For additional information, contact the Evening MBA office at (305) 348-3256 or the Master of Science in Finance office at (305) 348-4198.

## Master of Science in Finance/Master of International Business Joint Degree Program

The Department of Finance and the MIB programs in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University are proposing a joint degree program culminating in both a Master in International Business (MIB), and a Master of Science in Finance. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MIB or MSF students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. The two degrees will have four common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSF courses transferred to meet MIB elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MSF and MIB degree programs may adjust these exact course requirements as a result of future changes to the MSF or MIB curriculums.
3.1. To obtain the MIB degree, MSF students who have finished their core courses, must complete a total of 36 credit hours as follows:
In the MIB program ( 24 credits hours):
MAN 6617 Managing Global Production and Technology
MAR 6158 International Marketing 3
BUL 6850 International Business Law 3
MAN 6635 International Business Policy 3
MAN 6679 Master's Project in International Business
MAN 6601 International Management 3
MAN 6606 International Business Environment 3
MAN 6930A Master's Seminar in Management 11
MAN 6930B Master's Seminar in Management 21
MAN 6930C Master's Seminar in Management 31
From the MSF program (12 credit hours) will be transferred as follows:

| FIN 6644 | Global Financial Strategy | 3 |
| :--- | :--- | ---: |
| FIN 6465 | Financial Planning and Statements |  |
|  | Analysis | 3 |
| MAN 6606 | International Business Environment 3 |  |
| FIN 6XXX | Elective | 3 |
| FIN 6XXX | Elective | 3 |

3.2. To obtain the MSF degree, MIB students who have finished their core courses, must complete a total of 33 credits hours as follows:

From the MSF program (21 credit hours):
FIN 6406
Corporate Finance

FIN $6456 \quad$ Quantitative Method in Financial Analysis
FIN 6246
FIN 6515
FIN 6525
FIN 6465
FIN 6487
program, for a total of 36 credit hours. Four of these eleven MSIS courses will be used to satisfy part of the elective requirements of the MBA program. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements. The two degrees will have five common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSIS courses transferred to meet MBA elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MSIS degree programs may adjust these exact course requirements as a result of future changes to the MBA or MSIS curriculums.
4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 76 credit hours to get both degrees. Without the joint degree program students will need to take 91 credit hours to get both degrees. Thus, MBA students who have taken twelve credits of MSIS common courses may obtain an MSIS degree with an additional 21 credits. MSIS students who have taken three credits of a MBA core MIS course may obtain an MBA degree with only 40 credits.
For additional information, contact the Evening MBA office at (305) 348-3256 or the MSIS Office at (305) 348-6852.

## Master of Science in International Real Estate/Master of Business Administration Joint Degree Program

The Department of Finance and the Master of Business Administration program in the Alvah H. Chapman, Jr. Graduate School of Business at Florida International University have a joint degree program culminating in both a Master of Business Administration degree (MBA), and a Master of Science in International Real Estate degree (MSIRE). Under the joint degree program, a student can obtain both degrees in less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MSIRE students must apply and be admitted prior to or concurrent with the last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. To obtain the MSIRE degree, the student will be required to take ten (10) finance courses totaling 30 hours as required by the program. This includes two finance courses, FIN 6428 Corporate Finance and FIN 6644 Global Financial Strategy, included in the MBA (and required by all the individual MBA programs) which are also required by the MSIRE

Program, plus five real estate core courses in the MSIRE Program, plus two real estate (REE prefix) electives and an additional graduate course approved by the Program Director.
4. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements for the specific MBA program in which they are also enrolled including the three 3 -credit hour prerequisites, ten 3 credit core courses, four 1-credit seminars, and four 3-credit hour electives, for a total of 55 credit hours. Two finance courses are specifically required by both programs. In addition, two of the real estate (REE prefix) courses in the MSIRE may be considered as partially satisfying the elective requirements of the MBA program. The two degrees will have 4 common courses.
5. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSIRE courses transferred to meet MBA elective credit must be 6000 level courses. Directors of the MBA and MSIRE degree programs may adjust these exact course requirements as a result of future changes to the MBA or MSIRE curriculums.
6. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
7. With the joint degree program students will take a total of 73 credit hours to get both degrees. Without the joint degree program students would need to take 85 credit hours to earn both degrees. A maximum of 12 credit hours or four courses will be double counted for both degree programs. This means that a MBA student will be required to take a minimum of six courses or 18 additional credit hours above the requirements for the MBA Program to earn both degrees. Similarly, a student of the MSIRE must satisfy an additional 43 credit hours in order to earn both degrees.
For additional information, contact the Evening MBA office at (305) 348-3256 or the Master of Science in International Real Estate office at (305) 348-4198.

## Master of Science in Human Resource Management/Master of Business Administration Joint Degree Program

The Department of Management \& International Business and the MBA program in the Alvah H. Chapman, Jr. Graduate School of Business at Florida International University have a joint degree program culminating in both a Master of Business Administration degree (MBA), and a Master of Science in Human Resource Management (MSHRM). Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MSHRM students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree:
a. To obtain the MSHRM degree, the student will be required to take twelve (12) 3-credit HR courses. This includes the existing HR Strategy course (MAN 6385) - which can replace the Strategic Management course in the core MBA curriculum (MAN 6726) - plus eleven HR courses from the MSHRM program, for a total of 36 credit hours. Four of these eleven MSHRM courses will be used to satisfy the elective requirements of the MBA program.
b. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements, that is, three prerequisites ( 9 credits unless waived), four one-credit seminars, ten 3 -credit core courses and four 3-credit electives, for a total of 46-55 credits depending on prerequisites.
c. Two degrees will have five common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSHRM courses transferred to meet MBA elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MSHRM degree programs may adjust these exact course requirements as a result of future changes to the MBA or MSHRM curriculums.
4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all degree requirements for the first program as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 67-76 credit hours (depending on prerequisites) to get both degrees. Without the joint degree program students would need to take 82-91 credits hours (depending on prerequisites) to get both degrees. Thus, MBA students who have taken twelve credits of MSHRM common courses may obtain an MSHRM degree with an additional 21 credits. MSHRM students who have taken three credits of an MBA core MSHRM course may obtain an MBA degree with only 40 credits.

For additional information, contact the MBA office at (855) 348-7622 or the Master of Science in Human Resource Management office at (305) 348-5945.

## School of Accounting

Ruth Ann McEwen, Professor and Director, Senior Associate Dean
Elio Alfonso, Assistant Professor
David Barman, Clinical Professor
Abhijit Barua, Associate Professor and Morrison Brown, Argiz, and Farra LLP Professor
Teresita Brunken, Instructor
Jimmy Carmenate, Instructor
Lucia Chang, Professor Emeritus
Mort Dittenhoffer, Professor Emeritus
Desiree Elias, Instructor
Wendy Gelman, Senior Instructor
C. Delano Gray, Instructor

Kenneth Henry, Clinical Assistant Professor
Xiaochuan (Kelly) Huang, Assistant Professor
Stan Jansta, Instructor
Jung Hoon Kim, Assistant Professor
Brent Lao, Assistant Professor
Stephen W. Lin, Professor and Ryder Eminent Scholar
Gregory McPhee, Assistant Professor
Jonathan Milian, Assistant Professor
Kenneth S. Most, Professor Emeritus
Sue Ganske, Clinical Professor
Frederick Perry, Clinical Professor
Felix Pomeranz, Professor Emeritus
Kannan Raghunandan, Professor and Ryder Eminent Scholar Chair in Business Leadership
Dasaratha V. Rama, Professor and Knight Ridder Center Research Fellow
Brett Rixom, Assistant Professor
Leonardo Rodriguez, Professor Emeritus
Antoinette Smith, Associate Professor
Krishnamurthy Surysekar, Associate Professor
Thomas J. Tarangelo, Lecturer
Maria Vulcheva, Assistant Professor
Miriam Weismann, Clinical Professor
Clark Wheatley, Professor

## Purpose

Our mission as a School of Accounting in an internationally-focused public research university is to:

- Foster an environment of intellectual curiosity, diversity of thought, and integrity;
- Provide a diverse student body with excellence in accounting education in order to succeed as business professionals and leaders as well as valued members of society;
- Prepare students for advancement in the accounting profession through specialized masters programs that strengthen professional competencies;
- Serve the academic community through scholarly research, colloquia, and the training of future accounting educators;
- Promote opportunities for professional development, lifelong learning and networking for our alumni and accounting professionals in the local, national and global community.


## Master's Degree Programs

The School of Accounting offers a Master of Accounting (MACC) with tracks in Assurance, Forensic Accounting, and Taxation. The program is designed for students who have completed an undergraduate degree in accounting, or the equivalent, from a regionally accredited college or university. The Director of the School of Accounting will determine the equivalency of students' undergraduate degrees.

Students whose undergraduate degrees are in majors other than accounting will be required to make up for any business and/or accounting deficiencies. The Director of the School must approve programs of study for students seeking to correct such deficiencies.

All students taking graduate accounting and tax courses must be fully admitted to one of the graduate accounting programs or have written permission from the Director of the School. Registration for all such course work must be made through the appropriate College advisor.

## Admission Requirements

To be eligible for admission to a Master's degree in the School of Accounting in the Chapman Graduate School, students must:

1. Hold a Bachelor's degree from an accredited college or university;
2. Show high promise of success in graduate studies as determined by the faculty based upon a minimum score of 500 on the Graduate Management Admission Test (GMAT) score or Graduate Record Exam (GRE). Applicants submitting GRE scores will be considered on an individual basis. The GMAT requirement will be waived if the student has a
a. graduate degree from an AACSB accredited university;
b. passed all parts of the CPA exam or;
c. obtained an undergraduate accounting degree from FIU with a GPA of at least 3.25 in their upper-level undergraduate coursework AND a 3.0 GPA in classes equivalent to Intermediate Financial Accounting I (ACG 4101), Financial Accounting II (ACG 4111), Management Accounting (ACG 4341), and Income Tax Accounting (TAX 4001);
3. Have a minimum upper division grade point average (GPA) of 3.0;
4. Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version) or 6.5 overall on the International English Language Testing System (IETLS);
5. Be in good standing with all previously-attended colleges and universities.
Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

## Special Program Requirements

To be considered for admission into the graduate program, an applicant with a non-accounting business degree may be required to complete up to 8 accounting
courses ( 24 credit hours), to be selected from the following three credit-hour courses:
ACG 4101 Financial Accounting I
ACG 4111 Financial Accounting II
ACG 4651 Auditing
ACG 4401 Accounting Information Systems
ACG 4341 Management Accounting and Control
BUL 4320 Business Law
TAX 4001 Income Tax Accounting
TAX 4011 Taxation of Corporations and
Partnerships

## Accounting undergraduate equivalents

Alternately, students may complete accelerated prerequisites, which offer graduate level coursework equivalent to the undergraduate courses listed above. In order to be considered for the accelerated prerequisites, an applicant must be admitted to the accounting graduate program.

An applicant with a non-business degree will be required to complete, in addition to the courses listed above, the core courses for the MBA program or equivalent undergraduate courses.

## Florida Certified Public Accountant Requirements

Completing a Bachelor of Business Administration with a concentration in Accounting does not alone meet the Florida State Board of Accountancy educational requirements for CPA licensure. These requirements include earning 30 credit hours beyond an undergraduate degree with a total of 36 semester hours of accounting and 39 hours of general business including six hours of business law. One year of work experience in an accounting-related field is also required for licensure.

FIU's graduate accounting programs satisfy the 30 semester hours beyond a Bachelor's degree required for CPA licensure.

## Master of Accounting (MACC)

The Master of Accounting degree program prepares students for a career in accounting.

Depending on a student's interests, he or she will prepare for a variety of careers:

## Careers

| Financial | Independent accountant in public <br> Accounting/Auditing <br> accounting <br> Accounting systems, consultant, <br> auditor, corporate officer, or public <br> accountant |
| :--- | :--- |
| Systems | Internal auditor, industry or <br> government |
| Corporate | Internal accountant or corporate <br> Management |
| officer |  |

## Master of Accounting - Assurance Track

The Assurance Track of the Masters of Accounting (MACC-Assurance) requires students to complete a minimum of 15 credits in the field of assurance within the 30 -credit Masters of Accounting program (MACC). The

Assurance Track provides students a clear designation of their concentration in the field.

## Required Courses

MACC-Assurance requires the following core courses:
ACG 6176 Evaluation of Financial Reports, Business Analysis and Valuation
BUL 6890 Special Topics in Business Law
ACG 6225 Value Added Accounting Practices in Strategic Business Decisions
ACG 6257 Global Accounting, Auditing and Financial Strategy
ACG 6385 Managerial Control and Controllership
With prior approval of the Director of the School of Accounting, two courses may be substituted for other 6000 level business courses.

## Electives

An additional 15 credits are required with an ACG prefix in order to earn the MACC-Assurance. These courses are chosen from the following:
ACG 6135 Seminar in Financial Accounting Theory I
ACG 6295 Financial Accounting IV
ACG 6406 Accounting Data Warehousing and Analysis
ACG 6437 Advanced Accounting Information Systems
ACG 6466 Accounting Enterprise Resource Planning
ACG 6625 Information Technology Auditing
ACG 6657 Environment of Accounting and Auditing
ACG 6675 Internal Auditing
ACG 6676 Advanced Internal Auditing
ACG 6677 Applied Internal Auditing
ACG 6686 Fraud Examination
ACG $6696 \quad$ Current Issues in Auditing
ACG 6885 Accounting Research and Reporting
ACG 6935 Special Topics in Accounting

## Master of Accounting - Forensic Accounting Track

The Forensic Accounting Track of the Masters of Accounting (MACC-Forensic Accounting) requires students to complete a minimum of 15 credits in the field of forensic accounting within the 30-credit Masters of Accounting program (MACC). The track provides our students a clear designation of their concentration field, which is particularly attractive in a metropolitan area where identity theft, money laundering, estate settlements, healthcare fraud, and valuation disputes are prolific. This track serves the accounting profession and community in areas such as fraud, business valuation, Ponzi schemes, and financial dispute resolution services. It serves to distinguish those students whose electives include five courses in forensic accounting.

## Required Courses

MACC-Forensic Accounting track requires the following core MACC courses (15 credits):
BUL $6890 \quad$ Special Topics in Business Law
ACG 6225 Value Added Accounting Practices in
Strategic Business Decisions

| ACG 6176 | Evaluation of Financial Reports, Business Analysis and Valuation |
| :---: | :---: |
| ACG 6257 | Global Accounting, Auditing and |
|  | Financial Strategy |
| ACG 6385 | Managerial Control and Controllership |
| The Forensic core (3 credits) consists of: |  |
| ACG 6685 | Introduction to Forensic Accounting |
| An additional 12 credits are required with an ACG prefix in order to earn the MACC-Forensic Accounting track. These courses are chosen from the following: |  |
| ACG 6687 | Financial Investigation |
| ACG 6838 | Fraud Investigation |
| ACG 6686 | Fraud Examination |
| ACG 6692 | Business Analytics for Forensic Accountants |
| ACG 6XXX | Business Valuation for Forensic Accountants |
| ACG 6XXX | Advanced Accounting Applications in Business Valuation |
| ACG 6XXX | Valuation Advanced Theory Concepts and Methodologies |
| ACG 6XXX | Advanced Digital Forensic in Forensic Accounting |
| ACG 6XXX | Graduate Auditing |
| ACG 6XXX | Forensic Accounting and the Legal Environment |
| ACG 6XXX | Graduate Topics in Auditing |
| ACG 6XXX | Advanced Accounting and Fraud |
|  | Examination Concepts for Healthcare |
| ACG 6867 | Seminar in Medicare Regulation |
| ACG 6XXX | Advanced Healthcare Industry Overview for Forensic Accounting |

With prior approval of the Director of the School of Accounting, two courses may be substituted for other 6000 level business courses.

## Master of Accounting - Taxation Track

The Taxation Track of the Master of Accounting (MACCTax) requires students to complete a minimum of 15 credits in the field of taxation within the 30 -credit Master of Accounting program (MACC). The Taxation Track provides students a clear designation of their concentration in the taxation field.

## Required Courses

MACC-Tax requires the following core courses:
ACG 6176 Evaluation of Financial Reports, Business Analysis and Valuation
BUL 6890 Special Topics in Business Law
ACG 6225 Value Added Accounting Practices in Strategic Business Decisions
ACG 6257 Global Accounting, Auditing and Financial Strategy
ACG 6385 Managerial Control and Controllership
With prior approval of the Director of the School of Accounting, two courses may be substituted for other 6000 level business courses.

## Electives

An additional 15 credits are required with a TAX prefix in order to earn the MACC-Tax. These courses are chosen from the following:

TAX 6026
TAX 6065
TAX 6105
TAX 6107
TAX 6115
TAX 6205
TAX 6206
TAX 6305
TAX 6405
TAX 6415
TAX 6445
TAX 6446
TAX 6505
TAX 6507
TAX 6515
TAX 6805
TAX 6835
TAX 6875
TAX 6876
TAX 6877
TAX 6905
TAX 6935

Value-Added Tax Strategies for Business Decisions
Tax Research, Practice and Procedure
Taxation of Corporations I
Federal Corporate Taxation
Taxation of Corporations II
Partnership Taxation
Taxation of Pass-Through Entities
State and Local Taxation
Estate and Gift Taxation
Fiduciary Accounting and Taxation
Estate Planning
Wealth Transfers
International Taxation I
Principles of International Taxation
International Taxation II
Tax Policy
Taxation of Deferred Compensation
Current Developments in Taxation
Transactions in Property
Seminar in Taxation
Independent Study in Taxation
Special Topics in Taxation

## Computer Requirements

All MACC students are expected to own a laptop computer with wireless capability. You must have a laptop computer in order to begin your studies. A list of minimum requirements is available at http://business.fiu.edu or by contacting the program office.

## Master of Accounting/Master of Business Administration Joint Degree Program

The School of Accounting and the IMBA program in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University offer a joint degree program culminating in both a Master of Accounting (MACC) and a Master of Business Administration. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree.
3. Domestic undergraduate non-accounting degree holders; and international degree holders, regardless of major, will take the following courses, for a saving of 15 credits:

- 34 credits at the 6000 -level from the IMBA
- 15 credits at the 5000-level from the MACC
- 30 credits at the 6000 -level from the MACC

4. Domestic undergraduate accounting degree holders from AACSB accredited universities, may petition to waive the 5000-level MACC courses, for a saving of an additional 15 credits.
5. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. Directors of the MACC and MBA degree programs may adjust these exact course requirements as a result of future changes to the MACC or MBA curriculums.
6. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.

## Accounting Concentration in the Ph.D. Program

The School of Acccounting offers an Accounting concentration in the doctoral program in Business Administration.

The first two years of the PhD program are typically spent in coursework distributed as follows:

18-24 credit hours in doctoral level Accounting seminars and courses.

12-18 credit hours in Research Method and/or Statistics courses.
Students will take 18-24 credit hours of doctoral level Accounting courses from among the following:

| ACG 7157 | Seminar: Theory and Contemporary <br> Research in Financial Accounting |
| :--- | :--- |
| ACG 7177 | Seminar: Accounting Information and <br> Security Prices |
| ACG 7436 | Seminar: Information Value and Agency <br>  <br> Research Accounting. |

ACG 7695 Seminar: Contemporary Research in Management Accounting and Auditing
ACG 7836 Seminar: Behavioral Research in Accounting-Individual Behavior
ACG 7837 Seminar: Behavioral Research in Accounting-Human Groups and Systems
ACG 7886 Seminar: Empirical Research Methodology and Paradigms in Accounting
ACG 7888 Seminar: The Philosophy of Science, Theory Construction, and Verification in Accounting
ACG 7889 Seminar: Positive Theory Research in Accounting
ACG 7896 Accounting Research Methods on Capital Markets
ACG 7938 Seminar: Special Topics in Accounting Research

# Tibor and Sheila Hollo School of Real Estate 

William Hardin, Professor and Tibor and Sheila Hollo School of Real Estate Fellow; Director, Jerome Bain Real Estate Institute and Director, Tibor and Sheila Hollo School of Real Estate<br>Eli Beracha, Assistant Professor<br>Julia Freybote, Assistant Professor<br>Suzanne Hollander, Instructor<br>Zhenguo Lin, Associate Professor and Tibor and Sheila Hollo School of Real Estate Fellow<br>Zhonghua Wu, Associate Professor and Tibor and Sheila<br>Hollo School of Real Estate Fellow<br>Participating Adjunct Faculty<br>Paul Black<br>Eileen Cardelle<br>Alex Morcate

## Purpose

The Tibor and Sheila Hollo School of Real Estate offers a Master of Science in International Real Estate degree that prepares students to analyze and solve complex real estate investment decisions. The curriculum grounds the students in areas such as real estate investments, mortgage related securities, mortgage banking, commercial brokerage, development, asset management, and property management with an international focus.

## Master of Science in International Real Estate (MSIRE)

## Admission Requirements

To be eligible for admission to the Master of Science in International Real Estate program in the Chapman Graduate School of Business, students:

1. Must hold a Bachelor's degree or equivalent from either a U.S. regionally accredited college or university or the equivalent for institutions outside the U.S. A degree in business is not required;
2. Will show high promise of success in graduate studies as determined by the faculty based upon academic performance, work experience or a combination of academic and work experience. Evidence includes a minimum score of 500 on the Graduate Management Admission Test (GMAT) or similar Graduate Record Exam (GRE) score or demonstrate at least four years of industry (real estate, development, architecture and affiliated industries such as banking, finance, insurance, etc.) work experience. Applicants having an undergraduate business degree from Florida International University with an upper division grade point average (GPA) of 3.25, or having a business, economics, engineering, construction management or architecture degree from an accredited school with an upper division grade point average (GPA) of 3.25 are eligible for a GMAT or GRE waiver at the discretion of the faculty director. If the applicant has already completed a graduate degree from an accredited university with a minimum grade point average (GPA) of 3.0, or is entering a business master's program under a special agreement for admissions with
specific foreign universities, he or she would be eligible for a GMAT or GRE waiver at the discretion of the faculty director;
3. Should, in general, have a minimum upper division grade point average (GPA) of 3.0. An applicant with substantial work experience and industry/work related recommendations will be evaluated based on academic and industry performance;
4. Must, when the applicant's studies were completed outside of the U.S., demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paperbased version) or 6.5 overall on the International English Language Testing System (IETLS);
5. Can provide any additional documentation to augment and strengthen the application portfolio. For example, a master's degree in any discipline, a degree in Law, professional certifications and specialized industry or leadership experience or training;
6. Who are enrolled in the Certificate of International Business program and have completed the first 12 graduate credits with a GPA of 3.25 or higher, may be eligible for admission to the program;
7. Who have been accepted and are successfully completing other Florida International University graduates degrees in business, architecture, construction management, economics, hospitality management, or engineering will be evaluated on their graduate school performance. A minimum graduate grade point average (GPA) of 3.0 in these programs is required; and
8. Will be in good standing with all previously attended colleges and universities.
Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

To complete a Master of Science in International Real Estate degree, students must complete a minimum of 30 semester hours (10 courses).

The following courses are required for the MSIRE degree:

## Core Courses

REE 6045
Real Estate Markets, Institutions and Practices
FIN $6406 \quad$ Corporate Financial Management
FIN $6246 \quad$ Financial Markets and Institutions
REE 6435 Real Estate Law
FIN $6644 \quad$ Global Financial Strategy
REE 6305 Advanced Real Estate Investments and Valuation
REE 6200 Real Estate Finance
REE 6935 Seminar in International Real Estate
Required Electives: to be determined under consultation with the Faculty Director of MSIRE.

The minimum passing grade for any MSIRE course is "C". MSIRE students must maintain an overall grade point average (GPA) of 3.0.

For more information, contact the program manager (305) 348-4198.

## Master of Science in Finance/Master of Science in International Real Estate

The Department of Finance, Tibor and Sheila Hollo School of Real Estate and the Alvah H. Chapman Jr. Graduate School of Business at Florida International University have a joint degree program culminating in both a Master of Science in Finance (MSF), and a Master of Science in International Real Estate (MSIRE) degree. Under the joint degree program, a student can obtain both degrees in less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MSF or MSIRE students must apply and be admitted prior to or concurrent with the last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. To obtain the MSIRE degree, the student will be required to take ten (10) courses totaling thirty (30) credit hours. This includes the five real estate courses in the MSIRE core, three finance courses in the MSIRE core, plus one real estate (REE prefix) elective and one finance (FIN prefix) elective for a total of 30 credit hours. The Faculty Director of the MSIRE may substitute other suitable courses for these electives at the request of the student. The eight core REE and FIN courses include REE 6045 Real Estate Markets, Institutions, and Practices, REE 6200 Real Estate Finance, REE 6305 Real Estate Investments, REE 6435 Real Estate Law, REE Seminar in International Real Estate, FIN 6406 Corporate Finance, FIN 6644 Global Financial Strategy, and FIN 6246 Financial Markets and Institutions.
4. To obtain the MSF degree, the student will have to fulfill all MSF program requirements, including eleven finance courses totaling thirty-three (33) credit hours, eight courses of which are considered part of the core curriculum. The eight core MSF courses are FIN 6406 Corporate Finance, FIN 6644 Global Financial Strategy, FIN 6246 Financial Markets and Institutions, FIN 6456 Quantitative Methods in Financial Analysis, FIN 6515 Security Analysis, FIN 6537 Financial Futures and Fixed Income Investment, and FIN 6487 Financial Risk Management. The remaining three courses must be taken in one of three specializations approved by the faculty and which include three courses in Corporate Finance, three in Investments, or three in Commercial and International Banking.
5. The three finance courses in the MSIRE core curriculum correspond to three of the courses in the core MSF program. Therefore, students pursuing the joint degree program will be credited for these courses in both programs. In addition, one Real

Estate course in the MSIRE curriculum may be counted as one of the three courses required by the MSF specialization. The two degrees then will potentially have 4 common courses.
6. A minimum of seventeen (17) courses will be required to earn the dual degrees: four common courses, six specific to the MSIRE program, and seven specific to the MSF program. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. The Faculty Directors of the MSIRE and MSF degree programs may adjust these exact course requirements as a result of future changes to the MSIRE or MSF curriculums, subject to the approval of the Dean of the Chapman Graduate School.
7. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
8. With the joint degree program students will take a total of 51 credit hours to get both degrees. Without the joint degree programs students would need to take 63 credit hours to get both degrees.

## Master of Science in International Real Estate/Master of Business Administration Joint Degree Program

The Hollo School of Real Estate and the Master of Business Administration program in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University have a joint degree program culminating in both a Master of Business Administration degree (MBA), and a Master of Science in International Real Estate degree (MSIRE). Under the joint degree program, a student can obtain both degrees in less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MSIRE students must apply and be admitted prior to or concurrent with the last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. To obtain the MSIRE degree, the student will be required to take ten (10) courses totaling 30 hours as required by the program. This includes two finance courses, FIN 6406 Corporate Finance and FIN 6644 Global Financial Strategy, included in the MBA (and required by all the individual MBA programs) which are also required by the MSIRE Program, plus five real estate core courses in the MSIRE Program, plus two real estate (REE prefix)
electives and an additional graduate course approved by the Program Director.
4. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements for the specific MBA program in which they are also enrolled including the three 3 -credit hour prerequisites, ten 3 credit core courses, four 1-credit seminars, and four 3 -credit hour electives, for a total of 55 credit hours. Two finance courses are specifically required by both programs. In addition, two of the real estate (REE prefix) courses in the MSIRE may be considered as partially satisfying the elective requirements of the MBA program. The two degrees will have 4 common courses.
5. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSIRE courses transferred to meet MBA elective credit must be 6000 level courses. Directors of the MBA and MSIRE degree programs may adjust these exact course requirements as a result of future changes to the MBA or MSIRE curriculums.
6. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
7. With the joint degree program students will take a total of 73 credit hours to get both degrees. Without the joint degree program students would need to take 85 credit hours to earn both degrees. A maximum of 12 credit hours or four courses will be double counted for both degree programs. This means that a MBA student will be required to take a minimum of six courses or 18 additional credit hours above the requirements for the MBA Program to earn both degrees. Similarly, a student of the MSIRE must satisfy an additional 43 credit hours in order to earn both degrees.

## Master of Science in International Real Estate/Master of Science in Hospitality Management

The Hollo School of Real Estate and the Alvah H. Chapman Jr. Graduate School of Business along with the Chaplin School of Hospitality and Tourism Management at Florida International University have a joint degree program culminating in both a Master of Science in International Real Estate (MSIRE) degree and Master of Science in Hospitality Management (MSH) degree. Under the joint degree program, a student can obtain both degrees in less time and at a lower cost than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on their application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed their degree. MSIRE and MSH students must apply and be admitted prior to or concurrent with the last semester in which they are expected to complete their original degree requirements.
3. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
4. The joint degree program will apply to the on-line versions of both degree programs. The joint degree does not include the Executive MSHM degree.
5. Candidates must satisfy all requirements for each degree. To obtain the MSIRE degree, student will be required to take ten (10) courses totaling thirty (30) credit hours. These courses include the real estate courses in the MSIRE core, finance courses in the MSIRE core, plus real estate (REE prefix) or other electives (FIN prefix, for example) for a total of 30 credit hours. The eight core REE and FIN courses include:
REE 6045 Real Estate Markets, Institutions and Practices
REE 6200 Real Estate Finance
REE 6305 Advanced Real Estate Investment Valuation
REE 6435 Real Estate Law
REE 6935 Seminar in International Real Estate
FIN 6406 Corporate Finance
FIN 6644 Global Financial Strategy
FIN 6246 Financial Markets and Institutions
Typical electives include:
REE 6715 Real Estate Development
REE 6147 Real Estate Market Analysis
The Faculty Director of the MSIRE may substitute other suitable courses for these electives.
6. To obtain the MSH degree, the student will have to fulfill all MSH program requirements, including eleven (11) hospitality courses totaling thirty-three (33) credit hours. The student can follow with the standard track or the thesis track. There are ten (10) core hospitality (HMG) courses along with an elective. The following core classes are required in the standard track: HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies
HMG 6225 Multicultural Human Resources Management for the Hospitality Industry or
HMG 6246 Organizational Behavior in the Hospitality Industry
HMG 6296 Strategic Management for Hospitality and Tourism
HMG 6257 Contemporary Issues in the Lodging Industry
HMG 6477 Financial Management for the Hospitality Industry
HMG 6478 Restaurant Development or
HMG 6476 Feasibility Studies for the Hospitality Industry

HMG 6586 Research and Statistical Methods
HMG 6697 Hospitality Law Seminar
HMG 6466 Hospitality Revenue Management
HMG 6596 Marketing Management
There are ten (10) core hospitality (HMG) course along with an elective class. The following core classes in the "thesis" track:
HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies
HMG 6225 Multicultural Human Resources Management for the Hospitality Industry or
HMG 6246 Organizational Behavior in the Hospitality Industry
HMG 6296 Strategic Management for Hospitality and Tourism
HMG 6257 Contemporary Issues in the Lodging Industry
HMG 6596 Marketing Management
HMG 6477 Financial Management for the Hospitality Industry
HMG 6697 Hospitality Law Seminar
HMG 6586 Research and Statistical Methods
HMG 6297 Seminar in Management Methods
HMG 6972 Hospitality and Tourism Thesis
7. To facilitate the joint degree program, the following courses will be considered as sufficient substitutes for the joint degree students. The relations are one way based on the initial program within which a student enrolls. This means that students starting in the MSH program will take the HMG classes and the students in the MSIRE will take the FIN and REE classes. By considering these classes as sufficient substitutes, the joint degree program will reduce time to degree and cost. The two degrees will potentially have 4 common or substitute courses.
HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies
FIN 6644 Global Financial Strategy
HMG 6477 Financial Management for the Hospitality Industry
FIN 6406 Corporate Finance
HMG 6697 Hospitality Law Seminar
REE 6435 Real Estate Law
HMG 6478 Restaurant Development or
HMG 6476 Feasibility Studies for the Hospitality Industry
REE 6715 Real Estate Development
The elective class in the MSH can be a REE class provided that it is approved by the MSH Faculty Director. In no case will more than four (4) classes concurrently count for both degree programs.
8. A minimum of seventeen (17) courses will be required to earn the two degrees: four (4) substitute courses, six (6) specific to the MSIRE program, and seven (7) specific to the MSH program. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. The Faculty Directors of the MSIRE and MSH degree programs may adjust these exact course requirements as a result of future changes to the MSIRE or MSH curriculums, subject to the approval of the Dean of the College of Business in
consultation with senior administrators Chapman Graduate School and Hollo School of Real Estate as well as the Dean of the Chaplin School of Hospitality and Tourism Management.

## Finance

Shahid Hamid, Professor and Chair
Gary Anderson, Associate Professor
Joel Barber, Associate Professor
Deanne Butchey, Senior Lecturer
Flavio Carrillo, Instructor and Director, Capital Markets Lab
Chun-Hao Chang, Professor
Wen-Hsiu Chou, Associate Professor
Robert T. Daigler, Professor and Knight Ridder Center Research Fellow
Krishnan Dandapani, Professor
Mark Del Pezzo, Instructor
Diogo Duarte, Assistant Professor
Brice Dupoyet, Associate Professor and Faculty Director, MSF Program
Ali Gungoraydinoglu, Lecturer
Yeonju Jang, Assistant Professor
Kenneth Jessell, Professor, CFO and Senior VP, Finance and Administration
Xiaoquan Jiang, Associate Professor and Knight Ridder Center Research Fellow
Qiang Kang, Assistant Professor
James Keys, Senior Instructor
Manuel Lasaga, Clinical Professor
Edward Lawrence, Associate Professor and Florida International Bankers Association Professorship
Suchismita Mishra, Associate Professor and Knight Ridder Center Research Fellow
Raul Moncarz, Professor Emeritus
Anastasios Moysidis, Instructor
Ozde Oztekin, Associate Professor
Ali M. Parhizgari, Professor
Arun Prakash, Professor
Emmanuel Roussakis, Professor Emeritus
Arun Upadhyay, Assistant Professor
John S. Zdanowicz, Professor
Participating Adjunct Faculty
Marcos Kerbel
Laureano Martinez
Badi Sabet

## Purpose

The Department of Finance graduate program seeks to extend and deepen students' understanding of finance in both its theoretical and practical dimensions.

The Department offers a Master of Science in Finance (MSF) degree that prepares graduates to analyze and solve problems related to obtaining and using real and financial assets and liabilities. The curriculum grounds students in the areas of banking, corporate finance, investment, portfolio management, financial risk management, financial engineering, financial markets, institutions, and international finance. It provides them with concepts and applications framed within the most current developments in these fields.

The Department also offers a Finance Concentration in the EVEMBA program. Contact the Program Manager for details.

## Master of Science in Finance (MSF)

## Admission Requirements

1. Hold a Bachelor's degree from an accredited college or university;
2. Show high promise of success in graduate studies as determined by the faculty based upon a minimum score of 500 on the Graduate Management Admission Test (GMAT) score or Graduate Record Exam (GRE) scores, or have an undergraduate business degree and demonstrate at least four years of business (Finance affiliated industries such as banking, Investment, accounting, insurance, etc.) related work experience, or have undergraduate business degree with a finance major from FIU. If the applicant already completed a graduate degree from an accredited university with a minimum grade point average (GPA) of 3.0, or is entering a business master's program under a special agreement for admissions with specific foreign universities, he or she would be eligible for a GMAT or GRE waiver at the discretion of the faculty;
3. Have a minimum upper division grade point average (GPA) of 3.0;
4. Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency of the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version) or 6.5 overall on the International English Language Testing System (IETLS);
5. Be in good standing with all previously-attended colleges and universities.
Admissions at the graduate level are competitive and meeting minimum requirements does not guarantee admission.

To earn a Master of Science in Finance degree, students must complete a minimum of 36 semester hours (12 courses)

The 36 credit-hour requirement may be reduced to 33 hours for students who have an accredited Master's degree in Business Administration (MBA). In addition, students may be allowed to transfer three graduate semester hours from an accredited university even if they did not secure an advanced degree.

The following courses are required for the MSF degree:

## Core Courses

FIN 6406
FIN $6456 \quad$ Quantitative Methods in Financial Analysis
FIN $6515 \quad$ Security Analysis
FIN $6246 \quad$ Financial Markets and Institutions
FIN $6525 \quad$ Portfolio Management
FIN $6537 \quad$ Financial Futures and Fixed Income Investments
FIN $6487 \quad$ Financial Risk Management
FIN $6644 \quad$ Global Financial Strategy
FIN $6465 \quad$ Financial Planning and Statement Analysis

## Required Electives: Choose either A, B, or C

 A).FIN $6425 \quad$ Financial Management Policies

| FIN 6436 | Capital Budgeting and Long Term <br> Resource Allocation |
| :--- | :--- |
| FIN 6776 | Financial Software <br> or |

B).

FIN $6425 \quad$ Financial Management Policies
FIN 6517 Advanced Investment
FIN 6489 Advanced Financial Risk Management or
C).

FIN 6625 International Bank Management
FIN 6326 Commercial Banking
FIN $6346 \quad$ Credit Analysis
*Note: Students are required to have taken a basic accounting course or equivalent by the end of the first semester as prerequisite or co-requisite for the program.

The minimum passing grade for any FIN 6000 level courses is " $C$ ". MSF students must maintain an overall grade point average (GPA) of 3.0.

For more information, contact the program manager (305) 348-4198.

## Finance Concentration in the Ph.D. Program

All students are required to complete a minimum of 16 courses. Those concentrating in Finance must take six courses or seminars in Finance (as described below), a two-course sequence in advanced economic theory, and a two-course sequence in either advanced econometrics or an equivalent sequence of courses in advanced statistics. With the advice and consent of the departmental Ph.D. committee, students also select other supporting coursework. The first year of study is regarded as "Tier I" in the Ph.D. program, and successful completion of this year of study is a prerequisite for enrollment in some of the more advanced courses.

Students are expected to maintain a GPA of 3.5 or better in the six departmental courses that comprise the Finance concentration. In addition, students are expected to maintain a GPA of 3.3 or better in all of their coursework.

## A Sample Course of Study

The sample program of study below describes the schedule for a typical student. Variations may be allowed for some students, and, of course, the requirements may be changed at the discretion of the Ph.D. Committee.

| Year I- Fall Semester |  |  |
| :---: | :---: | :---: |
| FIN 7855 | Financial Economics I** | 3 |
| FIN 7845 | Statistical Methods in Finance ${ }^{* * *}$ | 3 |
| FIN 7808 | Financial Theory I | 3 |
| Year I-Spring Semester |  |  |
| FIN 7856 | Financial Economics II** | 3 |
| FIN 7846 | Statistical Methods in Finance II*** | 3 |
| FIN 7809 | Financial Theory II | 3 |
| Year I-Summer Semester |  |  |
| MAN 7916 | Empirical Project | 6 |
| Year II - Fall Semester |  |  |
| FIN 7819 | Financial Theory III | 3 |
| Finance Elective |  | 3 |
| Finance Elective |  | 3 |

Year II - Spring Semester
Finance Elective ..... 3
Finance Elective ..... 3
Finance Elective ..... 3
Year II - Summer Semester
MAN $7916 \quad$ Empirical Project ..... 6
Year III - Fall Semester
Finance Elective ..... 3
Finance Elective ..... 3
FIN 7981 Dissertation Preparation ..... 3
Year III - Spring Semester
FIN 7980 Ph.D. Dissertation ..... 6
Finance Elective ..... 3
Year III - Summer Semester6
Year IV - Fall Semester9
Year IV - Spring Semester
FIN 7980 Ph.D. Dissertation ..... 9
** The sequence in Micro-Economic Theory, ECO 7115 and ECO 7116, may be substituted for this sequence in Financial Economics.
***The sequence in Econometrics, ECO 7424 and ECO 7425, may be substituted for this sequence in Statistical Methods in Finance.

## Summer Research Projects

Students are required to complete research projects during the summer semesters following their first and second years in the program. One faculty member will serve as an advisor for all research projects in a given summer.

For both summer projects, students must submit a written paper and make a presentation to the faculty. Ideally, these papers should be of sufficient quality to merit their submission to a conference or a journal. Students must satisfy all university and college dissertation requirements.

## Master of Science in Finance/Master of Business Administration Joint Degree Program

The Department of Finance and the MBA program in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University have a joint degree program culminating in both a Master of Business Administration degree (MBA), and a Master of Science in Finance degree (Fast Track-MSF). Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program uses existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate in the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or Fast Track-MSF students must apply and be admitted by no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. To obtain the MSF degree, the student will be required to take eleven (11) finance courses. This includes the two finance courses in the MBA core program, plus nine finance courses from the MSF fast track program, for a total of 33 credit hours. Three of the nine MSF courses will be used to satisfy part of the elective requirements of the MBA program. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements. The two degrees will have 5 common courses. Courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSF courses transferred to meet MBA elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MSF degree programs may adjust these exact course requirements as a result of future changes to the MBA or MSF curriculums.
4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 73 credit hours to get both degrees. Without the joint degree program students will need to take 88 credit hours to get both degrees. Thus, MBA students who have taken nine credits of MSF fast track common courses may obtain an MSF degree with only an additional 18 credits. MSF students who have taken six credits of MBA core finance courses may obtain an MBA degree with only an additional 40 credits.

## Master of Science in Finance/Master of Science in International Real Estate

The Department of Finance and the Alvah H. Chapman Jr. Graduate School of Business at Florida International University have a joint degree program culminating in both a Master of Science in Finance (MSF), and a Master of Science in International Real Estate (MSIRE) degree. Under the joint degree program, a student can obtain both degrees in less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed either
degree. MSF or MSIRE students must apply and be admitted prior to or concurrent with the last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. To obtain the MSIRE degree, the student will be required to take ten (10) courses totaling thirty (30) credit hours. This includes the five real estate courses in the MSIRE core, three finance courses in the MSIRE core, plus one real estate (REE prefix) elective and one finance (FIN prefix) elective for a total of 30 credit hours. The Faculty Director of the MSIRE may substitute other suitable courses for these electives at the request of the student. The eight core REE and FIN courses include REE 6045 Real Estate Markets, Institutions, and Practices, REE 6200 Real Estate Finance, REE 6305 Real Estate Investments, REE 6435 Real Estate Law, REE Seminar in International Real Estate, FIN 6406 Corporate Finance, FIN 6644 Global Financial Strategy, and FIN 6246 Financial Markets and Institutions.
4. To obtain the MSF degree, the student will have to fulfill all MSF program requirements, including eleven finance courses totaling thirty-three (33) credit hours, eight courses of which are considered part of the core curriculum. The eight core MSF courses are FIN 6406 Corporate Finance, FIN 6644 Global Financial Strategy, FIN 6246 Financial Markets and Institutions, FIN 6456 Quantitative Methods in Financial Analysis, FIN 6515 Security Analysis, FIN 6537 Financial Futures and Fixed Income Investment, and FIN 6487 Financial Risk Management. The remaining three courses must be taken in one of three specializations approved by the faculty and which include three courses in Corporate Finance, three in Investments, or three in Commercial and International Banking.
5. The three finance courses in the MSIRE core curriculum correspond to three of the courses in the core MSF program. Therefore, students pursuing the joint degree program will be credited for these courses in both programs. In addition, one Real Estate course in the MSIRE curriculum may be counted as one of the three courses required by the MSF specialization. The two degrees then will potentially have 4 common courses.
6. A minimum of seventeen (17) courses will be required to earn the dual degrees: four common courses, six specific to the MSIRE program, and seven specific to the MSF program. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. The Faculty Directors of the MSIRE and MSF degree programs may adjust these exact course requirements as a result of future changes to the MSIRE or MSF curriculums, subject to the approval of the Dean of the Chapman Graduate School.
7. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
8. With the joint degree program students will take a total of 51 credit hours to get both degrees. Without
the joint degree programs students would need to take 63 credit hours to get both degrees.

## Master of Science in Finance/Master in International Business Joint Degree Program

The Department of Finance and the MIB programs in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University are proposing a joint degree program culminating in both a Master in International Business (MIB), and a Master of Science in Finance. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MIB or MSF students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. The two degrees will have four common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSF courses transferred to meet MIB elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MSF and MIB degree programs may adjust these exact course requirements as a result of future changes to the MSF or MIB curriculums.
3.1. To obtain the MIB degree, MSF students who have finished their core courses, must complete a total of 36 credit hours as follows:

In the MIB program ( 24 credits hours):

| MAN 6617 | Managing Global Production and |  |
| :--- | :--- | ---: |
|  | Technology | 3 |
| MAR 6158 | International Marketing | 3 |
| BUL 6850 | International Business Law | 3 |
| MAN 6635 | International Business Policy | 3 |
| MAN 6679 | Master's Project in International |  |
|  | Business | 3 |
| MAN 6601 | International Management | 3 |
| MAN 6606 | International Business Environment 3 |  |
| MAN 6930A | Master's Seminar in Management 1 1 |  |
| MAN 6930B | Master's Seminar in Management 2 1 |  |
| MAN 6930C | Master's Seminar in Management 3 1 |  |

From the MSF program (12 credit hours) will be transferred as follows:

| FIN 6644 | Global Financial Strategy | 3 |
| :--- | :--- | ---: |
| FIN 6465 | Financial Planning and Statements |  |
|  | Analysis | 3 |
| MAN 6606 | International Business Environment 3 |  |
| FIN 6XXX | Elective | 3 |

FIN 6XXX Elective
3.2. To obtain the MSF degree, MIB students who have finished their core courses, must complete a total of 33 credits hours as follows:

From the MSF program (21 credit hours):

| FIN 6406 | Corporate Finance | 3 |
| :--- | :--- | :--- |
| FIN 6456 | Quantitative Method in Financial |  |
|  | Analysis | 3 |
| FIN 6246 | Financial Markets and Institution | 3 |
| FIN 6515 | Securities Analysis | 3 |
| FIN 6525 | Portfolio Management | 3 |
| FIN 6465 | Financial Future and Fixed Income |  |
|  | Investments | 3 |
| FIN 6487 | Financial Risk Management | 3 |

From the MIB program (12 credit hours) will be transferred as follows:

| FIN 6644 | Global Financial Strategy | 3 |
| :--- | :--- | :--- |
| ACG 6255 | International Accounting | 3 |
| FIN 6XXX | Finance Elective 1 | 3 |
| FIN 6XXX | Finance Elective 2 | 3 |

4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 57 credit hours to get both degrees. Without the joint degree program students will need to take 69 credit hours to get both degrees. Thus, MIB students who have taken twelve credits of MSF common courses may obtain an MSF degree with an additional 21 credits. MSF students who have taken twelve credits of the MIB classes, may obtain an MIB degree with an additional 24 credits.

# Information Systems and <br> Business Analytics 

Monica Chiarini Tremblay, Chair and Associate Professor
Dinesh Batra, Professor and Knight Ridder Research Fellow
Lina Bouaya, Assistant Professor
Karlene Cousins, Associate Professor and Academic Director, MS in Information Systems
David Darcy, Assistant Professor
Gloria Deckard, Associate Professor and Academic Director, MS in Health Informatics and Analytics
Joyce J. Elam, Dean Emerita
S. Christopher Ellis, Instructor

Pouyan Esmaiel Zadeh, Visiting Assistant Professor
Paulo J. Gomes, Visiting Assistant Professor
Manjul Gupta, Assistant Professor
Sushil K. Gupta, Professor and Knight Ridder Research Fellow
Hyeyoung Hah, Assistant Professor
Attila J. Hertelendy, Instructor
Keum S. Kang, Assistant Professor
Richard Klein, Assistant Dean for Undergraduate Affairs, College of Business, Assistant Chair, Associate Professor and Knight Ridder Research Fellow
Christos P. Koulamas, Professor and Ryder Eminent Scholar
Kuldeep Kumar, Professor
George J. Kyparisis, Professor and Knight Ridder Center Research Fellow
George Marakas, Professor
Tala Mirzaei, Assistant Professor
Manoel Oliveira, Senior Lecturer
Peter Polak, Instructor
Gladys Simpson, Instructor
Hemang C. Subramanian, Assistant Professor
Zhili Tian, Assistant Professor
Debra Vander Meer, Associate Professor
Nicole Wishart, Senior Instructor
Weidong Xia, Associate Professor and Knight Ridder Center Research Fellow
Participating Adjunct Faculty
Susan Clemmons
Fernando Martinez
Jorge Rey

## Mission

The mission of the Department is to provide students with the knowledge and ability to design, develop, implement, and use information systems that allow organizations to effectively solve problems and use data for decisionmaking. The department offers courses in management information systems, management science, production and operations management, business analytics, and business statistics at both the graduate and undergraduate levels.

Students in our information systems related graduate programs learn the intellectual frameworks and methods used in areas including business analytics, business process design, database management, data warehousing, global electronic commerce, enterprise-wide information systems, information security management,
project management, and systems analysis and design (including object-oriented applications).

The Department offers a Master of Science in Health Informatics and Analytics (MSHIA), Master of Science in Information Systems (MSIS), and a concentration within the College of Business' Ph.D. in Business program.

## Master of Science in Health Informatics and Analytics (MSHIA)

Our Master of Science in Health Informatics and Analytics is a fourteen month graduate degree program designed for information systems professionals, physicians, nurses, other clinical personnel and healthcare managers who want to increase their knowledge of health information technology and management of the complex social and organizational issues surrounding the increased emphasis on managing healthcare quality, efficiency and outcomes through information systems.

Health Informatics integrates the domains of information systems with the organizational domains of healthcare delivery processes and leadership and management principles. The goal of this program is to educate effective developers, users, and managers of health information systems. Students will learn how to implement and use the health information systems needed by hospital and system executives, government planners, public health officials, and other healthcare professionals. Courses will have both an academic and practical perspective, exposing students to both theoretical approaches and real world application.

## Admission Requirements

To be eligible for admission to the MSHIA degree program in the Chapman School, prospective students must:

1. Hold a Bachelor's degree or equivalent from an accredited college or university.
2. Achieve a minimum score of 500 on the Graduate Management Admission Test (GMAT) or Graduate Record Exam (GRE) or have a minimum of four years of professional experience. If the applicant already completed a graduate degree from an accredited university with a minimum of a 3.0 grade point average (GPA), he or she may be eligible for a GMAT or GRE waiver.
3. Have a minimum upper division grade point average (GPA) of 3.0.
4. Provide a personal statement on the motivation to attend the program, including personal and career goals.
5. Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency in the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on paper-based version) or 6.5 overall of the International English Language Testing System (IELTS).
6. If applicant is a student in the Graduate Certificate in Healthcare Management, and have completed the first 12 credits with a GPA of 3.25 or higher, he or she may be eligible for admission to the program. Appropriate courses from the Certificate program may be transferred into the degree program.
7. Be in good standing with all previously-attended colleges and universities.

Admissions at the graduate level are competitive and meeting minimum program requirements does not guarantee admission.

## Graduation Requirements

To graduate with the Master's degree, a student must:

1. Satisfy all University requirements for a Master's degree.
2. Meet the 36 hours required in the M.S. in Health Informatics and Analytics "Program of Study."
3. Earn an overall "B" (3.0) cumulative Grade Point Average.
4. No courses in which a graduate student earns a grade below "C" may be counted towards any Master's degree program in the Chapman School.
5. Completion Professional Development Seminars I-III ( 0 credits) offered through the College of Business.

## Program Format

Students will complete the program in 14 months. Students will complete this program as a cohort. The program will be offered on Saturdays in 8-week terms. Two courses will be taken each term. The students will be considered full time as within a "semester", or two terms in the cohort, they will complete 12 graduate credit hours.

## Required Courses

HSA 6759 Quality Assessment and Outcome in Healthcare 3
ISM 6205 Database Management 3
ISM 6326 Information Security and Compliance 3
ISM $6136 \quad$ Business Analytics Applications 3
HIM 5065 Introduction to Health and Health Informatics
HIM $6937 \quad 3$
HIM 6685 Electronic Health Record and Clinical Support Systems
HIM 6019 Legal and Ethical Aspects of Healthcare 3
HSA 6186 Leadership and Organization Behavior in Health Care Systems
ISM 6930
Special Topics in Management Information Systems
ISM 6316 Project Management of Information Sciences
ISM $6128 \quad 3$
Professional Development Seminars I, II, III
Seminars will be mandatory, non-credit.
For more information, please contact the Program Manager at mshims@fiu.edu or (305) 779-7980.

## Master of Science in Information System (MSIS)

Our Master of Science in Information Systems (MSIS) is the only program of its kind designed with strategic direction from the top South Florida Chief Information Officers (CIOs) ensuring our program delivers knowledge critical to the success of future CIOs .

To better prepare students for senior managerial and executive roles, we offer an integrated curriculum that combines technical and IT management skills, including electronic commerce management and strategy, database management, systems analysis and design, project management, knowledge management, and business analytics. This approach enables an understanding of the
complexities of today's most critical business systems and an ability to manage IT resources to produce the best results for the organization.

1. Students complete the program in 14 months either by enrolling in our daytime program (Monday through Thursday) or weekend program (classes Saturdays).
2. Students improve soft skills through numerous professional development seminars focused on leadership, team-building skills, oral and written presentation skills, and career preparation, while gaining experience in sought after technology skills such as Teradata, SAP, Rational Rose, .Net Java, PL/SQL, UML, XML, SAS Enterprise Miner, Tableau, and so on. Additionally, students build a future network of highly-qualified professionals and peers within the IT field.

## Admission Requirements

To be eligible for admission to the MSIS degree program in the Chapman School, prospective students must:

1. Hold a Bachelor's degree or equivalent from an accredited college or university.
2. Show high promise of success in graduate work as determined by the faculty based on a minimum score of 500 on the Graduate Management Admission Test (GMAT) or a minimum combined score of 1000 (297 on new scale) on the Graduate Record Exam (GRE) or demonstrate at least four years of IT (Information Technology) related work experience. If the applicant already completed a graduate degree from an accredited university with a minimum of a 3.0 grade point average (GPA), or is entering a business master's program under a special agreement for admissions with specific foreign universities, he or she would be eligible for a GMAT or GRE waiver at the discretion of the faculty director.
3. Have a minimum upper division grade point average (GPA) of 3.0.
4. Provide a personal statement on the motivation to attend the program, including personal and career goals
5. Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency in the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on paper-based version) or 6.5 overall of the International English Language Testing System (IELTS).
6. Be in good standing with all previously-attended colleges and universities.
Admissions at the graduate level are competitive and meeting minimum program requirements does not guarantee admission.
The following courses are required for the MSMIS degree:
ISM 6205
Database Management 3
ISM $6316 \quad$ Project Management of Information Sciences
ISM 6106
Systems Analysis 3

ISM 6156 Enterprise Information Systems 3
ISM 6136
ISM 6128
Business Analytics Applications
Business Process Design

| ISM 6307 | Management of the Information |  |
| :--- | :--- | :--- |
|  | Systems Function | 3 |
| ISM 6208 | Data Warehousing | 3 |
| ISM 6489 | Electronic Commerce and Internet |  |
|  | Business Applications | 3 |
| ISM 6024 | Managing Distributed Architectures | 3 |
| ISM 6338 | Information Systems Strategy and |  |
|  | Governance | 3 |
| ISM 6328 | Information Security Management | 3 |

Professional Development Seminars I, II, III

## Optional Elective

ISM 6942 MIS Internship

## Professional Development Seminars

Seminars will focus on soft skills such as leadership, team building, oral presentation, writing skills and career exploration. There will be team-building activities, including classroom exercises in group decision-making and problem-solving. Challenging outdoor exercises help participants build the skills they will need to work together in the program and to succeed in today's team-based organizations. Students will also work with a presentation and writing skills coach to improve the communication and writing skills that are critical to managerial success.

Seminars will be mandatory, non-credit.
Professional Development Seminar I

| Team Building - Ropes Course | 8 hrs |
| :--- | :--- |
| Career Development | 6 hrs |
| Working in Teams | 4 hrs |

Working in Teams 4hrs
Professional Development Seminar II
Presentation Skills 8hrs

## Professional Development Seminar III Writing Skills <br> 8hrs

To complete the MSIS degree, students need to successfully complete all 12, three-credit hour courses for a total of 36 credit-hours, and maintain a B average (3.0 GPA).

For additional information, please visit http://msis.fiu.edu or contact the Program Manager at (305) 348-4347 or msis@fiu.edu.

## Program Format

Students will complete the program in 14 months with classes offered Monday through Thursday, or with classes on Saturdays. Students will complete this program as a cohort. The program offers all classes in 8-week terms. Students will take two courses each term. Students will be considered full time during a "semester", or two consecutive terms in the cohort, as long as they are enrolled for a minimum of 9 graduate credit hours.

## Master of Science in Information System/Master of Business Administration Joint Degree Program

The Master of Science in Information Systems and the MBA program in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University are offering a joint degree program culminating in both a Master of Business Administration (MBA), and a Master of Science in Information Systems degree (MSIS). Under the
joint degree program, a student can obtain both degrees in significantly less time then it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MSIS students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. To obtain the MSIS degree, the student will be required to take twelve (12) MIS courses. This includes the one MIS course in the MBA core program, plus eleven MIS courses from the MSIS program, for a total of 36 credit hours. Four of these eleven MSIS courses will be used to satisfy part of the elective requirements of the MBA program. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements. The two degrees will have five common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSIS courses transferred to meet MBA elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MSIS degree programs may adjust these exact course requirements as a result of future changes to the MBA or MSIS curriculums.
4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate. With the joint degree program students will take a total of 76 credit hours to get both degrees. Without the joint degree program students will need to take 91 credit hours to get both degrees. Thus, MBA students who have taken twelve credits of MSIS common courses may obtain an MSIS degree with an additional 21 credits. MSIS students who have taken three credits of a MBA core MIS course may obtain an MBA degree with only 40 credits.
For additional information, contact the Evening MBA office at (305) 348-3256 or the MSIS Office at (305) 3484347.

## Combined MPH/Graduate Certificate in Healthcare Management

The Department of Health Policy and Management in the Robert Stempel College of Public Health and Social Work and the Health Management Programs in the Chapman Graduate School of Business offer a combined Masters of Public Health (MPH) degree and a Graduate Certificate in Healthcare Management. An MPH with a specialization in

Health Policy and Management provides students with grounding in public health, health policy analysis, health economics, public health leadership, and an introduction to qualitative and quantitative research methods. The Graduate Certificate in Healthcare Management is designed to provide breadth of knowledge in the healthcare management field. The objective of the graduate certificate is to provide individuals with the basic understanding of management, operational, and reimbursement issues challenging today's health care organizations.

Students are admitted to the MPH program once a year in the fall semester as a cohort. Classes begin in the fall semester in the College of Public Health and Social Work, concentrating on training in the core areas of public health. Students begin work in the graduate certificate during the second year, while taking public health courses. Requirements for the MPH are completed at the end of the second year. Nine credit hours (three courses) in the Certificate Program can be applied towards the student's MPH degree. Three credit hours (one course*) in the MPH program can be applied towards the student's Certificate program. The remaining three credit hours (one course) in the Certificate Program must be completed prior to completing the MPH degree. Courses in the College of Public Health and Social Work are offered on a traditional semester schedule. Courses in the Graduate Certificate in Healthcare Management are offered using an 8-week hybrid schedule. This certificate program is open to degree-seeking students only.

## Required Credits

Students will complete 45 degree credits required for the MPH, 9 credits of which will be credits from the certificate program. These nine credits are substitutes for electives in the MPH program. To obtain the certificate, students must complete an additional 6 credits, for a total of 15 credits, in the certificate program.

## Required Courses

Students interested in pursuing the MPH/Certificate will apply to the MPH program in the College of Public Health and Social Work and the Certificate program in the College of Business. Before applying, students will be encouraged to speak with an advisor in the Department of Health Policy and Management and the advisor for the Graduate Certificate in Healthcare Management in the Chapman Graduate School of Business. Application for the Certificate program is completed after acceptance into the MPH program.

To be considered for admission to the College of Public Health, students must have, at minimum, a GPA of 3.0, GRE scores in the top $20^{\text {th }}$ percentile, and strong letters of recommendation from three faculty familiar with previous academic performance.

Students will be admitted to and enroll in the MPH program. Students will be required to complete all the requirements of the MPH degree program. The 15 hour core elements of the MPH degree will be completed. Students will enroll in the certificate program in the second year.

Required courses included in the plan are:
PHC 6000 Epidemiology I: Introduction to Public Health Epidemiology
PHC 6065 Public Health Statistics

| PHC 6315 | Introduction to Environmental Health | 3 |
| :---: | :---: | :---: |
| PHC 5430C | Public Health Economics or | 3 |
| HSA 6156 | Economic and Decision Analysis in Health Services | 3 |
| PHC 6102 | Introduction to Public Health Policy and Management | 3 |
| PHC 6155C | Health Policy Analysis | 3 |
| PHC 6063C | Health Policy Database Applications | 3 |
| MAN 6095 | Management of Healthcare Organizations in the 21st Century | 3 |
| HSA 6176 | Financing \& Reimbursement of Health Systems | 3 |
| PHC 6930C | Integrative Seminar in Public Health | 3 |
| PHC 6104C | Public Health Management and Leadership |  |
| Two Public | Elective |  |

## MIS Concentration in the Ph.D. Program

The Department of Information Systems and Business Analytics (ISBA) offers a Management Information Systems (MIS) concentration in the doctoral program in Business Administration. The concentration requires completion of the following six courses (18 credit-hours):
ISM $7935 \quad$ Foundations of IS Research
ISM 7306 Seminar on Strategy and Information Resource
COP $7545 \quad$ File and Database Systems
ISM 7126 Seminar on Systems Analysis
ISM 7406 Decision Support Systems
ISM 6156 Enterprise Information Systems
Please contact the Ph.D. program director, Associate Professor Weidong Xia for further requirements and details.

## Graduate Certificate in Healthcare Management

The objective of this graduate certificate is to provide individuals with a basic understanding of the context, management and reimbursement issues for health services organizations.

## Admission Requirements

Students must have an earned baccalaureate degree with a GPA of 2.75 or higher. This certificate is open to both degree-seeking students and those who are not currently enrolled at FIU.

## Prerequisite:

Computer skills including: Word, Excel and PowerPoint
Program of Study (15):
MAN 6095 Management of Healthcare Organizations in the $21^{\text {st }}$ Century 3
HSA 6176 Financing and Reimbursement of Health
3 Systems 3
HSA Organization Information Systems 3
HSA 6156 Economic and Decision Analysis in Health Services

3
MAN 6501 Operations Management 3

# Management and International Business 

William Newburry, Professor and Chair, and SunTrust Bank Professor
Donald Roomes, Senior Instructor and Assistant Chair
Sungu Armagan, Instructor
Brooke Buckman, Assistant Professor
Eric Cartaya, Instructor
Aya Chacar, Professor and Ingersoll-Rand Professor
Jose de la Torre, Professor Emeritus
Stav Fainshmidt, Assistant Professor
Carolina Gomez, Associate Professor, International
Master of Business Administration Program
Doreen Gooden, Senior Instructor
Konstantinos Grigoriou, Assistant Professor
Jerry Haar, Clinical Professor
Nathan J. Hiller, Associate Professor and Kinght-Ridder Research Fellow
K. Galen Kroeck, Professor

Arun Kumaraswamy, Associate Professor
Sumit Kundu, Professor, James K. Batten Eminent Scholar Chair in International Business and Associate
Dean, International Programs, Academic Director, MIB Programs
Curba Lampert, Assistant Professor
Karl O. Magnusen, Professor Emeritus
Modesto A. Maidique, Professor, FIU President Emeritus and Alvah H. Chapman Eminent Scholar Chair in Leadership
Louis Melbourne, Senior Instructor
Ronaldo Parente, Associate Professor and Knight-Ridder Research Fellow
Karen Paul, Professor
Samantha Paustian-Underdahl, Assistant Professor
Clifford R. Perry, Distinguished Executive Professor
Seema Pissaris, Clinical Professor
David Ralston, Professor
Dileep Rao, Clinical Professor
Juan Sanchez, Professor and Knight Ridder Byron Harless Eminent Scholar Chair in Management
Philip Shepherd, Associate Professor
Mary Ann Von Glinow, Professor and Knight Ridder
Eminent Scholar Chair in International Management
Fred Walumbwa, Associate Professor
Marc Weinstein, Clinical Associate Professor and
Academic Director, MSHRM Programs
David Wernick, Senior Lecturer
Participating Adjunct Faculty

| Kevin W. Brown | Martin C. Luytjes |
| :--- | :--- |
| Andrew Carbon | Juan Pujol |
| G. Ronald Gilbert | Eduardo Safille |
| S. Shawn Khosravi | David Wilson |
| John Kleban | Andrew Yap |
| Kaihan Krippendorff |  |

Kaihan Krippendorff
The Management and International Business Department includes an internationally-oriented and dedicated faculty with expertise in strategic management, change management, human resource management, organizational behavior and international business.

Our curriculum is designed to prepare students for successful management careers in the global business arena and in a variety of organizations. Our graduates are
armed with an understanding of the management discipline, a broad intellectual framework for managing in an evolving marketplace, the ability to lead and work within teams, computer literacy, and solid communication skills.

## Master of Science in Human Resource Management

## Admission Requirements

To be eligible for admission to the Masters of Science in Management in Human Resources Management, students must:

1. Hold a Bachelor's degree from an accredited college or university;
2. Earned a GPA of 3.0 or better in all their upper divisions course work;
3. Have at least 5 years of work experience, of which at least 2 years should be in the HR field;
4. Obtain two letter of recommendation from either faculty members at their undergraduate institution, professional supervisors or business associates;
5. Complete a personal interview with the faculty advisor or the program manager for the MSHRM program;
6. Demonstrate graduate level writing competency by submitting a 2-3 page essay on their motivation to attend the program, including personal and career goals, and contributions they may bring to their colleagues and fellow students;
7. Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency in the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on paper-based version) or 6.5 overall of the International English Language Testing System (IELTS).
Admissions are competitive and meeting the minimum program requirements does not guarantee admissions.
The Master of Science in Human Resource Management is designed for professionals and executives in the field of human resource management, as well as for college graduates interested in a career in the field. The MSHRM is a value-added program where students proceed through courses in a lock-step process designed to maximize the value of the program. This program is designed to be completed in 12 months. Students can choose from two delivery formats, online or on campus with classes meeting only on Saturdays. The students will also have extensive interaction with an Advisory Board, which is made up of leading HR professionals from the South Florida area.

To complete the program successfully, students must maintain a " $B$ " average (3.0 GPA). For further information, please contact the program manager at (305) 348-5945, or visit our web site at http://mshrm.fiu.edu.

The following courses are required for the MSHRM degree.

## Core Courses

MAN 6297 Labor Issues and Conflict Management 3
MAN 6626 International Human Resource Management
MAN 6347 Performance and Talent Management 3

| MAN 6157 | Wellness Management |
| :---: | :---: |
| MAN 6316 | Human Resource Management Metrics |
| MAN 6403 | Employment Law and Human Resource Management |
| MAN 6385 | Human Resource Strategy and Planning |
| MAN 6365 | Staffing Organizations |
| MAN 6336 | Reward Systems Management |
| MAN 6359 | Human Resource Knowledge Management |
| MAN 6327 | High Involvement Human Resource Management |
| MAN 6317 | Critical Thinking in Human Resource Management |
| Required Professional Development Course: |  |
| Required to select one (1) of the following |  |
| Professional Development Seminar courses: |  |
| MAN 6356 | Professional Development Seminar I |
| MAN 6946 | Human Resource Management Internship |

## Entrepreneurship

The Eugenio Pino and Family Global Entrepreneurship Center, founded in 2003 at Florida International University, facilitates all entrepreneurial activities at FIU. The Center's programs provide campus-wide awareness of entrepreneurship as an approach to life that enhances and transcends traditional academic experiences. It is woven into the fabric of FIU through activities and courses across the university.

The multi-dimensional nature of the program allows it to address the unique entrepreneurial needs of one of the nation's largest ethnically diverse academic institutions, located in one of America's most entrepreneurial and dynamic international cities, Miami.

Whether in the arts, sciences, business, engineering, or humanities, entrepreneurship at FIU adds value to every discipline and enhances the creativity and innovation of students, faculty, staff, and alumni. The Center encourages students from all disciplines to enroll in entrepreneurship courses.

All academic courses in entrepreneurship and other educational activities are offered on a campus-wide basis.
The Department of Management and International Business and the Department of Industrial and Systems Engineering are primary partners in the academic endeavors of the Center. As such, both Departments have a range of courses and programs at the Master's and Doctoral level for students focusing on careers in Entrepreneurship.

## Entrepreneurship Specialization within the Evening MBA Program

The Evening Master of Business Administration (EVEMBA) program is designed to give students a general management education to help them prepare for advancement in their business careers. While in the program, students may select an area of business within which to specialize: Marketing, Entrepreneurship, Human Resources, Management Information Systems, Finance, Accounting, and International Business.

In order to specialize in the area of entrepreneurship, students enrolled in the EVEMBA program must take the following required courses ( 6 credits hours):

MAN 6805 Entrepreneurship*
ENT 6116 Business Plan Development*
Plus two of the following elective courses ( 6 credit-hours):
FIN 6477 Entrepreneurial Finance
ENT 6019 Starting and Growing Professional Practice
MAN $6865 \quad$ Family Owned Businesses
MAN 6057 Managing Innovation
MAN 6086 Product and Service Development
MAN 6446 Negotiations
MAN 6678 International Entrepreneurship
*Evening MBA students may take this course as a requirement toward their specializations in finance, marketing, management, or international business.

## Doctoral Studies Program

The Doctoral Studies Program in Business Administration is a selective one leading to the Ph.D. degree. The program emphasizes the development of research and teaching skills to ensure the graduates acquire the credentials necessary for placement in leading institutions.

Each doctoral student's program of study is individually tailored to mesh faculty and student interests and to maintain a high level of interaction between the students and faculty.

The program generally requires three to four years of full-time study, including approximately one to one-and-one-half years of dissertation research. A set of core, or "tool area" business courses, geared toward establishing the student's breadth of knowledge, is required of all doctoral candidates during the first year of study. The second year of coursework focuses on a particular area of concentration to develop the student's depth knowledge in a specific discipline. The Department of Management and International Business offers a Ph.D. concentration in Management. Students may focus their studies on Strategic Management, Entrepreneurship, International Business and International Management, Human Resource Management, Organizational Behavior, and Hospitality Management.

## Required Courses

MAN $7275 \quad$ Organizational Behavior Management MAN 7895 Seminar in Management and either
MAN $7616 \quad$ Multinational Firm Global Strategy or
MAN $7718 \quad$ Analysis of Corporate Policy

## Content Courses: (Minimum of 3 courses)

MAN 7146 Leadership
MAN 7147 Leadership II
MAN $7148 \quad$ Intuition in Management
MAN $7206 \quad$ Organizational Analysis
MAN 7207 Theories of Organization
MAN $7235 \quad$ Management Philosophy and Strategy
MAN 7305 Human Resource Management
MAN 7412 Labor-Management Topics
MAN 7609 Comparative Management
MAN 7620 International Business Operations I
MAN 7621 International Business Operations II

## Required Research Methods Courses:

MAN $7155 \quad$ Fundamentals of Behavioral Research
MAN 7910 Advanced Management Research

| MAN 7640 | International Business Research <br> Methods <br> and |
| :---: | :--- |
| QMB 7910 | Quantitative Research Methods in <br> Business <br> or |
| GEB 7911 | Quantitative Research Methods in <br> Business <br> or |
| MAN 7984 | Doctoral Research Seminar: <br> Development and Utilization of Large |
|  | Scale Datasets |

Minimum of 4 Statistical Courses (not listed here)

Research Project Courses
ACG 7906
Independent Study (Required 6 hour course)
MAN 7936 Doctoral Seminar in Business
MAN $7980 \quad$ Ph.D. Dissertation
(Minimum of 24 credit hours)

## Master of Science in Finance/Master in International Business Joint Degree Program

The Department of Finance and the MIB programs in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University are proposing a joint degree program culminating in both a Master in International Business (MIB), and a Master of Science in Finance. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MIB or MSF students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. The two degrees will have four common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSF courses transferred to meet MIB elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MSF and MIB degree programs may adjust these exact course requirements as a result of future changes to the MSF or MIB curriculums.
3.1. To obtain the MIB degree, MSF students who have finished their core courses, must complete a total of 36 credit hours as follows:

In the MIB program (24 credits hours):
MAN 6617 Managing Global Production and
MAR 6158 Technology

3
national Marketing
BUL 6850 International Business Law 3

| MAN 6635 | International Business Policy | 3 |
| :--- | :--- | ---: |
| MAN 6679 | Master's Project in International |  |
|  | Business | 3 |
| MAN 6601 | International Management | 3 |
| MAN 6606 | International Business Environment 3 |  |
| MAN 6930A | Master's Seminar in Management 1 1 |  |
| MAN 6930B | Master's Seminar in Management 2 1 |  |
| MAN 6930C | Master's Seminar in Management 3 1 |  |

From the MSF program (12 credit hours) will be transferred as follows:
FIN $6644 \quad$ Global Financial Strategy 3
FIN $6465 \quad$ Financial Planning and Statements Analysis

3
MAN 6606 International Business Environment 3
FIN 6XXX Elective 3
FIN 6XXX
Elective
3
3.2. To obtain the MSF degree, MIB students who have finished their core courses, must complete a total of 33 credits hours as follows:

From the MSF program (21 credit hours):
FIN $6406 \quad$ Corporate Finance 3
FIN $6456 \quad$ Quantitative Method in Financial Analysis

3
FIN $6246 \quad$ Financial Markets and Institution 3
FIN 6515 Securities Analysis 3
FIN 6525 Portfolio Management 3
FIN $6465 \quad$ Financial Future and Fixed Income Investments

3
FIN 6487 Financial Risk Management 3
From the MIB program (12 credit hours) will be transferred as follows:

| FIN 6644 | Global Financial Strategy | 3 |
| :--- | :--- | :--- |
| ACG 6255 | International Accounting | 3 |
| FIN 6XXX | Finance Elective 1 | 3 |
| FIN 6XXX | Finance Elective 2 | 3 |

4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 57 credit hours to get both degrees. Without the joint degree program students will need to take 69 credit hours to get both degrees. Thus, MIB students who have taken twelve credits of MSF common courses may obtain an MSF degree with an additional 21 credits. MSF students who have taken twelve credits of the MIB classes, may obtain an MIB degree with an additional 24 credits.

## Master of Science in Human Resource Management/Master of Business Administration Joint Degree Program

The Department of Management \& International Business and the MBA program in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University have a joint degree program culminating in both a Master of Business Administration degree (MBA), and a Master of Science in Human Resource Management (MSHRM). Under the joint degree program, a student can obtain both degrees in significantly less time than it would
take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the joint degree student contract the intention to pursue both programs. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention by completing the request to enter a joint degree program.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MSHRM students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree:
a. To obtain the MSHRM degree, the student will be required to take twelve (12) 3-credit HR courses. This includes the existing HR Strategy course (MAN 6385) - which can replace the Strategic Management course in the core MBA curriculum (MAN 6726) - plus eleven HR courses from the MSHRM program, for a total of 36 credit hours. Four of these eleven MSHRM courses will be used to satisfy the elective requirements of the MBA program.
b. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements, that is, three prerequisites ( 9 credits unless waived), four one-credit seminars, ten 3 -credit core courses and four 3-credit electives, for a total of $46-55$ credits depending on prerequisites.
c. Two degrees will have five common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSHRM courses transferred to meet MBA elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MSHRM degree programs may adjust these exact course requirements as a result of future changes to the MBA or MSHRM curriculums.
4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all degree requirements for the first program as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 67-76 credit hours (depending on prerequisites) to get both degrees. Without the joint degree program students would need to take 82-91 credits hours (depending on prerequisites) to get both degrees. Thus, MBA students who have taken twelve credits of MSHRM common courses may obtain an MSHRM degree with an additional 21 credits. MSHRM students who have taken three credits of an MBA core MSHRM course may obtain an MBA degree with only 40 credits.

For additional information, contact the MBA office at (855) 348-7622 or the Master of Science in Human Resource Management office at (305) 348-5945.

## Master of Business <br> Administration/Master in International Business Joint Degree Program

The MIB and MBA programs in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University are proposing a joint degree program culminating in both a Master of Business Administration degree (MBA), and a Master in International Business (MIB). Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MIB students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Candidates must satisfy all requirements for each degree. The two degrees will have four common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MIB courses transferred to meet MBA elective credit and vice versa must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MIB degree programs may adjust these exact course requirements as a result of future changes to the MBA or MIB curriculums.
3.1. To obtain the MIB degree, MBA students who have finished their core courses, must complete a total of 36 credit hours as follows:

| In the MIB program (24 credits hours): |  |
| :---: | :---: |
| ACG 6255 | International Accounting 3 |
| MAN 6617 | Managing Global Production and Technology |
| MAR 6158 | International Marketing 3 |
| MAN 6606 | International Business Environment 3 or |
| International Business Elective 3 |  |
| International | ness Elective 3 |
| MAN 6679 | Master's Project in International Business |
| MAN 6601 | International Management 3 |
| MAN 6930A | Master's Seminar in Management 11 |
| MAN 6930B | Master's Seminar in Management 21 |
| MAN 6930C | Master's Seminar in Management 31 |

From the MBA program (12 credit hours) will be transferred as follows:
BUL 6810 Legal Environment

FIN 6644
MAN 6726
MAN 6606

Global Financial Strategy 3 Strategic Management 3 International Business Environment 3 or
International Business Elective
(the one different from MIB program)
3.2. To obtain the MBA degree, MIB students who have finished their core courses, must complete a total of 46 to 55 credits hours (depending on prerequisites) as follows:
From the MBA program (34-43 credit hours):
Three prerequisite courses, unless waived (9) credits
ACG 6026 Accounting for Managers
ECP 6705 Managerial Economics
QMB 6357C Business Analysis for Decision Making
MAN 6209 Organizational Design and Behavior

3
FIN $6406 \quad$ Corporate Finance 3
ACG 6175 Financial Reporting and Analysis 3
MAN 6830 Organization Information Systems 3
MAN 6501 Operations Management 3
MAR 6816 Corporate Simulation 3
MAR 6805 Marketing Management in the Global Environment
MAN 6703
Colloquium in Managing Organizational Ethics
MAN 6356 PDS I 1
MAN 6357 PDS II 1
MAN 6358 PDS III 1
Elective 1
Elective 2
Elective 3
From the MIB program (12 credit hours) will be transferred as follows:

| BUL 6850 | International Business Law | 3 |
| :--- | :--- | ---: |
| FIN 6644 | Global Financial Strategy | 3 |
| MAN 6606 | International Business Environment 3 |  |
| MAN 6635 | International Business Policy | 3 |

4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
5. With the joint degree program students will take a total of 70-79 credit hours (depending on prerequisites) to get both degrees. Without the joint degree program students will need to take 82-91 credit hours (depending on prerequisites) to get both degrees. Thus, MBA students who have taken twelve credits of MIB common courses may obtain an MIB degree with an additional 24 credits. MIB students who have taken twelve credits of the MBA classes, may obtain an MBA degree with an additional 34-43 credits (depending on prerequisites).

## Master of International Business/Juris Doctor Joint Degree Program

The faculties of the College of Law and the College of Business at Florida International University have approved a joint degree program culminating in both a Juris Doctor degree, awarded by the College of Law, and a Master of

International Business degree, awarded by the College of Business. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. Essential criteria relating to the joint degree program are as follows:

1. Candidates for the program must meet the entrance requirements for and be accepted by both Colleges.
Both Colleges must be informed by the student at the time of application to the second program that the student intends to pursue the joint degree.
2. The joint degree program is not open to students who have already earned one degree.
3. For law students, enrollment in the MIB program is required no later than the completion of 63 credit hours in the JD program. For MIB students, enrollment in the JD program is required no later than the time that the student has completed one-half of the MIB curriculum.
4. A student must satisfy the curriculum requirements for each degree before either degree is awarded. The College of Business will allow 9 credit hours of upper level international and comparative law courses to be credited toward both the MIB and JD degrees. These 9 credit hours of law classes will be in lieu of the International Business Law course (3 credit hours) and any two other courses (totaling 6 credit hours) in the MIB curriculum. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the JD degree for courses taken in the MIB curriculum upon completion of the MIB degree curriculum with a grade point average of 3.0 or higher.
5. A student enrolled in the joint degree program may begin the student's studies in either College, but fulltime law students must take the first two semesters of law study consecutively and part-time law students must take the first three semesters of law study consecutively. Students admitted to one College but electing to begin study in the other College under the joint degree program may enter the second College thereafter without once again qualifying for admission so long as they have notified the second College before the end of the first week of the first semester in the second College and are in good academic standing when studies commence in the second College.
6. A student enrolled in the joint degree program will not receive either degree until the student has satisfied all of the requirements for both degrees, or until the student has satisfied the requirements of one of the degrees as if the student had not been a joint degree candidate.
7. Students in the joint degree program will be eligible for the graduate teaching assistantships and research assistantships in the College of Business on the same basis as other MIB students, subject to the guidelines and restrictions set by the College of Business.
For additional information, contact the MIB office at (305) 348-3279 or the Law School Admissions Office at
(305) 348-8006.

## Master of International Business/Master of Arts in International Studies Joint Degree Program

The Department of Politics and International Relations and The Alvah H. Chapman Jr. Graduate School of Business at Florida International University are proposing a joint degree program culminating in both a Master in International Business (MIB), and a Master of Arts in International Studies (MAIS). Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already graduated with either degree. MIB or MAIS students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements, including the comprehensive examination for the MAIS degree.
3. Candidates must satisfy all requirements for each degree. The two degrees will have four common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. Courses transferred to meet elective credits must be 5000 or 6000 level courses. Directors of the MAIS and MIB degree programs may adjust these exact course requirements as a result of future changes to the MAIS or MIB curriculums.
3.1. To obtain the MIB degree, MAIS students who have successfully completed the required 36 credits must, additionally, complete 24 credit hours in the MIB program as follows:

| MAN 6617 | Managing Global Production and |  |
| :--- | :--- | :--- |
|  | Technology | 3 |
| MAR 6158 | International Marketing | 3 |
| MAN 6635 | International Business Policy | 3 |
| MAN 6679 | Master's Project in International |  |
|  | Business | 3 |
| MAN 6601 | International Management | 3 |
| FIN 6644 | Global Financial Strategy | 3 |
| ACG 6255 | International Accounting | 3 |
| MAN 6930A | Master's Seminar in Management 1 1 |  |
| MAN 6930B | Master's Seminar in Management 2 1 |  |
| MAN 6930C | Master's Seminar in Management 3 1 |  |

In order to satisfy the 36 credits hours required by the MIB program, 12 credit hours will be transferred from the MAIS program as follows:

| INR 6017 | Comparative Approaches to Area |  |
| :--- | :--- | :--- |
|  | Studies and Global Issues | 3 |
| INR 5409 | International Law | 3 |
| Elective 1 |  | 3 |
| Elective 2 |  | 3 |

3.2. To obtain the MAIS degree, MIB students who have successfully completed the required 36 credits
must, additionally, complete 24 credit hours in the MAIS program as follows:
INR $6706 \quad$ Political Economy of International Relations

3
INR 5615 Research Design and International Relations

3
GEO 6473 Space, Place and Identity 3
INR 5609 Contemporary Dynamics of International Relations 3
INR 6017 Comparative Approaches to Area Studies and Global Issues
Field course 1 3
Field course 23

Field course 3
In order to satisfy the 36 credits hours required by the MAIS program, 12 credit hours will be transferred from the MIB program as follows:

| MAN 6606 | International Business Environment 3 |  |
| :--- | :--- | ---: |
| BUL 6850 | International Business Law | 3 |
| Elective 1 |  | 3 |
| Elective 2 |  | 3 |

All MAIS students coming into the MIB program will be required, during the first month of classes, to take a 16 -hour workshop in Accounting and a 16 -hour workshop in Quantitative Methods. The purpose of these workshops is to ascertain that students have the necessary background in both of these fields. Students must pass each workshop with at least a B grade (there is no charge for this workshop). Otherwise, they must register, and pay the corresponding tuition for the Accounting class (ACC 6026) and/or the Quantitative methods class (QMB 6357 ) in the Evening MBA program, and earn a grade of $B$ or higher.
4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.

## Marketing

Anthony Miyazaki, Professor and Chairperson
Alexandra Aguirre-Rodriguez, Associate Professor
Craig Austin, Visiting Instructor
Elisabeth Beristain, Instructor
Tim Dugan Birrittella, Senior Instructor
Yi-Ju Vivian Chen, Senior Lecturer
Peter R. Dickson, Professor and Ryder Eminent Scholar
Chair in Global Logistics Management
Maria M. Garcia, Instructor
Jonathan N. Goodrich, Professor
Wendy Guess, Visiting Instructor
Walfried M. Lassar, Ryder Professor and Associate Dean
Tiger Li, Associate Professor
Greg Maloney, Visiting Instructor
Ron Mesia, Instructor and Director, Ryder Center for
Supply Chain Management
Paul Miniard, Professor
Gustavo Mosquera, Visiting Instructor
Anna Pietraszek, Instructor
Nancy Rauseo, Senior Lecturer
Nancy Richmond, Instructor
Jessica Rixom, Assistant Professor
Raymond Rody, Clinical Professor
Bruce Seaton, Associate Professor
Jayati Sinha, Assistant Professor
Rafael Soltero, Instructor
Jaclyn Tanenbaum, Visiting Instructor
Kimberly Taylor, Associate Professor
John Tsalikis, Professor and BMI Marketing Professor
The Department of Marketing offers a Master of Science in Marketing and a concentration in Marketing for the Ph.D. program.

The Department of Marketing boasts an internationally diverse, experienced, widely published, and highly involved faculty. Our faculty includes recognized experts in digital marketing, branding, marketing analytics, consumer behavior, social media, marketing management, international marketing, logistics and supply chain management, distribution channels and business ethics.

The study of marketing involves learning about how best to make a host of key decisions and implement them in an organization. Some of these decisions include:

- Selection of profitable product/service offerings
- Market segment selection and targeting strategies
- Product/service positioning
- Digital marketing and social media strategies
- Distribution, logistics, and supply chain management
- Pricing and the management of price perceptions
- Advertising, promotion, and customer relations

You can study topics like marketing management, market research, consumer behavior, export marketing, digital marketing, social media, marketing channels, retailing, international marketing, advertising, promotional strategy, personal selling, sales management, marketing analytics and strategic marketing.

## Master of Science in Marketing

The Master of Science in Marketing is a one year (10month) program that will provide rigorous graduate education focused on areas of marketing that are relevant
to, and demanded by today's business environment, namely, digital marketing, brand development, and marketing analytics.

The program will be taught in a lockstep fashion that allows each course to be integrated into the overall theme of the program such that examples and exercises that are relevant to the three areas of focus will be used to reinforce students' learning. Likewise, the overall focus of digital, branding, and analytics will be incorporated into each course. As a whole, the program will cover digital marketing (from general e-marketing to social media to digital marketing strategies), the psychology and economics of buyer behavior, how to conduct marketing research in today's electronic environment, the development of brand equity and its implications for organizational success, the use of marketing analytics to improve the efficiency of marketing activities, as well as marketing management and overall strategy.

## Admission Requirements

To be eligible for admission to the program, students must:

1. Hold a bachelor's degree (or equivalent) from an accredited college of university;
2. Have a minimum GPA of 3.0 (on a 4-point scale) in all of their upper division course work or have earned a graduate degree with a minimum of a 3.0 GPA;
3. Provide three letters of recommendation from professional supervisors and/or former faculty that attest to the applicant's educational background, motivation, and analytical skills;
4. Provide a series of personal statements regarding their motivation to attend the program, personal and career goals, and contributions that they will bring to their colleagues and fellow students;
5. Have at least 3 years of professional work experience or score at least 500 on the Graduate Management Admissions Test (GMAT) or the equivalent on the Graduate Record Exam (GRE);
6. Complete an interview with one of the faculty advisors or the director of the program;
7. Applicants who studies were completed outside of the US must demonstrate proficiency in the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version) or 6.5 overall on the International English Language Testing System (IELTS); and
8. Be in good standing at all previously-attended colleges and universities.
Admissions at the graduate level are competitive and meeting the minimum program requirements does not guarantee admission.

## Graduation Requirements

Completion of 10 graduate courses equivalent to 30 graduate credit hours and the completion of a series of Professional Development Seminars and/or an Internship approved by the Faculty Advisor.
To be eligible for a Master's degree, a student must:

1. Satisfy all university requirements for a master's degree;
2. Satisfy any required prerequisites;
3. Complete any required professional development seminars and/or internships;
4. Complete required courses in the enrolled graduate program; and
5. Earn a minimum average of " $B$ " (3.0) in all approved courses in the student's approved course of graduate study.

No courses in which a graduate student earns a grade below "C" may be counted toward any master's degree program in the Chapman School. However, all approved undergraduate and graduate course work a graduate student takes will be counted in computing his or her grade point average, including courses in which he or she earned a "D" or "F" grade.

## Required Courses

MAR $6805 \quad \begin{aligned} & \text { Marketing Management in the Global } \\ & \\ & \text { Environment }\end{aligned}$
MAR 6722 E-Marketing 3
MAR 6506 Consumer Behavior 3
MAR 6646 Marketing Research 3
MAR 6880 Social Media Marketing 3
MAR 6336 Integrated Marketing Communication 3
MAR 6675 Marketing Analytics 3
MAR 6838 Brand Management 3
MAR 6735 Digital Marketing Strategies 3
And one of:
MAR $6819 \quad$ Marketing Strategy 3
MAR 6936 Special Topics in Marketing 3
MAR 6075 Current Issues in Marketing I 3
Professional Development Seminars and/or an appropriate internship will be required.

## Marketing Concentration in the Ph.D. Program

All students are required to complete a minimum of 15 courses in addition to the College Colloquium series. Students concentrating in Marketing must take all seven of the seminars offered by the Marketing Department; these seminars are listed below. In addition, students are required to take a two-course sequence in research methods and between two to four courses in statistics (the number of required courses in statistics depends upon the student's level of statistical knowledge upon entering the program). Other coursework will be selected by the student with the advice and consent of the Department's Ph.D. Committee. To remain in the program, students are expected to maintain a GPA of 3.5 or better in the seven courses comprising the Marketing concentration. In addition, students are expected to maintain a GPA of 3.3 or better in all of their other coursework.

## Required Marketing Seminars

| MAR 7246 | Seminar in International Marketing |
| :--- | :--- |
| MAR 7507 | Seminar in Consumer Behavior |
| MAR 7623 | Seminar in Marketing Environment |
| MAR 7399 | Seminar in Advertising and Persuasion |
| MAR 7205 | Seminar in Channels of Distribution |
| MAR 7665 | Seminar in Marketing Models |
| MAR 7817 | Seminar in Marketing Management |

## Research Projects

Students' research skills are further developed through summer projects during their first and second years in the program. These projects are supervised by faculty and are multi-faceted in their intended purpose.

Many students have never been involved with a research project from start to finish. The first year project is intended to familiarize students with the research process. The emphasis is on executing a manageable project during the allotted time rather than the novelty of the thinking behind the research. Much more emphasis is given to the creativity of the research for the second summer project. Ideally, this research would serve as a stepping stone for the student's dissertation, which will be the focus of the last two years of the program. Both summer projects require the submission of a written paper and presentation to the marketing faculty.

## Course Descriptions

## Definition of Prefixes

ACG-Accounting; BUL-Business Law; COP-Computer Programming; ECP-Economic Problems and Policy; ENTEntrepreneurship; FIN-Finance; GEB-General Business; HIM-Health Information Management; HSA-Health Services Administration; ISM-Information Systems Management; MAN-Management; MAR-Marketing; QMBQuantitative Methods in Business; REE-Real Estate; TAXTaxation; TRA-Transportation.
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering.

## Departmental or School/College Designation:

AC - School of Accounting
BA - College of Business
FI - Finance
IS - Information Systems and Business Analytics
MA - Management and International Business
ME - Marketing
RE - Real Estate
ACG 5137 Standards and Principles of Financial Accounting (AC) (3). A survey of official pronouncements on accounting standards and principles. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5256 International Dimensions of Accounting and Auditing (AC) (3). Review of and reasons for variations in accounting and auditing practices throughout the world; explore initiatives undertaken to promote transparency, harmonization, and standardization to facilitate understanding of financial statements prepared under various conventions. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5307 Advanced Managerial Accounting (AC) (3). In depth study of determination and control of production costs; budgetary control; CVP analysis; and alternative methods of performance measurement and analysis. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5386 Controllership (AC) (3). Study of controllership function; role of controller in planning, accounting for, and evaluating company performance; relationship with internal auditing. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5395 Seminar in Managerial Accounting (AC) (3). An in-depth study of selected areas of managerial accounting. Prerequisites: ACG 4341 or equivalent and permission of Accounting certificate program advisor.
ACG 5507 Issues and Problems in Accounting for Non-Profit Entities (AC) (3). Study and analysis of accounting, reporting, and control standards and practices of non-profit organization -including accounting for governments, hospitals, universities, churches, and others. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5516 The Environment of Government Accounting (AC) (3). Basic public administration emphasizing governmental processes with which governmental accountants and auditors come into contact. Includes legislative and administrative activities and operating functions having high accounting and auditing
involvement. Prerequisite: Permission of accounting certificate program advisor.
ACG 5518 Historical and Comparative Government Accounting (AC) (3). Research and reporting on subjects in the history of, or on comparative aspects of, government accounting. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5519 Contemporary Issues in Government Accounting (AC) (3). Research and reporting on current issues related to government accounting. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5545 Analysis of Governmental Financial Reports (AC) (3). Describes content of government financial reports and analytical methods employed by internal and external users; covers concepts of disclosure, budget/actual analysis, credit evaluations, operational evaluations, measures of fiscal capacity and signs of fiscal stress. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5546 Governmental Planning and Budgetary Accounting with Cases (AC) (3). Budgeting in governments emphasizing formulation based on accounting and auditing input. Budget execution and analysis of deviations of actual from budgets; study of ZBB, PPBS, and MBO systems and their behavioral and accounting bases. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5596 Accounting for Specialized Governmental and Nonprofit Entities (AC) (3). Survey course by guest lecturers covering detailed accounting concepts, procedures, and reporting for enterprise fund entities, educational entities, and unique types of internal service funds. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5627 Systems Auditing (AC) (3). Principles and procedures of auditing systems of information, including the function, approach, and techniques of systems auditing and the evaluation of systems controls. Emphasis on auditing computerized systems. Prerequisite: Permission of Accounting certificate program advisor.
ACG 5696 Seminar in Auditing (AC) (3). An in-depth study of recent developments in auditing. Prerequisites: ACG 4651 or equivalent and permission of Accounting certificate program advisor.
ACG 5806 Seminar in Financial Accounting (AC) (3). An in-depth study of recent developments in financial accounting. Prerequisite: ACG 4111 and permission of Accounting certificate program advisor.
ACG 5846 Statistical Methods in Accounting and Auditing (AC) (3). Formulation, analysis and implementation on a microcomputer of mathematical models in financial and managerial accounting and auditing. Prerequisite: Permission of Accounting certificate advisor.
ACG 5905 Independent Study in Accounting and Auditing (1-3). Individual conferences, supervised readings, and reports on personal investigations. Prerequisites: Written permission of the instructor, accounting certificate program advisor, School Director, and Dean.

ACG 5936 Special Topics in Accounting and Auditing (AC) (3). For groups of students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Prerequisites: Written permission of the instructor, accounting certificate program advisor, School Director, and Dean.
ACG 6026 Accounting for Managers (AC) (3). Presentation of the nature, techniques and uses of accounting from the perspective of people who manage businesses and investments in businesses. Covers both financial and management accounting. Not open to EMST or MACC students.
ACG 6105 Accelerated Financial Accounting I (AC) (4). Underlying concepts and ethical, regulatory and business environment of financial reporting; emphasis on measurement, analysis and interpretation of income, cash flows and financial position. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the School Director. Not open to those with undergraduate accounting degrees.
ACG 6115 Accelerated Financial Accounting II (AC) (4). Underlying concepts and ethical, regulatory and business environment of financial reporting; emphasis on measurement, analysis and interpretation of financial position, accounting partnerships, international corporations. Prerequisites: ACG 6105 and admission to a graduate program in the School of Accounting or permission of the School Director. Not open to those with undergraduate accounting degrees.
ACG 6135 Seminar in Financial Accounting Theory I (AC) (3). A study of the theoretical structure of accounting, with special attention to asset and income definition, recognition, and measurement; and an appraisal of pronouncements of professional accounting organizations. Prerequisites: Baccalaureate in accounting or equivalent and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.

ACG 6145 Seminar in Financial Accounting Theory II (AC) (3). A continuation of ACG 6135, with emphasis on the problems of accounting for price-level changes and other current issues. Prerequisites: ACG 6135 and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6175 Financial Reporting and Analysis (AC) (3). Comprehensive treatment of analysis of financial statements as aid for decision making; looks at current state of financial reporting practices and impact of published statements on economic systems. Prerequisites: ACG 6026, FIN 6406 or equivalent. Not open to EMST or MACC students.
ACG 6176 Evaluation of Financial Reports, Business Analysis and Valuation (3). Seminar examining quality of financial reports and adjusting for investment decisions. Valuation models are used to value firms given economic and industry characteristics and alternative business strategies. Prerequisites: ACG 4111, ACG 4201, or permission of the Director of the School of Accounting.
ACG 6225 Value Added Accounting Practices in Strategic Business Decisions (3). Seminar examining role and inputs of accounting, finance, and taxation in
strategic decisions. Mergers, acquisitions, and corporate restructuring is the frame-work used to bring these issues into focus. Prerequisites: Master of Accounting students only; must be in final semester of program.
ACG 6245 Accounting and Auditing Compliance Issues (AC) (3). Corporate, government and public accounting compliance with response to institutional and political regulation; attention to compliance in specialized industries such as health care, transportation, financial institutions real estate and construction. Prerequisites: ACG 4111 or equivalent, ACG 4651 and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6255 International Accounting (AC) (3). Comparative analysis of accounting concepts and practices in different countries; international accounting standards; problems of accounting for multinational corporations, including transfers of funds and income measurements; the role of accounting in national economic development. Prerequisites: ACG 6026 or equivalent, not open to MACC students.
ACG 6257 Global Accounting, Auditing and Financial Strategy (3). Evaluation of U.S. GAAP, International Accounting Standards and the international dimensions of auditing. Consideration is given to geopolitical issues, international organizations, and role of regulators. Prerequisites: ACG 4111, ACG 4651, ACG 6176, or permission of the Director of the School of Accounting.
ACG 6295 Financial Accounting IV (AC) (3). The application of accounting principles in the production of information for selected topics in financial statements with extensive examination and evaluation of FASB and international standards of accounting. Prerequisites: Admission to a graduate program in the School of Accounting or the permission of the Director of the School of Accounting.
ACG 6345 Management Accounting and Control (AC) (3). Accounting concepts and techniques useful in evaluation, planning, organization and control of a business enterprise, with attention to methods of accounting for production activities; ethics in management accounting. Prerequisites: ACG 4111 and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting. Not open to those with undergraduate accounting degrees.
ACG 6346 Seminar in Managerial Accounting I (AC) (3). Analysis of transfer pricing; product pricing; incremental profit analysis; decision models; alternative performance measurement techniques; and other advanced topics. Prerequisites: ACG 4341 or ACG 6026, and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6356 Seminar in Managerial Accounting II (AC) (3). A study of the controllership function in corporate organizations; an appraisal of the controller's role in planning, accounting for, and evaluating company performance; and relationship to internal audit function. Prerequisites: ACG 4341 and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.

ACG 6385 Managerial Control and Controllership (AC)
(3). Control methods for management; control structure, planning and forecasting for budgets; the functions of controllership, including cash management, risk management, investments, tax administration and records management. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.

ACG 6405 Seminar in Accounting Information Systems I (AC) (3). Accounting information systems security and control and legal and ethical compliance; control of computer failure and abuse and compliance with laws, regulations, and standards. Computer usage required. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.

ACG 6406 Accounting Data Warehousing and Analysis (3). Framework for enterprises to provide comprehensive access to organization wide accounting data and to develop information systems capable of collecting, processing and arranging accounting data in comprehensive data bases. Prerequisites: ACG 6437, or permission of the Director of the School of Accounting.
ACG 6415 Seminar in Accounting Information Systems II (AC) (3). Accounting information systems for strategic use in the management of competitive enterprises; budgeting, performance measurement, and cost accounting for generating strategic information. Computer usage required. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6437 Advanced Accounting Information Systems (AC) (3). Development and control of information systems for accounting, emphasis on new microcomputer technology, software engineering, methods of data processing and database management systems. Prerequisites: ACG 4401, or permission of the Director of the School of Accounting.

ACG 6445 Accounting Information Systems Analysis and Design (AC) (3). Accounting applications of information systems analysis and design concepts, methods, and tools; requirements, design, control, and prototyping of accounting information systems. Computer usage required. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6455 Accounting Information Systems Technology, Control and Audit I (AC) (3). Accounting applications, control, and audit of large computer systems; technology, control concepts and procedures, audit testing and documentation, and control and audit software. Computer usage required. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6456 Accounting Information Systems Technology, Control and Audit II (AC) (3). Accounting applications, control, and audit of small computer systems; technology, control concepts and procedures, audit testing and documentation, and control and audit software. Computer usage required.

ACG 6466 Accounting Enterprise Resource Planning (3). Course intends to provide students with an overview
of ERP in accounting including history, concepts of ERP and role of ERP in accounting. It also provides students hands on experience with accounting application of ERP package, SAP/R3. Prerequisites: ACG 6437, or permission of the Director of the School of Accounting.
ACG 6515 Advanced Governmental Accounting (AC) (3). Treats the developing concept of consolidated financial statements for governments. Also covers advanced areas of accounting, e.g., concepts, investment accounting, grant accounting, and pension accounting. Prerequisites: ACG 6505, ACG 6584, admission to graduate program in School of Accounting or permission of the Director of the School of Accounting.
ACG 6517 Audit of Governmental Entities (AC) (3). Covers methods of audits of governments by independent public accountants, coordination with internal audit staffs; describes audits of governments by internal auditors (audits of fidelity, efficiency and effectiveness); covers current single audit concept. Prerequisites: ACG 6505, admission to the graduate program in the School of Accounting, or permission of the Director of the School of Accounting.
ACG 6625 Information Technology Auditing (AC) (3). Understanding and application of concepts and procedures of auditing computer information systems; analysis, testing, and documentation of computer security and controls for management and financial statement reports. Prerequisites: ACG 4651, ACG 6437, or permission of the Director of the School of Accounting.
ACG 6655 Auditing and Accounting Systems (AC) (4). Standards and procedures of auditing, ethics and responsibilities of auditors, audit evidence, reporting, international standards; design and control of accounting information systems. Prerequisites: ACG 4111 with a grade of ' $C$ ' or higher and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting. Not open to those with undergraduate accounting degrees.
ACG 6657 Environment of Accounting and Auditing (AC) (3). Economics and scope of accounting practice in context of self-regulated profession, public policy constraints, complex business structures and innovative transactions, and rapidly changing information technology with extensive reference to business periodicals and online databases. Prerequisites: ACG 4111, ACG 4651, or permission of the Director of the School of Accounting.
ACG 6675 Internal Auditing (AC) (3). This course examines auditing in depth as a professionalized discipline for reviewing testing, and evaluating the financial and the operational activities and controls of an economic entity. Focus will be directed to private sector profit seeking entities as well as governmental and other nonprofit organizations. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6676 Advanced Internal Auditing (AC) (3). Special topics in internal auditing such as forensic auditing, analytical auditing, management consulting, work with external auditors, ethics, multinational aspects, evaluation methods, quality control, new technologies and recent research. Prerequisites: Admission to a graduate program
in the School of Accounting or permission of the Director of the School of Accounting.

ACG 6677 Applied Internal Auditing (AC) (3). The expansion of the internal audit process into such areas as administrative and support functions; line functions such as research, sales, and production; and special areas such as compliance, budgeting and controls. Course is taught by outside lecturers. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6685 Introduction to Forensic Accounting (3). The course will define forensic accounting and will identify techniques used in domestic and foreign frauds. It also will define financial fraud, and provide mechanisms for its detection. Prerequisite: Entry into the MACC program.

ACG 6686 Fraud Examination (3). Use of technology for the prevention of financial fraud, examination of emerging practices and regulatory trends as reflected in court decisions. Prerequisites: ACG 4651, ACG 6625, or permission of the Director of the School of Accounting.
ACG 6687 Financial Investigation (3). The course will present knowledge and skills necessary to specialize in financial investigation, will identify common schemes in financial fraud and how will analyze behavioral, digital, and manual evidence. Prerequisite: Entry into the MACC Program.
ACG 6692 Business Analytics for Forensic Accounting (3). The course will involve going through a series of exercises that allow students to learn and apply forensic analytic methods and techniques. Students will learn both high-level techniques and detailed, drill-down level analysis. Prerequisite: Entry into the MACC Program.
ACG 6696 Current Issues in Auditing (AC) (3). Professional and technical aspects of auditing practice; introduction to SEC; ethics and legal responsibilities; emergence of non-public practice; public expectations and professional reality; the impact of technology; international auditing; recent auditing developments. Prerequisites: ACG 4651 and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6835 Behavioral Accounting (AC) (3). Study of the effect of the process and products of accounting and of the relation of changes in the process and products to individual and group behavior; consideration of ways in which accounting can aid individuals and organizations to attain their goals. Prerequisites: ACG 4111 and 4341 or equivalents, and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6838 Fraud Investigation (3). The course will present an in-depth study of corporate crime and fraud using case law and recent major corporate debacles as case studies to explain theories of corporate, managerial, and third party professional criminal liability. Prerequisite: BUL 6890.

ACG 6845 Accounting and Quantitative Methods (AC) (3). Study of statistical and management science techniques that are or may be utilized in financial and managerial accounting. Prerequisites: QMB 3200 and ACG 4401, or equivalents, and admission to a graduate
program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6866 Accounting for Health Care Organizations (3). Study of financial reporting and analysis applied to forprofit and NFP healthcare organizations emphasizing accounting issues related to strategic decision-making. Prerequisite: Permission of the Director of the School of Accounting.
ACG 6867 Seminar in Medicare Regulation (3). Principles of Medicare payment systems emphasizing changing role of Medicare in the American healthcare system and developing technical skills to understand, identify and research problems in Medicare payments. Prerequisite: Permission of the Director of the School of Accounting.
ACG 6875 Evolution of Accounting Thought (AC) (3). The cultural origins of accounting and its traditional controversies, from pre-historic time onward, and in an international context. Prerequisites: Admission to graduate program in School of Accounting or permission of the Director of the School of Accounting.

ACG 6885 Accounting Research and Reporting (AC) (3). Examine the projects relating to historical and current problems in public accounting practice, and preparation of appropriate reports in oral and written formats, under a variety of professional settings. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6897 Small Business Accounting and Consulting (3). Live client clinic providing business and accounting services to low income and minorities seeking to start small businesses or non-profit corporations and weekly seminars on relevant topics. Prerequisite: Fully admitted into any graduate program in the college of business.
ACG 6905 Independent Study in Accounting (AC) (13). Individual conferences; supervised readings; reports on personal investigations. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6935 Special Topics in Accounting (AC) (1-3). Intensive study for groups of students of a particular topic or a limited number of topics not otherwise offered in the curriculum. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
ACG 6940 Accounting Internship (3). Practical application in a clinical setting of knowledge acquired in the classroom. Prerequisite: Approval by Director of School of Accounting.
ACG 7157 Seminar: Theory and Contemporary Research in Financial Accounting (AC) (3). An evaluative overview of the classical literature in financial accounting and the contemporary empirical research published in the leading scholarly journals. Examined are income determination theories, normative accounting principles, accounting information and stock prices, and principal-agent relationships. Prerequisite: Permission of Doctoral advisor in Accounting.
ACG 7177 Seminar: Accounting Information and Security Prices (AC) (3). An in-depth examination of accounting information and security prices within capital
markets theory, including a thorough examination of the cross-sectional properties and time-series properties of accounting numbers and the importance of research findings and new developments in research methodology. Prerequisite: Permission of Doctoral advisor in Accounting.
ACG 7436 Seminar: Information Value and Agency Research Accounting (AC) (3). An in-depth examination of the research paradigm and the associated empirical research in accounting and auditing. Examined are the issues of information value, risk aversion, risk sharing contracts, as well as accountability from the standpoint of monitoring contracts. Prerequisite: Permission of Doctoral advisor in Accounting.

ACG 7695 Seminar: Contemporary Research in Management Accounting and Auditing (AC) (3). A broad overview of classical and contemporary empirical research in managerial accounting and auditing including budget and performance review, decision making, information analysis, professional judgment, sampling problems, audit risk, etc. Prerequisite: Permission of Doctoral advisor in Accounting.

ACG 7836 Seminar: Behavioral Research in Accounting-Individual Behavior (AC) (3). An in-depth examination of the relationship of cognitive psychology, cognitive models of human judgment, decision theory and accounting information. Emphasis is placed upon the human processing of accounting information, the decision value of information, and the development of decision aids or heuristics. Prerequisite: Permission of Doctoral advisor in Accounting.
ACG 7837 Seminar: Behavioral Research in Accounting-Human Groups and Systems (AC) (3). The multifarious behavioral relationships of groups within the formal and informal organizational structure are examined with respect to performance measurement (efficiency and effectiveness), accountability, planning and control of the development of decision support systems. Prerequisite: Permission of doctoral advisor in Accounting.
ACG 7886 Seminar: Empirical Research Methodology and Paradigms in Accounting (AC) (3). Study of research design, methods of data collection and analysis and problems of measurement in accounting research. Empirical research studies in accounting are integrated throughout to illustrate and analyze the structural problems of research design as well as the strengths and weaknesses of various acceptable paradigms. Prerequisite: Permission of doctoral advisor in Accounting.
ACG 7887 Research Forum and Workshop (AC) (1). Regularly scheduled workshop at which visiting scholars as well as faculty and doctoral candidates present and evaluate research papers. Candidates are expected to participate in discussions, act as discussants and present their own research for critique. Sessions are held for structuring and brainstorming research projects in the formative stages as well as for presenting completed efforts. Prerequisite: Permission of doctoral advisor in Accounting.

ACG 7888 Seminar: The Philosophy of Science, Theory Construction, and Verification in Accounting (AC) (3). An examination of knowledge, theories, scientific explanation and prediction as related to the social
sciences. Various theories of accounting are critically examined from the standpoint of theory construction and verification in the philosophy of science. Prerequisite: Permission of doctoral advisor in Accounting.
ACG 7889 Seminar: Positive Theory Research in Accounting (AC) (3). Construction of theory to explain accounting and auditing practices in an environment of regulation using empirical research findings from a growing body of economic-based research in accounting and finance. Prerequisite: Permission of doctoral advisor in Accounting.
ACG 7896 Accounting Research Methods on Capital Markets (AC) (3). An advanced accounting graduate course in current time series methods used to analyze capital and other time-related financial markets. This course is designed for Ph.D. students in accounting and business who already have advanced statistical and financial training, and serves as an introduction to other doctoral courses. Prerequisite: Permission of doctoral advisor in Accounting.
ACG 7906 Independent Study (1-12). Supervised accounting research projects determined by professor and student. May involve conferences, supervised reading and reports. Consent of sponsoring professor and admission to the Ph.D. program. (on demand)
ACG 7938 Seminar: Special Topics in Accounting Research (AC) (3). Topics vary according to instructor and student interest in problems and issues on the frontier issues of accounting. Prerequisite: Permission of doctoral advisor in Accounting.
ACG 7980 Ph.D. Dissertation (1-12). Original research that is supervised by a faculty committee and defended openly before the university committee. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
ACG 7981 Dissertation Preparation (1-12). Preparatory background research and study to begin development of dissertation proposal. Students should be able to complete proposal by end of the course. Prerequisite: Completion of TIER 1 courses. (on demand)
BUL 5661 Law for Accountants (AC) (3). A survey of select topics of direct interest to accounting students, including contracts, sales, agencies, partnerships, corporations.
BUL 5662 Accountant's Liability (AC) (3). Overview of accountant exposure to private and public sector liability suits, independent in auditor engagements, securities regulations and other state and federal laws of chief concern to accountants.

BUL 6810 Legal Environment of Business (AC) (3). Examines current legal, regulatory, ethical, and political issues within the context of public law. Topics include employment, antitrust, administrative, cyberlaw, and contracts and tort.

BUL 6821 Cyber Law (3). Cutting edge issues of relationship between business/society and legal issues impacting internet usage in e-commerce and topics include intellectual property, business and finance, privacy and social issues. Prerequisites: BUL 4310 or BUL 4320 and graduate standing.

BUL 6830 Survey of Business Law (AC) (3). Overview of substantive and procedural aspects of contract law, U.C.C., partnerships and corporations, accountant's liability, and other aspects of government regulation of business. Prerequisites: Admission to a graduate program in the School of Accounting, or permission of the Director of the School of Accounting. Not open to those with undergraduate accounting degrees.

BUL 6850 International Business Law (AC) (3). Analysis of legal problems facing the U.S. international and multinational businesses. Topics include the transnational research of economic regulation, international trade and investment, antitrust law, technology transfers, and securities law.
BUL 6890 Special Topics in Business Law (AC) (1-6). Intensive study for groups of students of a particular topic, or a limited number of topics, not otherwise offered in the curriculum. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
BUL 6906 Independent Study in Business Law (AC) (16). Individual conferences; supervised readings; reports on personal investigations. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
COP 7545 File and Database Management Systems (IS) (3). Fundamentals of database concepts and methodologies, including data representation, data modeling, and file organization. Prerequisite: Graduate standing. (on demand)
ECP 6432 Macroeconomic Forecasting for Management (EC) (3). Basic macroeconomics concepts as they apply to decision making within the firm. Traditional models of income determination and forecasting analysis. Prerequisite: ECP 6705. (F,S,SS)
ECP 6705 Managerial Economics (EC) (3). Basic microeconomic concepts as they apply to decision making within the organization; supply and demand; market structure and market behavior in specific industries. Prerequisites: ECO 3021 and ECO 3011.

ENT 6019 Starting and Growing a Professional Practice (3). This course is directed at the creation of sustainable and profitable professional practice for those in law, accounting, architecture, nursing, engineering, medicine, or any other profession.
ENT 6116 Advanced Business Plan Development (3). This course is designed to help the student develop an effective written implementation plan for a new business venture; it deals with the critical decisions and actions that entrepreneurs must make in both planning and executing a new venture. Prerequisites: MAN 6805 or permission of the instructor.
FIN 5307 Financial Markets and Analysis (3). Financial Institutions, Financial Investments, Financial Planning and Analysis, International Financial Perspectives.
FIN 5495 Leasing and Mergers (FI) (3). Discussionoriented course will provide an analytical foundation to corporate development, strategies, and resource allocation decisions. Merger activity and leasing decisions will be viewed as strategic decisions by the firm to enable
them to achieve corporate objectives. Prerequisites: FIN 3414 or FIN 6406, or equivalent.

FIN 6246 Financial Markets and Institutions (FI) (3). Analysis of the characteristics and efficiency of the money markets and capital markets. Types of money market and capital market instruments, and the role of financial institutions in these markets. Prerequisite: FIN 6406.
FIN 6325 Current Issues in Commercial Banking (FI) (3). Main policy issues in commercial banking and the role of regulatory authorities. Presentation includes bank mergers and holding companies; national bank branching; and the present structure and prospects of the financial sector. Prerequisites: FIN 6326 or equivalent. (on demand)
FIN 6326 Commercial Banking (FI) (3). The objectives, constraints, and policies applicable to the management of commercial banks. Emphasis will be given to asset and liability management, marketing of services and other banking functions. Prerequisite: FIN 6406.
FIN 6346 Credit Analysis (FI) (3). This course examines how the accounting framework is integrated with tools and techniques for the analysis and interpretation of financial statements. Evaluation of risk in domestic and foreign loans and the pricing of credit facilities. Prerequisite: FIN 6406.

FIN 6406 Corporate Finance (FI) (3). In-depth examination of asset, liability and capital structure management, with emphasis on valuation capital budgeting techniques; risk evaluation; working capital management; and methods of short-term, intermediate and long-term financing. Prerequisites: ACG 6026 or equivalent.
FIN 6418 Working Capital Management (FI) (3). Intermediate theories and techniques of cash, accounts receivable, inventory, and accounts payable management. Prerequisite: FIN 6406.
FIN 6425 Financial Management Policies (FI) (3). Advanced theories and applications underlying financial decision making. Case studies and model building. Topics may include valuation, capital structure, dividend policy, restructuring, mergers and acquisition, corporate bankruptcy, agency theory, and initial public offerings. Prerequisite: FIN 6406.
FIN 6436 Capital Budgeting and Long Term Resource Allocation (FI) (3). The theory of capital allocation at the level of the firm, and empirical findings. Decision models and their application. The pattern of capital expenditure of industries and of the economy as a whole. Investment determinants. Prerequisite: FIN 6406.
FIN 6446 Competitive Strategy (FI) (3). Provision of tools for managerial decision-making in a variety of competitive environments including demand analysis, short- and longrun costs of production, demand for factors, market structure and competitive strategy.
FIN 6455 Financial Modeling and Forecasting (FI) (3). An introduction to Financial Modeling and Forecasting. Emphasis is on computer models and forecasting the financial variables. Prerequisites: Permission of the instructor and FIN 6406.

FIN 6456 Quantitative Methods in Financial Analysis (FI) (3). Introduction to mathematical and statistical methods used in finance. The applications of computer techniques to financial management. Prerequisites: FIN 6406 or equivalent.
FIN 6465 Financial Planning and Statement Analysis (3). Examination of fundamental analysis of corporate financial planning and financial statements. Identification of reliable estimates of fundamental corporate earning power and earning risks and valuation.
FIN 6477 Entrepreneurial Finance (3). The course covers how to raise capital for a new venture, maximize the value in a growing venture, and forecast and manage financial performance/cash-flow of a growing enterprise. Prerequisite: FIN 6406.
FIN 6487 Financial Risk Management -Financial Engineering (FI) (3). A survey of financial instruments used for financial risk management, including forwards, futures, options and swaps. Emphasis is on identification of financial risks and designing optimal risk management program. Prerequisites: FIN 6425 or FIN 6515.
FIN 6489 Advanced Financial Risk Management (3). This course examines advanced issues in options and financial engineering, including quantitative aspects of options models credit risk instruments, and how to develop new securities. Prerequisites: FIN 6487 or equivalent.
FIN 6515 Securities Analysis (FI) (3). An analysis of securities and the organization and operation of their markets. The determination of the risk reward structure of equity and debt securities and their valuation. Special emphasis on common stocks. Other topics include options, mutual funds and technical analysis. Prerequisite: FIN 6406.
FIN 6517 Advanced Investments (3). This course examines advanced topics in equity and fixed income investments as well as portfolio theory. Emphasis is on theories and applications in the valuation and management of equity and fixed income instruments both locally and globally. Prerequisites: FIN 6516 and FIN 6537 or equivalent.
FIN 6525 Portfolio Management (FI) (3). Practical and theoretical problems associated with the techniques of optimal portfolio selection, construction, and revision. The portfolio objectives of individuals, corporations and funds. Measurement of portfolio performance and related empirical evidence. The role of computers in portfolio management. Prerequisite: FIN 6515.
FIN 6537 Financial Futures and Fixed Income Investments (FI) (3). An examination of the structure, uses, and strategies associated with financial futures markets. Valuation, hedging, speculative activity, and other futures related risk management issues are discussed. The varieties of fixed income securities and their default risk. The valuation of fixed income securities and their use in the investment and risk management. Prerequisites: FIN 6246 or FIN 6515.
FIN 6550 Behavioral Finance and Market Microstructure (3). Behavioral finance studies how human behavior affects investment and financial decisions by including biases and dependence. Market micro-
structure examines intraday price, volume and volatility behavior. Prerequisite: FIN 6406.
FIN 6625 International Bank Management (FI, MA) (3). Management of the international banking function; setting goals and developing strategies, establishing an organizational structure and managing operations. International banking services. Foreign lending, risks, restraints, and portfolio considerations. International banking trends and implications for regulation. Prerequisite: FIN 6406.

FIN 6626 International Bank Lending Policies and Practices (FI, MA) (3). Organization of the lending function and examination of the basic types of international lending: trade financing, loans or placements to foreign banks, loans to governments and official institutions, and loans to businesses. Syndicated bank loans. Documentation and legal considerations in foreign lending. Assessing and managing risk in the international loan portfolio. Prerequisite: FIN 6406.
FIN 6636 International Finance (FI, MA) (3). A comparative study of the institutional characteristics and internal efficiency of developed and underdeveloped capital markets. The relationships between world and capital markets and prospects for integration. The role of multilateral institutions, multinational corporations, states, and the structure of trade in the international short and long term capital flows. The development of financial centers. Prerequisites: FIN 6406 or equivalent.
FIN 6638 International Capital Markets (FI) (3). An exhaustive study of the current institutional aspects of the financial and monetary systems of the developed and emerging markets. Topics will include detailed discussions of capital markets including stock exchanges and the international asset pricing models. Prerequisites: FIN 6406 or permission of the instructor.
FIN 6644 Global Financial Strategy (3). Aspects of strategic financial environment and management of firms that operate in a global arena; to include recent developments in financial strategy, international trade and economic decision making. Prerequisite: FIN 6406.
FIN 6645 Global Finance for Executives (FI) (3). Deals with the theoretical and empirical aspects of the financial management of firms that operate in an international business environment. Prerequisite: FIN 6406.
FIN 6656 Latin American Financial Markets and Institutions (3). An evaluative overview of the money and capital markets in Latin America. Topics include review of the most recent literature on regulation and deregulation, globalization, regional markets, privatization, banking innovations, the role of foreign banks, and currency boards in Latin America. Applicable cases will be discussed. Prerequisite: FIN 6406.
FIN 6776 Financial Software (3). Covers the application of financial software and institutional financial data systems. It includes application in excel, learning model, simulation, option analysis, trading models, and other FS analysis programs. Prerequisite: FIN 6246.
FIN 6804 The Theory of Finance (FI) (3). The study of the development of the theory of finance and its implications for the financial decisions made by the manager of business firms. Topics include: utility theory;
capital budgeting; portfolio theory; capital market equilibrium; multi-period valuation; and the cost of capital. Financial decision making is explored under both certainty and uncertainty and within the context of both perfect and imperfect markets. Prerequisites: FIN 6406 or equivalent.

FIN 6906 Independent Study in Finance (FI) (1-6). Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.
FIN 6915 Master's Project in Finance (FI) (1-6). An individualized research project and report, which may include field experience with a firm or agency; library research; computer programming; or project development. The course should be taken during the last half of the student's graduate program. Consent of faculty tutor and Department Chairperson required.

FIN 6936 Special Topics in Finance (FI) (1-3). For groups of students who desire intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

FIN 6943 Finance Internship (FI) (1-3). Student placement within a financial institution, business firm or other organization for the purpose of providing practical experience to supplement theoretical classroom instruction. Periodic reports and conferences required. Permission of the instructor and Department Chairperson.
FIN 7527 Seminar in Investments (FI) (3). Examines analysis and measurement problems of investments. Includes the application of statistical techniques, current theoretical issues and empirical literature. Prerequisite: Permission of the instructor.

FIN 7536 Seminar in Futures Markets (FI) (3). A comprehensive examination of the literature in futures markets. Emphasizes the structure and pricing of futures, and risk-management via hedging and arbitrage. Prerequisite: Permission of the instructor.
FIN 7606 International Corporate Finance (FI) (3). The study of topics of research interest to international financial decisions. Topics include foreign exchange risk, international financial markets, and foreign exchange market efficiency. Prerequisite: Permission of the instructor.
FIN 7807 Seminar in Corporate Finance (FI) (3). Familiarizes students with recent developments in finance theory. Includes such topics as the influence of leverage, uncertainty and the cost of capital, agency theory and related topics. Prerequisite: Permission of the instructor.

FIN 7808 Financial Theory I (FI) (3). This course focuses on the theory of financial decision-making under certainty and risk. Includes investment under uncertainty, capital structure, dividend, asset valuation, and options pricing. Prerequisite: Permission of the instructor.

FIN 7809 Financial Theory II (FI) (3). This course focuses on the theory of financial decision-making under certainty and risk. Includes investment under uncertainty, capital structure, dividend, asset valuation, and options pricing. Prerequisite: Permission of the instructor.

FIN 7810 Financial Theory III (FI) (3). This sequel to Financial Theory I and II focuses in on microfinance.

Discusses issues primarily in corporate finance such as effects of taxation, agency theory, and signaling theory. Prerequisite: Permission of the instructor.
FIN 7811 Seminar in Financial Markets and Institutions (FI) (3). Examines recent developments in economic and financial theories as applied to topics such as the structure of financial markets and the economics of information and financial institutions. Prerequisite: Permission of the instructor.

FIN 7812 Seminar in Options and Contingent Claims (FI) (3). An examination of the theories of option valuation and arbitrage pricing, and their applications to security analysis, portfolio management and financial instrument valuation. Prerequisite: Permission of the instructor.
FIN 7816 Seminar in Portfolio Theory (FI) (3). Examines investment and portfolio theory, with emphasis on the historical development of the literature in this area and the recent analytical and empirical work. Prerequisite: Permission of the instructor.
FIN 7818 Foundations of Financial Models (FI) (3). Introduction to mathematical and economic models underlying the development of modern finance theory. Includes discrete and continuous time models in finance using stochastic calculus. Prerequisite: Permission of the instructor.

FIN 7845 Statistical Methods in Finance I (FI) (3). Estimation, and testing of various economic and financial models. Emphasis on econometric techniques to deal with various problems of single-equation models and introduction to simultaneous equation. Prerequisite: Instructor's permission.
FIN 7846 Statistical Methods in Finance II (FI) (3). Emphasis on econometric techniques and multivariate statistics as applied in finance. Includes simultaneous equation models, multiple discriminant analysis and factor analysis. Prerequisite: Instructor's permission.
FIN 7855 Financial Economics I (FI) (3). An advance doctoral course covering selected advanced topics in microeconomic foundations and other topics related to business. Emphasis will be on economics of uncertainty, agency problems, information and signaling. Prerequisites: ECO 7115 or permission of the instructor.

FIN 7856 Financial Economics II (FI) (3). An advanced doctoral course covering selected advanced topics in the theory of macrofinance. Emphasis will be on financial intermediation. Prerequisites: ECO 7206 or permission of the instructor.

FIN 7906 Finance Doctoral Independent Study (1-6). Supervised research projects determined by professor and student. May involve conferences, supervised reading, and reports. Prerequisites: Consent of sponsoring professor and Chairperson required. (on demand)
FIN 7916 Finance Doctoral Research Project (1-6). Intensive research project conducted during the summer following the student's first and second years of coursework. Each student develops his/her own research project under the supervision of a faculty member. Prerequisite: Graduate standing. (on demand)
FIN 7936 Finance Doctoral Seminar (3). College colloquium series featuring presenters from various
academic disciplines and businesses. Prerequisite: (on demand).

FIN 7980 Ph.D. Dissertation (1-12). Original research that is supervised by a faculty committee and defended openly before the university committee. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
FIN 7981 Finance Dissertation Preparation (3). Preparatory background research and study to begin development of dissertation proposal. Students should be able to complete proposal by the end of the course. Prerequisites: Completion of TIER 1 courses. (on demand)
GEB 5895 Strategic Business Planning (3). This course focuses on clarifying ideas and processes for developing viable strategic plans. Students will develop a venture concept for an existing corporation and write a plan for implementation, including corp culture, task environment, external environment.

GEB 6368 Navigating in a Globalizing World (8). Concepts and issues from macroeconomics, accounting, international law, political science, finance, and international business give broad but insightful perspectives about complex and ambiguous world.
GEB 6507 Finance for HR Professionals (1). Provides a broad overview of the key financial terms, tools, and reports used in organizations. For an HR audience, it focuses on the financial knowledge that is most critical for HR professionals.
GEB 6528 Organizational Processes that Deliver Economic and Social Value (8). This course examines the internal workings of an organization to identify, analyze, correct, and create structures that enable performance.
GEB 6529 Creating Economic and Social Value (8). This interdisciplinary business course focuses on concepts, techniques, and experiences that result in a better understanding of complex and ambiguous work of delivering customer utility.

GEB 6896 Strategy Development and Implementation (8). This strategy course integrates strategic planning models and focuses on the implementation of business strategies in various stages of the firm's life-cycle through case study and project work.
GEB 6941C Graduate Business Internship (3-6). This program allows graduate students to work in jobs significantly related to their major area of study and career goals. This is supervised work with carefully designed and monitored work assignments. Specific placement must be approved by the faculty advisor prior to enrollment. Work performed on the current job cannot be used for internship credit. Prerequisite: Graduate Students.

GEB 7911 Qualitative Research Methods in Business (3). This course introduces a structured approach to qualitative research in business. It includes study of methods such as case studies, ethnography, archival studies, and action research.

HIM 5065 Introduction to Health and Health Informatics (IS) (3). Concepts of health, delivery of health services, role and impact of health informatics. Focus on legislative mandates for health IT, health, health IT standards, and health-related data structures.

HIM 6019 Legal and Ethical Aspects of Healthcare (IS) (3). This course focuses on a board range of legal and ethical issues as they apply to areas of management and use of computer-based technology and info systems in the delivery of healthcare services.

HIM 6627 Health Care Information Management (IS) (3). This course studies IT concepts and techniques that facilitate fact-based decision making through information and management systems in health care organization and introduce students to the use of healthcare informatics in managing quality, safety and outcomes of healthcare.
HIM 6682 Concepts in Healthcare Informatics (IS) (3). This course presents a comprehensive overview of the current and emerging healthcare informatics concepts for the analysis of information in healthcare organizations.

HIM 6685 Electronic Health Record and Clinical Support Systems (IS) (3). This course provides an indepth study of the clinical information systems concepts and components.
HIM 6937 Special Topics (IS) (3). This course focuses on health informatics specialty areas, such as genomics and bioinformatics.
HIM 7118 Seminar on Health Informatics and Healthcare IT Research (IS) (3). This doctoral seminar will concentrate on the field concerned with the acquisition, storage, and use of information in health and biomedicine.
HSA 6155 Health Policy and Economics (IS) (3). This course examines the impact of government, private sector, and interest groups on priority setting in global health policymaking and national health strategies using basic economics principles. Prerequisites: HSA 6415, HSA 6156, PHC 6065. For PMBA students, completion of MAN 6095, HSA 6176, and HSA 6156.

HSA 6156 Economic and Decision Analysis in Health Services (IS) (3). Using economics as a tool, this course analyzes specific world-wide health care problems and the functioning of global health care markets. Prerequisites: Completion of Foundation Courses or minimum of 9 credit hours of program coursework including HSA 5125, HSA 6185, PHC 6065, HSA 6176. For PMBA students, completion of MAN 6095 and HSA 6176.

HSA 6176 Financing \& Reimbursement of Health Systems (IS) (3). In this course financing models for health delivery systems are examined. Reimbursement strategy of Medicare, Medicaid and other third party payers are analyzed. Prerequisite or Corequisite: HSA 5125, For PMBA students, MAN 6095.
ISM 6024 Managing Distributed Architectures (IS) (3). Students will consider the organizational and technical challenges involved in implementing distributed business processes across multiple organizational units.
ISM 6045 Current Economic and Social Implications of Information Systems (IS) (3). Effects and implications of socioeconomic factors in the operation of information systems and interdependence with the legal and international business environment. Privacy and fraud; computer system purchase and lease contracts; economics of system design, selection and operation; electronic fund transfers and mail; international considerations. Prerequisites: MAN 6830 and MAN 3025.

ISM 6057 Web Management (IS) (3). This course provides students with techniques to manage and develop web projects including development environments, linkage between client and database. The course is designed to assist students in understanding how to manage and use web related techniques in an organization.
ISM 6106 Systems Analysis (IS) (3). A study of the systems approach to problem solving as it applies to any area of specialization. Consideration of the problems in determining system objectives; identifying system boundaries and constraints; marshaling resources for achieving system objectives; analyzing the subcomponents of the system and their respective objectives; and managing the system. Prerequisites: MAN 6830, CGS 3403, and COP 2210.

ISM 6128 Business Process Design (IS) (3). The course covers fundamentals concepts, principles, and techniques that can be used to improve business performance through the analysis, modeling and design of the as-is and the to-be business processes.
ISM 6136 Business Analytics Applications (IS) (3). This course covers business analytics skills required to conduct both pattern discovery (e.g., segmentation and association) and predictive modeling (e.g., decision trees and neural network mining). Prerequisites: Permission of department and introductory statistics.
ISM 6155 Information Systems Development (IS) (3). Concepts and methods used in the analysis and design of MIS. Feasibility study, system flow charting, data requirements analysis, data design, user friendly systems design. Systems design project. Prerequisites: MAN 6830 or equivalent.
ISM 6156 Enterprise Information Systems (IS) (3). Introduces concepts of enterprise-wide computing, information architecture, process design, data models, and client/server computing.
ISM 6157 Enterprise System Configuration (IS) (3).
ISM 6158 Enterprise-Wide System Administration (IS)
(3). This course will expose students to key aspects involved in the implementation and operation of the R/3 system and will provide the technical and conceptual foundation necessary for developing appropriate strategies and approaches for implementation and maintenance of an enterprise-wide system.
ISM 6159 Global Enterprise Management and Strategy (IS) (3). Global Enterprise Systems consist of 3 major components: Enterprise Resource Planning, Supply Chain Management, and Customer Relationship Management. This course examines each of these systems and explores how they support and overall business strategy.
ISM 6205 Database Management (IS) (3). The course addresses techniques for structuring and managing data in organizations. Discusses data concepts, data modeling, database requirements definition, conceptual, logical, and physical design, data administration, and distributed database management. Prerequisite: MAN 6830.

ISM 6208 Data Warehousing (IS) (3). Data Warehousing and Online Analytical Processing tools will be utilized to organize and analyze large volumes of data in order to explain the past, monitor the present, and anticipate the future.

ISM 6217 Database Administration (IS) (3). Administration of the physical realization of database, which includes studying physical database design, understanding database server architecture, studying recovery, and tuning the database. Prerequisite: ISM 6205.

ISM 6222 Telecommunications Network (IS) (3). This course will focus on providing the student with fundamental understanding of the various concepts involved in modern data communication and networking installations, along with its implications in the design of information systems.
ISM 6225 Global Applications of Information Technology (IS) (3). Examines information technology use in the international arena, e.g. for communication within a multinational corporation, or communication with customers, suppliers in another country. Topics include: transborder data flow; global connectivity through telecommunications; IT transfer across national boundaries, management of IT in multinational corporations; case studies or global IT use. Prerequisites: MAN 6830 or equivalent.
ISM 6251 Emerging Information Technologies (IS) (3). This course covers emerging information and communication technologies that are changing the way the business is being operated in global economy.
ISM 6305 Information Systems Planning (IS) (3). An indepth study of systems concepts, as they apply to information systems in organizations. Consideration of planning for systems development and its accomplishment through the phases of the life cycle, and of the overall management of the information systems function. Prerequisites: MAN 6830 and MAN 3025.
ISM 6307 Management of the Information Systems Function (IS) (3). Develop new ClO competencies: how enterprise competes or provides services, manage the IS organization like a business, and skills to gain support for incentives and maintain momentum in innovation.

ISM 6316 Project Management of Information Sciences (IS) (3). This course examines the defining characteristics of IT projects and introduces a variety of relevant techniques. The course includes project manager functions like managing scope, time, quality, and cost. Prerequisites: ISM 6205, ISM 6106, ISM 6156.
ISM 6326 Information Security and Compliance (IS) (3). Provides knowledge and skills needed to protect enterprise assets by mitigating IS/IT related security risks. An exposure to IS/IT security-related Laws, Regulations, and Compliance is also provided. Corequisite: ISM 6222.
ISM 6328 Information Security Management (IS) (3). Provides knowledge and skills needed to protect enterprise assets by mitigating IS/IT related security risks. Includes application of telecommunication technology and concepts.

ISM 6338 Information Systems Strategy and Governance (IS) (3). From the perspective of the CIO, students will develop and understanding of the strategic use of IS and how to define and implement IS governance to support business/IS alignment and value creation.

ISM 6357 Computer Administration (IS) (3). The theory and computer management. Topics include selection,
training, job and performance evaluation, and incentive schemes as they relate to key positions of systems analysis, programming, data preparation and entry, and project management. Special attention is given to human resources management and development at various levels within the EDP department.
ISM 6405 Management Support Systems (IS) (3). Concept of decision support is examined in a management decision context. Types of applied decision support and expert systems in business are surveyed. Prerequisite: MAN 6830.
ISM 6423 Knowledge Management (IS) (3). This course explores the basic concepts of managing organizational intellectual capital, including appropriate information technologies ranging from Intranets to Artificial Intelligence.
ISM 6455 Microcomputer Applications in Business (IS) (3). Fundamentals and comparison of contemporary microcomputers. Extensive usage of available software for making business decisions. Emphasis on small business applications and cases. Student projects. Prerequisites: Computer programming proficiency, MAN 4504 and CGS 3300 or MAN 6501 and 6830.
ISM 6489 Electronic Commerce and Internet Business Applications (IS) (3). Students will gain the knowledge needed to manage and develop web and mobile applications for B2B and B2C applications. Students will learn about current frameworks that facilitate electronic commerce.

ISM 6507 Electronic Commerce Strategy (IS) (3). This course will teach students strategies for the electronic commerce landscape to help them develop and execute a business plan for creating an e-business startup. Prerequisites: Technology of EC; ISM 6316.
ISM 6930 Special Topics in Management Information Systems (IS) (1-6). To study the recent developments in the MIS field not otherwise offered in the curriculum, such as office automation, computer graphics, etc. Prerequisites: Advanced standing and department chairman approval.

ISM 6942 MIS Internship (IS) (1-3). Student placement within a business firm or other organization for the purpose of providing practical experience to supplement theoretical classroom instruction.
ISM 7083 Deterministic Decision Models (IS) (3). This course deals with the optimal decision making and modeling of deterministic systems that originate from real life. These applications, which occur in government, business, engineering, economics, and the natural and social sciences, are largely characterized by the need to allocate limited resources.
ISM 7087 Probabilistic Decision Models (IS) (3). This course deals with the optimal decision making and modeling of probabilistic systems that originate from real life. These applications, which occur in government, business, engineering, economics, and the natural and social sciences, are largely characterized by the need to allocate limited resources.
ISM 7126 Seminar on Systems Analysis (IS) (3). A system theoretic approach to understanding and analyzing the role of information in organizations. Includes systems
approach, systems dynamics, soft systems and complexity theoretic prospects.

ISM 7152 Seminar on System Acquisition and Implementation (IS) (3). Theory and research on methodologies, tools, and techniques for acquiring, developing, and implementing information systems in organizations.

ISM 7306 Seminar on Strategy and Information Resource (IS) (3). Theory and research on strategic perspective on the management of the information resources. Relates IT strategy and management to corporate strategy.
ISM 7345 Seminar on IS and Organizations: Design and Impact (IS) (3). Theory and research on the impact of IS on organizational design and structure.

ISM 7406 Decision Support Systems (IS) (3). Theory and research on the design of decision aids. Integrating models and data with a technological delivery system that supports unstructured problem-solving by executive.
ISM 7906 Independent Study for Doctoral Students (IS) (1-12). Supervised research projects determined by professor and student. May involve conferences, supervised reading, and reports. Prerequisites: Consent of sponsoring professor and chairperson. (on demand)
ISM 7931 Seminar on Research in Emerging Organizations (IS) (3). Globalization, deregulation, and information-communication technologies are changing how organizations are coordinated and managed. This seminar examines emerging research in managing such organizations.
ISM 7932 Seminar on Research in Managing Distributed Operations (IS) (3). This seminar examines research issues arising as a consequence of global distribution of operations, as enabled by ICT and globalization of business.
ISM 7933 Seminar on Research in Measurement and Valuation in Knowledge Economy (IS) (3). Examination of research on measurement and valuation of digital, knowledge, and relationship assets in knowledge economy.
ISM 7934 Business as Dynamic Systems (IS) (3). This seminar course provides a systems theoretic framework for understanding and analyzing organizations. Hard and Soft Systems, Systems Dynamics, Complexity Theories are examined.
ISM 7935 Research in Information Systems (IS) (3). The research process in information systems: defining research questions, reviewing the literature, strategies for empirical investigation, methodological alternatives, and presenting research findings. Prerequisite: Permission of the instructor.
ISM 7936 Seminar on Research in Acquiring and Implementing IS (IS) (3). Examination of research and theory on the acquisition, development, implementation of information systems.

ISM 7937 Seminar on Research in Emerging ICT and their Implications (IS) (3). This seminar will examine research on emerging information technologies, their application, and their implications for organizations and strategy.

ISM 7938 Seminar on Research in Collaborative and Competitive Strategies in Global Economy (IS) (3). This seminar course examines research in emerging strategic transition from competitive to cooperative strategies in the context of internationalization and globalization.
ISM 7980 Ph.D. Dissertation (IS) (1-12). Original research that is supervised by a faculty committee and defended openly before the university committee. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
ISM 7981 Dissertation Preparation (IS) (1-12). Preparatory background research and study to begin development of dissertation proposal. Students should be able to complete proposal by end of the course. Prerequisite: Completion of TIER 1 courses. (on demand)
MAN 5524 Advanced Production Management (IS) (3). More advanced methods in master planning, forecasting, capacity management, production activity scheduling/ control, MRP and inventory management. This course has a professional orientation similar to the APICS certification guidelines. Prerequisites: MAN 4504 or MAN 6501, or Department Chairperson's approval.
MAN 5782 Managing in the 21st Century (3). This course is designed to identify important problems for managers in 21st Century. Includes responding to global issues, such as shift manufacturing trends; workplace ethics and diversity; cultural attitudes; the impact of new technologies.
MAN 5930 Seminar in Personnel Management (MA) (3). Overview and examination of the various aspects of the personnel management function.
MAN 6051 Organization Change Process (MA) (3). Analysis of organizations including evolution of management thought and effects of technology and environment on organization design. Emphasis on concepts for managing change related to division of work, delegation and decentralization, leadership, motivation, job satisfaction; as well as planning, organizing, directing, and controlling.
MAN 6057 Managing Innovation (3). This course explores the process of managing innovation. In today's global marketplace, competition from all over the world forces firms to continuously upgrade their product offerings and ways of doing business. This course discusses how to be more creative, how to manage creatively, and how to implement innovation.
MAN 6066 Business Ethics (MA) (3). Practical approaches for addressing ethical conflicts in organizational administration. Emphasis will be placed on developing participants' ability to accurately diagnose organizational ethics problems and determine constructive solutions.
MAN 6085 Introduction to E-Business (3). Survey of the various types of E-Business, their economic, financial, accounting, ethical, legal and regulatory implications and their impact on major traditional industries. Also, examines how to build business models leading to profitable business. Prerequisite: Acceptance of the degree program.

MAN 6086 Product and Service Development (3). The course presents the systematic process of product and service development in conjunction with the evolution of team projects, culminating (with a business plan class) in a venture capital and funding forum for new high-tech start-ups. Adopts a business and management emphasis to create worldclass products/internet services.
MAN 6095 Management of Healthcare Organizations in the 21st Century (3). This course explores the use of evidence-based management for effective planning and decision-making by today's healthcare managers.
MAN 6096 Fundamentals of the U.S. Healthcare Delivery System (3). This course presents a comprehensive overview of the U.S. health delivery system from the perspective of the healthcare manager.
MAN 6121 Interpersonal Behavior and Analysis (MA) (3). A human interaction/human relations training laboratory, designed to increase both self-awareness and understanding of behavior dynamics in groups. Course is intended to enable students to broaden their conceptual understanding of human interpersonal communications and conflict.
MAN 6145 Intuition in Management (MA) (3). Interdisciplinary study of intuition and its applications in management. Apply learnings in a term project. Prepare Intuitive Experience Logs to discover intuition firsthand. Prerequisite: Computer Competency.
MAN 6157 Wellness Management (3). This course focuses on the management of employee well-being, broadly defined and including safety, security, mental, attitudinal, and health-related outcomes.
MAN 6167 Leadership in a Global Environment (3). The course is designed to provide the student with a clear understanding of current thinking in the area of leadership. It focuses on the holistic nature of leadership and the impact leaders have on individuals, groups, and organizations.
MAN 6204 Organization and Management Theory (MA) (3). Analysis and design of the structure and process of complex organizations. Effects of task uncertainty, growth, power, goals, and information technology on organization structure and control.
MAN 6209 Organization Design and Behavior (MA) (3). Covers how managers interact with organizations to accomplish complex tasks by examining how strategy, structure and systems interact with behavioral variables.
MAN 6245 Organizational Behavior (MA) (3). Individual, interpersonal, and small group behavior in complex organizations. Focus on behavior, its causes, and management interventions to improve organizational effectiveness. Research methods to study organizational behavior.
MAN 6265 Group Processes in Organizations (MA) (3). The social and psychological processes of organizational functioning. The roles played by small groups in organizational settings.
MAN 6295 Conflict in Organizations (MA) (3). A critical examination of the role and impact of interpersonal and intergroup conflict in organizations. Models as approaches
to utilizing and resolving conflict toward constructive personal and organization ends will be emphasized.
MAN 6297 Labor Issues and Conflict Management (MA) (3). Covers skills to enhance resolution in union disputes. Teaches students methods to productively manage labor disputes between parties including legal issues in labor law and employee relations.

MAN 6311 Advanced Personnel Management (MA) (3). Attention is focused on the theory and practice of modern personnel management, as related to other management functions. Topics include selection; training; job and performance evaluation; and incentive schemes. Special attention is given to human resources management and development at various organizational levels.
MAN 6316 Human Resource Management Metrics (MA) (3). This course focuses on the linkage between human resources and the organization's financial plan. This includes budgeting, controlling, and measuring HRM impact.
MAN 6317 Critical Thinking in Human Resource Management (3). This course focuses on developing critical thinking skills to solve complex and multidimensional human resource management problems. The course will emphasize the analysis and discussion of cases.
MAN 6321 Personnel Selection and Placement (MA) (3). Individual differences and their measurement in personnel selection and job placement. Job design and redesign.
MAN 6327 High Involvement Human Resource Management (3). This course focuses on human resource practices that motivate and empower employees to excel on their job by fostering their participation and involvement in organizational decision-making.
MAN 6328C Applied Methods in Human Resource Management (MA) (3). This course focuses on the application of research design and measurement theory to solve human resource problems. The emphasis is on applied methodology rather than on statistical issues.
MAN 6331 Compensation Administration (MA) (3). An in-depth analysis of wages and salary administration, including such topics as job evaluation; wage incentive systems; and work sampling.
MAN 6336 Reward Systems Management (MA) (3). This course covers all aspects of compensation and reward systems such as the strategic alignment of compensation and other HR systems, job evaluation, merit - and skillbased pay, cost-effective benefit programs, and flexible pay.
MAN 6347 Performance and Talent Management (MA) (3). This course focuses on the development and implementation of effective performance management systems. Career development and electronic performance monitoring will be covered.
MAN 6351 Personnel Training and Development (MA) (3). Determining training needs. Training methods. The training staff. Supervisor development. Equal Employment Opportunity management.

MAN 6356 Professional Development Seminar I (1). Course includes orientation to graduate education,
focusing on international business, career development, team building and how to analyze business cases.

MAN 6357 Professional Development Seminar II (1). Course includes continued orientation to graduate education, focusing on analysis of current events impacting various business areas relating course content in IB, finance, IT and management.
MAN 6358 Professional Development Seminar III (1). Course includes continued orientation to graduate education, focusing on entrepreneurial activity in business.
MAN 6359 Human Resource Knowledge Management (MA) (3). This course focuses on the development of the organization's human capital. The identification of learning needs, current and future performance problems, and leadership development will be discussed.

MAN 6365 Staffing Organizations (MA) (3). This course focuses on the identification, recruitment, selection and promotion of successful employees.
MAN 6367 Career and Succession Planning (3). This course is based on an integrated "system thinking" model used to create and manage employee succession planning and leadership development processes. It also focuses on management of employee well-being including safety, security, mental and attitudinal and health-related outcomes.
MAN 6368 Human Resource Deployment (MA) (3). This course focuses on the staffing, organization, training, and management of rapid response operations.

MAN 6385 Human Resource Strategy and Planning (3). This course discusses the notion of strategic planning in the context of human resource management. Alignment of culture and strategy. HR inventories and forecasting.
MAN 6403 Employment Law and Human Resource Management (MA) (3). This course focuses on the legal and regulatory factors surrounding human resources management. The emphasis will be on creating awareness of legal constraints when making HR business decisions.
MAN 6405 Labor Relations (MA) (3). Examines the collective bargaining system in the United States from the viewpoint of the practitioner. Various aspects of the environment, structure, processes, issues and impact of collective bargaining are considered. Special attention is given to the negotiation and administration of agreements.
MAN 6411 Collective Bargaining Topics (MA) (3). An advanced course in labor relations for students with some background who desire more depth than that provided in introductory courses. Topics of contemporary interest, such as public sector collective negotiations, are treated at length.
MAN 6416 Corporate Negotiations (MA) (3). An examination and analysis of corporate negotiation strategies in such areas as collective bargaining, mergers, joint ventures, and with government regulation agencies. The legal environment affecting the negotiated process will be closely scrutinized, as well as internal and external political processes. Prerequisites: ACG 6026, MAN 6245, FIN 6406, MAR 6805.

MAN 6446 Negotiations (MA/ME) (3). Negotiations are the processes of creating agreements between two or
more parties. This course will introduce students to the art of negotiations in business transactions. The class will include a wide variety of negotiation cases.
MAN 6501 Operations Management (IS) (3). This course covers analysis, design, and operations of organizational systems. The systems approach is used to provide a framework or general model of analysis, to which specific concepts, quantitative techniques, and tools can be related. The material presented has application to any organization of people and machines, including hospitals, governmental agencies, service organizations, and industrial concerns. Prerequisites: QMB 6357 or Pass QMB waiver exam.
MAN 6525 Managing for Total Quality (MA) (3). Addresses underlying management assumptions, methods, tools, culture and philosophy of total quality management - TQM.
MAN 6529 Seminar in Production Control Systems (IS) (3). The control systems for production operations automation and its impact on organizations. Integrated operational-simulation approach. Group and individual projects.
MAN 6559 Seminar in Management Science (IS) (3). New topics application areas will be explored. Lectures will relate to the latest advances in the theory and application of management science. Prerequisite: Instructor's approval.
MAN 6569 Managerial Decision-Making (IS) (3). This course will investigate and analyze the decision-making problems that managers face in business, volunteer organizations, government, and the public sector. Emphasis will be placed on providing a variety of decisionmaking experiences for the student. Prerequisites: QMB 6603 or equivalent.
MAN 6585 Productivity Management Seminar (IS) (3). Analysis of productivity in manufacturing and service organizations and methodology for productivity improvement. Extensive cases, projects, tours, and guest speakers. Prerequisite: Graduate students (or CBA certificate students).

MAN 6601 International Management (MA) (3). This course examines the functions of management in an international context: organization, communication, strategic planning, control, motivation, leadership, and human resource management. The topics include the cultural differences behind different managerial styles and customs.
MAN 6603 Problems in Comparative Management (MA) (3). Discussion of literature, readings, and cases, aimed at underscoring the differences and similarities in management behavior in different countries and cultures. General instruction in obtaining and utilizing comparative data on management differences.
MAN 6606 International Business Environment (MA) (3). A study of economic, political, legal and cultural variables affecting the organization. Emphasis will be on understanding and adapting to foreign country environments.

MAN 6608 International Business (MA) (3). This course examines the environmental variables affecting international operations, trade and investment theories,
international institutions, and regional economic groups. It also focuses on international finance, international accounting, international marketing, and international management problems and issues.
MAN 6615 International Labor-Management Relations (MA) (3). Comparative analysis of selected industrial relations systems and impact on multinational firms and international labor movements. Emphasis on empirical models and management-oriented case studies.
MAN 6616 Managing Security Risks in Emerging Markets (3). This course will consider the nature of the contemporary risks facing multinational firms in emerging markets and what strategies that they can implement to minimize vulnerabilities and manage risks.
MAN 6617 Managing Global Production and Technology (IS) (3). An exploration of the management of technology and its relationship to the dynamics of globalization of production in both manufacturing and service industries. Prerequisite: MAN 6608.
MAN 6626 International Human Resource Management (MA) (3). Decisions about how to recruit, train, compensate, and manage global employees; crosscultural differences in values; managing the international assignee.
MAN 6635 International Business Policy (MA) (3). An analysis of corporate strategies in a rapidly developing and changing world environment. Emphasis will be placed on forecasting, planning, and contingency strategies. The course is taught by case method and stresses the environmental and institutional constraints on decision making within the organization. Corporate executives are invited to attend whenever possible. Prerequisites: ACG 6026, MAN 6245, FIN 6406, and MAR 6805 and MAN 6603 or MAN 6608.

MAN 6675 Special Topics in International Business (MA) (3). For groups of students who wish to study intensively a particular topic, or a limited number of topics, in international business, not offered elsewhere in the curriculum. Prerequisites: Approval of the faculty advisor, Department Chairperson, and Dean.

MAN 6676 Global e-Business Environment (3). Systematic review of the economic, financial, sociopolitical and infrastructure environments in which global ebusiness activity takes place. Introduces methods to evaluate the opportunities and constraints for e-business in a country. Prerequisite: Intro to e-business.
MAN 6677 Emerging Markets (3). The course focuses on what managers of international firms large and small need to know to succeed in emerging markets, including the factors and forces that shape the competitive environment.
MAN 6678 International Entrepreneurship (3). This course is an introduction to entrepreneurship in international contexts and its role in economic development.
MAN 6679 Master's Project in International Business (MA) (3). An interdisciplinary research project on an international business problem, which may include field work (including internship), library research, computer modeling, or the use of an approved research methodology. Prerequisites: Assignment of faculty advisor and permission of Department Chairperson.

MAN 6686 Master's Seminar in International Business (1-3). An examination of recent research findings in International Business. Emphasis is placed on readings; active discussion; and small, short-term action and research projects. Prerequisites: Consent of faculty sponsor, department Chairperson, and Dean.
MAN 6695 Independent Study in Business (MA) (3). Individual conferences; supervised readings; reports on personal investigations. Prerequisites: Assignment of faculty tutor and written permission of Department Chairperson, and Dean.
MAN 6703 Colloquium in Managing Organizational Ethics (MA) (1). Management issues, responsibilities, and techniques associated with public and private expectations for ethical performance of large-scale organizations.

MAN 6706 Crisis Management (MA) (3). Response to crises such as product recalls, product tampering, industrial accidents, and violence in the workplace.
MAN 6715 Business Environment and Public Policy (MA) (3). An examination of the economic, political, social and moral context in which management decisions are made. The focus is on the public policy environment of business, whereby community direction is transformed into corporate behavior.
MAN 6726 Strategic Management (MA) (3). The use of cases, guest lectures, and gaming to integrate the analysis and measurement tools, the functional areas and public policy issues. The objective is to develop skill in broad areas of rational decision-making in an administrative context of uncertainty. Should be taken in the last semester of master's program.
MAN 6727 Doing Business in the Marketplace (IS) (3). Give students practical lessons on the emerging world of the marketplace \& teach them how to manage and make money there. Show how managing in the marketplace works with managing in the marketplace. Prerequisite: MAN 6830.

MAN 6746 Global Environmental Management (MA) (3). An exploration of the national, regional, and global forces emerging and influencing the management of the business firm's impact on the physical environment. A review existing and developing environmental management theories and control systems for business.
MAN 6758 Project Consulting (3). Introduction to the basic principles, methodologies and tools of modern business consulting and project management as practiced by the large management consulting firms. Prerequisite: MAN 6830.

MAN 6805 Entrepreneurship (MA) (3). A discussion of the general theories, principles, concepts and practices of entrepreneurship. Heavy emphasis is placed on lecture, readings, case studies and group projects.
MAN 6830 Organization Information Systems (IS) (3). Introduction to information systems and their role in organizations from a user's viewpoint. Survey and application of the basic concepts necessary for understanding information systems. Study of the main activities in the development cycle used to acquire information systems capability.

MAN 6830L Organization Information Systems Laboratory (IS) (1). Laboratory applications for MAN 6830.

MAN 6865 Family Owned Businesses (3). This course addresses the special issues facing family-owned and managed firms and gives an appreciation for the special dynamics in such firms and how to be professional managers in such organizations.
MAN 6891 Leadership Development Seminar I (1). This leadership seminar focuses on increasing the selfawareness of the student as leader. Students will complete a 360 assessment and develop a personal leadership action plan.
MAN 6892 Leadership Development Seminar II (1). This leadership seminar focuses on helping a leader make better decisions and build high-performing teams.
MAN 6893 Leadership Development Seminar III (1). Leadership Development Seminar III focuses on the developing interpersonal competencies and examining how to give timely, specific feedback, and helpful coaching.
MAN 6898 Leadership Development Seminar IV (1). This leadership seminar focuses on developing leaders by helping them to think strategically, create and convey a vision and direction, learn how to deal with ambiguity and in times of crisis.

MAN 6907 Community Service Learning (3). The integration of classroom theory with experimental learning in community service participation, development, and management of community service projects, especially those associated with the business community.

MAN 6908 Independent Study in Business Environment (MA) (3). Independent project in the political, economic, social, cultural, ethical, or governmental relations environment of business. Directed study with a business environment faculty member. Prerequisites: MAN 6715, MAN 6606 and permission of the instructor.
MAN 6910 Research Methods in Management (MA) (3). Covers the research methods and analytical techniques most widely used in research in human resources and general management. Emphasis is on helping students to become more aware of current techniques and their applications.
MAN 6911 Research in Systems Development (IS) (3). Conduct an individual research project or thesis on a topic in the area of computer personnel, systems analysis and design, or other areas within the framework of the MIS program, subject to the instructor's approval. Prerequisite: ISM 6155.

MAN 6930 Master's Seminar in Management (MA) (13). Examination of recent research in selected areas. Emphasis on readings, case studies and active discussion on topics that may include IB, entrepreneurship, leadership, and management. Prerequisites: Consent of faculty sponsor, Department Chairperson, and Dean.
MAN 6937 Special Topics in Business Environment (MA) (3). A review of a contemporary dimension of business' environment in a field of faculty specialization. Prerequisites: MAN 6523, MAN 6606 or equivalent.

MAN 6946 Human Resource Management Internship (1-3). Provides students with practical experience to supplement theoretical of knowledge acquired in the classroom in the Human Resource field. Permission from the Faculty Director is required.

MAN 6974 Master's Project in Management (MA) (1-6). Each student is required to develop and conduct an individual research project or thesis on a topic of interest. The topic will be chosen in consultation with a faculty member in the College.
MAN 7146 Leadership I (MA) (3). Course identifies leadership theories and research bearing on modern management practice. Behavioral, situational and transformational theories of leadership are emphasized, compared and evaluated.

MAN 7147 Leadership II (MA) (3). Draws on research and case studies for understanding of adaptive leadership in turbulent, uncertain environments. Emphasis on effective management of innovation, entrepreneurial activity and new ventures.
MAN 7148 Intuition in Management (3). In-depth study of the nature and development of the intuitive process emphasizing its role in management decision making and its relationship to rational problem solving. Prerequisite: Permission of the instructor. Corequisite: MAN 7148L.
MAN 7155 Fundamentals of Behavioral Research (MA) (3). Analytical tools to conduct systematic research. Methods of data collection in lab, survey and field research. Emphasis on principles of measurement and statistics to interpret/report behavioral data.
MAN $\mathbf{7 2 0 6}$ Organizational Analysis (MA) (3). Develops skills in organizational problem-solving through applications of theory and research to actual problems. Emphasis on needs analysis, process consultation, teambuilding and action research.
MAN 7207 Theories of Organization (MA) (3). Organization functioning from a macro perspective; emphasis on evolution, structure, design and processes of complex systems. Study of communication/information networks, inter-group processes and control strategies.

MAN 7235 Management Philosophy and Strategy (MA) (3). Compares various cross-cultural management philosophies to structure and function of different types of organizations. Emphasis on how to develop and implement a management strategy for maximum productivity in different organizations.
MAN $\mathbf{7 2 7 5}$ Organizational Behavior Management (MA) (3). An introduction to the study of human behavior in organizations. Emphasis is given to management of individual and group processes including conflict attitudes, decision making, motivation and stress.
MAN 7305 Human Resource Management (MA) (3). Personnel management topics including personnel selection, performance appraisal, training design, employee development, and compensation administration. Legal and practical issues are emphasized.
MAN 7412 Labor-Management Topics (MA) (3). Presents various aspects of the labor-management relationship to provide a contemporary perspective.

Emphasis on structure, processes, strategies and legal issues in collective negotiation and industrial relations.

MAN 7529 Seminar in Operations Management (IS) (3). Concepts, tools and recent research developments in the design, planning and control of operations management systems in business and service organizations. Prerequisite: ISM 7083. Corequisite: ISM 7084.

MAN 7609 Comparative Management (MA) (3). Course focus is cross-cultural management, i.e., how cultural values influence managerial behavior. The problems of cross-cultural communications, leadership, motivation, and decision making are examined. Prerequisites: Admission to Doctoral program and completion of Doctoral core.

MAN 7616 Multinational Firm Global Strategy (MA) (3). Overview of the strategic management and international business concepts that frame strategic activity in MNCs. Competitive business strategies in global and multidomestic industries. Prerequisite: Completion of business Ph.D. core.
MAN 7620 International Business Operations I (MA) (3). Examination of the functional management, operations and concerns of international businesses. Emphasizes analysis of problems in managing joint ventures, licensing, barter, and technology transfer. Prerequisites: Admission to Doctoral program and completion of doctoral core.
MAN 7621 International Business Operations II (MA) (3). Focus on political, economic, and national security issues which influence IB operations or strategies. Examines techniques for political and economic risk, assessment and reactions to such influences. Prerequisites: Admission to Doctoral program and completion of doctoral core.
MAN 7640 International Business Research Methods (MA) (3). Overview of IB academic research, emphasizing topics, literature, methods, information sources, applications, problems, and journal characteristics. Prerequisites: Admission to business Doctoral program and completion of doctoral core.
MAN 7718 Analysis of Corporate Policy Methods (MA) (3). Links functional areas of management to provide integrated view of organization and public policy. Emphasis on measurement, analysis and conceptualization of organization as a totality of operations.
MAN 7895 Seminar in Management (MA) (3). Key concepts in management ranging from individual worker styles to business ethics. Emphasis on topics such as men and women in organization, decision making styles, and attribution management.
MAN 7910 Advanced Management Research (MA) (3). Covers applications of analytical methods in contemporary management research. Emphasis is given to complex research design strategies including multivariate techniques and multidimensional scaling.
MAN 7916 Doctoral Research Project in Business (BA) (1-15). Intensive research project conducted during the summer following the student's first and second years of coursework. Each student develops his/her own research project under the supervision of a faculty member. Prerequisite: Graduate standing. (on demand)

MAN 7936 Doctoral Seminar in Business Administration (BA) (1). College colloquium series featuring presenters from various academic disciplines and businesses. (on demand)
MAN 7980 Ph.D. Dissertation (BA) (1-12). Original research that is supervised by a faculty committee and defended openly before the university committee. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
MAN 7981 Dissertation Preparation (1-10). Preparatory background research and study to begin development of dissertation proposal. Students should be able to complete proposal by the end of the course. Prerequisite: Completion of TIER 1 courses. (on demand)
MAN 7984 Doctoral Research Seminar: Development and Utilization of Large Scale Datasets (3). Opportunities and issues associated with complex, multifaceted data set: representative samples and consensuses, multiple levels of analysis, diverse data sources, alternative weighting strategies, index formation and reliability: limits on inferences. Prerequisites: STA 6166, STA 6167, or equivalent.
MAR 5416 Marketing and Sales Strategies (ME) (3). This course discusses the nature and scope of marketing, and explores problems facing firms in developing existing markets and opening new ones. Includes sales skills and strategies and controlling sales operations. Prerequisites: Bachelor degree or equivalent.
MAR 6075 Current Issues in Marketing I (ME) (3). Intensive study of various topic areas in marketing. Course emphasizes student reading and research, with oral and written reports. Students electing to take this seminar may take no more than 3 credit hours of independent study in marketing. Prerequisite: MAR 6805.
MAR 6158 International Marketing (ME) (3). This course discusses the nature and scope of international marketing, and explores problems facing multinational firms and other international marketing organizations, together with strategies for foreign market penetration. Prerequisite: MAR 6805.

MAR 6336 Integrated Marketing Communication (ME) (3). A broad introduction to the field of integrated marketing communications and how it fits into the marketing plan. Discussion of objective setting, budgeting, and media planning, as well as the strategic planning and evaluation of advertising media, sales promotion, public relations, direct marketing, personal selling and marketing communications on the internet. Prerequisite: MAR 6805.

MAR 6406 Sales Management (ME) (3). Analysis of personal selling's roles in marketing strategy using detailed case studies on field sales management, working with channel organization, and planning and controlling sales operations. Prerequisite: MAR 6805.

MAR 6417 Sales Tactics and Strategies (ME) (3). New concepts in selling strategies and techniques, including internationalization and ethical issues in sales. These skills and processes will then be applied to sales management and global selling.
MAR 6446 Negotiations (ME) (3). Negotiations are the processes of creating agreements between two or more
parties. This course will introduce students to the art of negotiations in business transaction.

MAR 6506 Consumer Behavior (ME) (3). Modern comprehensive models of consumer behavior are utilized as a framework for understanding consumer decision processes. Prerequisite: MAR 6805.
MAR 6508 Consumer Analysis in Emerging Markets (ME) (3). The course will be providing you with a conceptual and analytical toolkit to explore and investigate consumers in emerging world economies.

MAR 6646 Marketing Research (ME) (3). The role of research in providing information for marketing decisionmaking, including an examination of the research process and the tools available to the researcher. Prerequisites: MAR 6805 or permission of the instructor.

MAR 6675 Marketing Analytics (ME) (3). A practical approach to the use of database information to solve marketing problems. Emphasis is on obtaining, managing and using information about current and potential customers. Topics include data acquisition, data mining, list segmentation and customer modeling, and direct marketing, relationship marketing and customer lifetime value applications.
MAR 6722 E-Marketing (ME) (3). Examines how ebusiness can transform the traditional marketing mix and how fundamental principles of marketing can be applied to develop e-business marketing plans. Prerequisite: MAN 6085 (Introduction to E-Business).
MAR 6735 Digital Marketing Strategies (3). Using critical thinking and strategic decision making to combine online technologies such as e-marketing, social media, mobile, SEO, and metrics to enhance brand value and drive marketing exchanges. Prerequisite: A grade of "C" or higher in MAR 6880.

MAR 6805 Marketing Management in the Global Environment (ME) (3). Analysis and application of theory and problem solving for marketing management in the global environment. Emphasis will be on the role of marketing in the organization; planning the marketing effort; management of the marketing organization; control of marketing operations; and evaluation of the marketing contribution.

MAR 6816 Corporate Simulation (ME) (3). Course emphasis is on application and integration of concepts and tools, through participation in the marketing management of a firm in competition with other firms. The course's focal point is a computerized marketing management simulation. Prerequisites: ACG 6175, FIN 6406, and MAN 6501.

MAR 6819 Marketing Strategy (ME) (3). A study of strategic marketing planning through case analysis and selected readings. Emphasis is on planning and problem solving processes, particularly directing, planning, organizing, coordinating, and controlling as applied to a contemporary market-oriented organization. Prerequisites: MAR 6805 or equivalent.

MAR 6838 Brand Management (ME) (3). The focus of this course is to provide a sound understanding of the function, issues and challenges of the brand or product manager. The scope of the course embraces U.S. and international situations and emphasis will be placed on
analysis, strategy development and practical decision making. The course will draw on the students' prior exposure to marketing management, research advertising and promotion and will provide insights and practice in application of these skills in the context of the product manager's roll in the enterprise.
MAR 6880 Social Media Marketing (3). Intensive study of social media marketing, including best practices, challenges, metrics, and its role in market segmentation, target marketing, branding market expansion, and marketing strategies.
MAR 6915 Independent Study in Marketing (ME) (1-6). Individual conferences; supervised reading; reports on personal investigations. Consent of faculty tutor, Department Chairperson and Dean required.

MAR 6936 Special Topics in Marketing (ME) (1-6). For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.
MAR 7205 Seminar in Channels of Distribution (ME) (3). Covers readings from the marketing, economics, logistics, organizational behavior, social psychology, and sociology literature's in developing a research perspective on channels of distribution.

MAR 7246 Seminar in International Marketing (ME) (3). Examines major topics and theories in the international marketing literature. Analyzes various perspectives on business activities and strategies in global markets.
MAR 7399 Seminar in Advertising and Persuasion (ME) (3). Covers the major topics and theoretical perspectives within the research literature addressing persuasive communications.
MAR 7507 Seminar in Consumer Behavior (ME) (3). Covers the major topics and theoretical perspectives in consumer behavior research, with emphasis on consumer decision making.

MAR 7622 Marketing Research Methodology I (ME) (3). Philosophy, concepts, methods of marketing research design. Experimental methods, sampling procedures, measurement techniques, other methodological considerations. Prerequisites: Successful completion of first year research methods requirements in a College of Business Ph.D. Program or permission of the instructor.

MAR 7623 Seminar in Marketing Environment (ME) (3). Examines the role of marketing professionals in responding to social, economic, political, technological and ecological changes in the business environment. Addresses issues of marketing ethics, social accountability, and the design of responsible marketing strategies.
MAR 7665 Seminar in Marketing Models (ME) (3). Examines the process of model building and the assumptions implicit in various modeling decisions. Emphasis in on learning to interpret, classify and critically evaluate models of marketing phenomena. Prerequisites: Calculus, Probability Theory, Statistics, and Matrix Algebra.

MAR 7786 Seminar in Marketing Theory (ME) (3). Intensive analysis of the nature and role of hypotheses, generalizations, and empirical regularities. Critical examination of theories of marketing and interaction of marketing theory and practice.

MAR 7815 Seminar in Foundations of Marketing Thought (ME) (3). Foundations of marketing, interdisciplinary relationships; reviews major research areas: the marketing mix, consumer choice models, segmentation, stochastic, and analytical models.
MAR 7817 Seminar in Marketing Management (ME) (3). Covers programs of research related to the management of marketing organizations and their role in improving organizational performance. Current and potential research topics will be considered from the perspective of leading scholars and marketing executives.
MAR 7849 Seminar in Services Marketing (ME) (3). Analyzes the nexus between services and marketing management. Identifies and appraises alternative corporate strategies within industries such as banking and finance, insurance, hospitality, entertainment and leisure, health care, and education.
MAR 7875 Sectorial Marketing (ME) (3). Course includes retailing, wholesaling, pricing, distribution, advertising, sales promotion and management, personal selling, international services and macromarketing; and marketing and economic development.

MAR 7979 Doctoral Research in Marketing (ME) (1-6). Research while enrolled for a doctoral degree under the direction of faculty members. Prerequisite: Permission of Department.

MAR 7980 Ph.D. Dissertation (ME) (1-12). Original research that is supervised by a faculty committee and defended openly before the university committee. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
MAR 7981 Dissertation Preparation (ME) (1-12). Preparatory background research and study to begin development of dissertation proposal. Students should be able to complete proposal by end of the course. Prerequisite: Completion of TIER 1 courses. (on demand)
QMB 6357C Business Analysis for Decision Making (3). Review of the relevant quantitative techniques required for business analysis and decision making, including decision models, mathematical programming, statistics and forecasting. This is a WebCT and Excel based course. Prerequisites: College Algebra, computer literacy and working knowledge of Excel.
QMB 6603 Quantitative Methods in Management (IS) (3). Introduction to basic quantitative tools for the analysis of problems arising in the management of organizations, and the application of these tools to real-life problems. Prerequisites: College Algebra and completion of the Computer Programming Proficiency requirement.
QMB 6805 Deterministic Models for Management Analysis (IS) (3). Applications of deterministic models such as linear and nonlinear programming, network analysis (PERT), dynamic programming, and branch and bound algorithms) to managerial problems of allocation, planning, scheduling, investment, and control.

QMB 6845 Simulation of Management Systems (IS) (3). Basic concepts of computer simulation of systems; application of these concepts to a variety of management problems. Industrial dynamics, urban dynamics, and large system simulation. Simulation in economic analysis, heuristic methods, and management games are covered. Prerequisites: MAN 6569 and a Computer Programming Language.
QMB 6855 Stochastic Models for Management Analysis (IS) (3). Applications of probabilistic models (such as queuing, inventory, and renewal) to their managerial problems.
QMB 6875 Stochastic Models for Project Management (IS) (3). Review of deterministic models and principles. Introduction to GERT, critical path methods, criticality index, and resource considerations in stochastic networks. Emphasis on operational decision-making, advanced topics, and individual projects. Students use the computer, and existing programs, to analyze hypothetical project networks, and learn to interpret the results in order to facilitate operational decisions. (F)
QMB 6905 Independent Study in Decision Sciences (IS) (1-6). Individual conferences; supervised readings; reports on personal investigations. Consent of instructor, Department Chairperson and Dean required. P/F only.
QMB 6934 Seminar in Decision Sciences (IS) (1-3). An examination of recent research findings in selected areas of current concern. Emphasis is placed on readings; active discussion; and small, short-term action and research projects. Consent of instructor required.
QMB 6974 Project in Decision Sciences (IS) (1-6). Each student is required to develop and conduct an individual research project or thesis on a topic of interest. The topic will be chosen in consultation with a faculty member in the College and approved by the Department Chairperson.
QMB 7910 Quantitative Research Methods in Business (3). This course introduces a structured approach to quantitative research methods such as surveys, experiments, data analysis, and multi-criteria analysis of judgments.
QMB 7935 Seminar in Decision Sciences (IS) (3). Critical review and analysis of recent and important research developments in the area of decision sciences. Prerequisites: ISM 7083 and ISM 7087.
REE 6045 Real Estate Markets, Institutions and Practices (3). This course is designed to introduce the student to the nature, principles, and advanced fundamental and analytical practices of the real estate industry.
REE 6147 Real Estate Market Analysis (3). An overview of basic theories, principles and techniques related to real estate market analysis with introduction to the standard cash flow software (ARGUS) from industry and to relevant databases.
REE 6200 Real Estate Finance (3). Financial analysis and structuring of real estate projects; traditional and creative concepts and mechanisms for construction financing and permanent financing of residential and income-producing property. Prerequisites: REE 3040 or permission of the instructor.

REE 6305 Advanced Real Estate Investment Valuation (3). The course emphasizes measuring risk and rate of return under conditions of uncertainty in real estate investment decision-making. Simulation is used to face the problems of matching investment strategy to the physical property, leverage, income taxation, and organizational alternatives.
REE 6435 Real Estate Law (FI) (3). Analysis of best practices in real estate law. The course provides a detailed look at the contracts, ownership, structures, and laws impacting domestic and international real estate transactions.
REE 6715 Real Estate Development (3). Operation of real estate markets related to development; land use and development decision-making; the development process; real estate feasibility studies, applied to specific real estate projects.
REE 6932 Special Topics in Real Estate (FI) (1-20). For groups of students desiring intensive studies of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty tutor and Department Chairperson required.
REE 6935 Seminar in International Real Estate (3). Current trends and issues affecting industrial real estate on an international level. Topics include: the multinational corporation and its location decisions; foreign taxation; international trade and exchange rates.
TAX 5066 Tax Research and Reporting (AC) (3). A study of tax planning aspects of a variety of business and other transactions. Emphasis will be placed upon perceiving tax issues and conducting research to resolve them. Prerequisite: Permission of Accounting certificate program advisor.
TAX 5106 Corporate Taxation (AC) (3). Tax implication of corporate formations, distributions, redemptions, liquidations, divisions, reorganizations, collapsibles, attributes, consolidations, S-Corp, AET and PHCs. Prerequisite: Permission of Accounting certificate program advisor.
TAX 5405 Taxation of Estate and Gift (3). The study of the federal estate tax and federal gift tax provisions. Prerequisite: Permission of Accounting Certificate program advisor.
TAX 5406 Taxation of Estates and Trusts (AC) (3). Study of income tax aspects of decedents, followed by income taxation of estates and trusts (subchapter J). Special emphasis on throw-back rules, grantor trusts, charitable remainder trusts, and foreign trusts. Prerequisite: Permission of Accounting certificate program advisor.

TAX 5506 International Dimensions of Taxation (AC) (3). Tax provisions affecting foreign corporations and nonresident aliens, as well as those tax provisions affecting U.S. person's business and investment activities outside the U.S. Prerequisite: Permission of Accounting certificate program advisor.

TAX 5725 Tax Planning for Managers (AC) (3). An exploration of the concepts of federal income taxation and tax planning, from the point of view of the manager. Prerequisites: ACG 6308 and permission of accounting certificate program advisor.

TAX 5875 Seminar in Taxation (AC) (3). An in-depth study of recent legislative, administrative, and judicial developments in taxation. Prerequisites: TAX 4001 or equivalent, and permission of Accounting certificate program advisor.
TAX 5904 Independent Study in Taxation (AC) (3). Individual conferences, supervised readings, reports on personal investigations. Prerequisites: Written Permission of the instructor, Accounting certificate program advisor, School director, and dean.

TAX 5936 Special Topics in Taxation (AC) (3). Intensive study for groups of students of a particular topic or topics not otherwise offered in the curriculum. Prerequisites: Written permission from the instructor, Accounting certificate program advisor, School director, and dean.
TAX 6005 Income Tax (AC) (3). A survey of federal income taxation, with emphasis on the taxation of individuals and corporations and the ethics of income tax accounting. Prerequisites: ACG 6115 and admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting. Not open to those with undergraduate accounting degrees.
TAX 6026 Value-Added Tax Strategies for Business Decisions (3). Development and implementation of a taxbased framework to assist business decision makers and their advisors in the design of sound strategies when considering alternative business transactions. Prerequisite: TAX 6065.
TAX 6065 Tax Research, Practice and Procedure (AC) (3). Study of the tax environment, the tax law and its interpretations, tax research tools, and of relevant practice and procedural mechanisms affecting taxation. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
TAX 6105 Taxation of Corporations I (AC) (3). The study of federal tax consequences of the formation and operation of corporations; distributions and redemption's; elections of Subchapter S status. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
TAX 6107 Federal Corporate Taxation (3). Study of the federal income taxation provisions affecting the formation, operations, liquidation, acquisition, and reorganization of Subchapter C corporations. Prerequisite: TAX 6065.
TAX 6115 Taxation of Corporations II (AC) (3). The study of federal tax consequences of the liquidation and reorganization of corporations; multiple corporations; advanced topics in corporate taxation. Prerequisite: TAX 6065.

TAX 6205 Partnership Taxation (AC) (3). The intensive study of the formation, operation, and dissolution of partnerships (general and limited). Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
TAX 6206 Taxation of Pass-Through Entities (3). Study of small business entitles, emphasis on partnerships, limited liability companies and S corporations; includes choice, formation and operation of above and distributions,
sales and exchanges of ownership in interests and transfers by death. Prerequisite: TAX 6065.
TAX 6305 State and Local Taxation (3). The Constitutional, statutory, regulatory, and judicial principles affecting state and local taxation of business transactions, with emphasis on Florida taxation. Prerequisite: TAX 6065.

TAX 6405 Estate and Gift Taxation (AC) (3). The study of the federal estate tax and federal gift tax provisions. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
TAX 6415 Fiduciary Accounting and Taxation (AC) (3). The study of the income taxation of estates, trust, and the beneficiaries thereof, including the determination of distributable net income, and throwback rules. The grantor trust and income in respect of a decedent is emphasized. The use of trusts in tax and estate planning is also explored. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
TAX 6445 Estate Planning (AC) (3). An in-depth discussion of the use of estate tax planning tools, such as lifetime gifts, life insurance, the marital deduction, the use of trusts, future interests, annuities, powers of appointment, charitable transfers, and post-mortem planning. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
TAX 6446 Wealth Transfers (3). Study of gift estate, and generation-skipping transfer taxes and taxation of estates and trusts; use of estate planning tools: lifetime gifts, life insurance trusts, martial bequests, post-mortem estate planning. Prerequisite: TAX 6065.
TAX 6505 International Taxation I (AC) (3). Federal income tax provisions applicable to non-resident aliens and foreign corporations. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.
TAX 6507 Principles of International Taxation (3). Study of the federal income tax provisions applicable to foreign persons' U.S. income and to U.S. persons' foreign income. Prerequisite: TAX 6065.
TAX 6515 International Taxation II (AC) (3). Federal income tax provisions applicable to U.S. persons, business, and investment activities outside the U.S. Prerequisite: TAX 6065.
TAX 6726 Tax Planning for Managers (AC) (3). An exploration of the concepts of federal income taxation and tax planning, from the point of view of the manager. Prerequisites: ACG 6026 or equivalent and permission of Accounting advisor. Not open to EMST or MACC students.
TAX 6805 Tax Policy (AC) (3). A study of the tax accounting concepts and the judicial doctrines inherent in the federal tax law, tax planning, and tax policy. Prerequisite: TAX 6065.
TAX 6835 Taxation of Deferred Compensation (AC) (3). The taxation of qualified and non-qualified pension and profit-sharing plans, stock options, annuities, lump-sum distributions, death benefits, rollovers, self-employment
plans, employee stock ownership plans, etc. Prerequisite: TAX 6065.

TAX 6875 Current Developments in Taxation (AC) (3). The study of recent legislative, administrative and judicial developments in taxation. Prerequisite: TAX 6065.

TAX 6876 Transactions in Property (AC) (3). An indepth investigation into tax problems relating to basis, capital gains and losses, and nonrecognition provisions for transactions in property with special emphasis on personal property transactions and securities investments. Prerequisite: TAX 6065.
TAX 6877 Seminar in Taxation (AC) (3). Intensive study of a particular topic or a limited number of topics. The topics included in this course will depend upon the availability of faculty with expertise in the following special classes of tax problems: advanced corporate taxation; taxation of not-for-profit institutions; interstate, state and local taxation; and others, as current developments demand. Prerequisite: TAX 6065.
TAX 6905 Independent Study in Taxation (AC) (1-3). Individual conferences, supervised readings; reports on personal investigations. Prerequisite: TAX 6065.
TAX 6935 Special Topics in Taxation (AC) (1-3). Intensive study for groups of students of a particular topic(s) not otherwise offered in the curriculum. Prerequisites: Admission to a graduate program in the School of Accounting or permission of the Director of the School of Accounting.

TAX 7067 Seminar: Special Topics in Taxation Research (AC) (3). Topics vary according to instructor and student interest in problems and issues on the frontier issues of taxation. Prerequisite: Permission of Doctoral advisor in Accounting.
TAX 7815 Seminar: Tax Policy: An Analysis of the Issues (AC) (3). An in-depth examination of the horizontal and vertical equity issues in taxation, the effects on income distribution, business decisions, foreign balance of payments, public finance issues, and economic policy. Emphasized are the areas of empirical research vis a vis legal research. Prerequisite: Permission of Doctoral advisor in Accounting.
TRA 5245 Transportation Logistics (ME) (3). Quantitative methods applied to solving problems in business logistics; mathematical and statistical models; optionalization theory and simulation. Problems selected from areas of physical distribution management, inventory control, mode selection, and facility locations.

TRA 5401 Transportation Operations and Carrier Management (ME) (3). Contemporary management techniques as applied to carriers; management-problems peculiar to transportation firms; economic analysis of marketing problems; capital formation; costs; pricing; labor relations; and government regulation.
TRA 6015 Graduate Survey of Transportation Management (ME) (3). Graduate survey of transportation, its elements, and their impact on society. History, economics, and regulatory principles in transportation. Current policies and problems for all the major transportation modes.

TRA 6905 Independent Study in Transportation (ME) (1-6). Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor, Department Chairperson, and Dean required.
TRA 6936 Special Topics in Transportation (ME) (1-6). For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

## College of Business

Acting Dean
Senior Associate Dean
Associate Dean, International Program
Associate Dean, Chapman Graduate School
Assistant Dean for Undergraduate Affairs
Executive Director, Development
Executive Director, Operations and Strategic Initiatives
Executive Director, Executive and
Professional MBA Programs
Director, Undergraduate Advising
Director, School of Accounting
Director, Ph.D. Programs
Director, Jerome Bain Real Estate Institute and the Tibor and Sheila Hollo School of Real Estate
Director, Marketing and Communication
William Hardin Luisa Perez
Interim Director, Career Management Services

John Nykolaiszyn

## Department Chairs:

Finance Shahid Hamid
Information Systems and Business
Analytics Monica Chiarini Tremblay
Management and International
Business
Marketing
William Newburry
Anthony Miyazaki

## Faculty

Aguirre-Rodriguez, Alexandra, Ph.D. (University of Illinois at Urbana-Champaign), Associate Professor, Marketing
Anderson, Gary, Ph.D. (University of Illinois), Associate Professor, Finance
Armagan, Sungu, Ph.D. (The University of Utah), Instructor, Management and International Business
Austin, Craig, M.B.A. (Florida International University), Visiting Instructor, Marketing
Barber, Joel, Ph.D. (University of Arizona), Associate Professor, Finance
Barua, Abhijit, Ph.D. (Louisiana State University), Assistant Professor, Accounting
Batra, Dinesh, Ph.D. (Indiana University), Professor, Information Systems and Business Analytics and Knight Ridder Research Fellow
Bell, Nathaniel M., J.D. (University of Miami), Participating Faculty, Accounting
Beracha, Eli, Ph.D. (University of Kansas), Assistant Professor, Hollo School of Real Estate
Beristain, Elisabeth, M.A. (University of Michigan), Instructor, Marketing
Birrittella, Timothy Dugan, M.B.A. (Baruch College, C.U.N.Y.), R. Kirk Landon Teaching and Student Engagement Fellow and Senior Instructor, Marketing
Bouaya, Lina, Ph.D. (University of South Florida), Assistant Professor, Information Systems and Business Analytics
Brown, Kevin W., M.S. (Florida International University), Participating Faculty, Management and International Business
Brunken, Teresita, M.S.T. (Florida International University), Clinical Professor, Accounting

Buckman, Brooke, Ph.D. (Arizona State University), Assistant Professor, Management and International Business
Butchey, Deanne, Ph.D. (Florida International University), Senior Lecturer, Finance
Carbon, Andrew, MS/HRM (Florida International University), Participating Faculty, Management and International Business
Carmenate, Jimmy, M.Acc. (Florida International University), Participating Faculty, Accounting
Carrillo, Flavio, M.S.F. (Florida International University), Instructor, Finance and Director, Capital Market Lab
Cartaya, Eric, Ph.D. (Florida International University), Instructor, Management and International Business
Chacar, Aya, Ph.D. (University of California - Los Angeles), Professor and Ingersoll-Rand Professor, Management and International Business
Chang, Chun-Hao, Ph.D. (Northwestern University), Professor, Finance
Chang, Lucia, Ph.D. (University of Texas at Austin), Professor Emeritus, Accounting
Chen, Yi-Ju (Vivian), D.B.A. (Argosy University), Lecturer, Marketing
Chou, Wen-Hsiu, Ph.D. (University of Wisconsin Milwaukee), Associate Professor, Finance
Clemmons, Susan, Ph.D. (Florida International University), Participating Faculty, Information Systems and Business Analytics
Cousins, Karlene, Ph.D. (Georgia State University), Associate Professor, Information Systems and Business Analytics
Cox, John, M.Acc. (Florida International University), Participating Faculty, Accounting
Daigler, Robert T., Ph.D. (University of Oklahoma), Professor and Knight Ridder Center Research Fellow, Finance
Dandapani, Krishnan, Ph.D. (Pennsylvania State University), Professor, Finance
Darcy, David, Ph.D. (University of Pittsburgh), Assistant Professor, Information Systems and Business Analytics
de la Torre, Jose, D.B.A. (Harvard University), Professor Emeritus, Management and International Business
Deckard, Gloria, Ph.D. (University of Missouri), Associate Professor, Information Systems and Business Analytics
Del Pezzo, Mark, M.B.A. (Jacksonville University), Instructor, Finance
Dickson, Peter R., Ph.D. (University of Florida), Professor and Ryder Eminent Scholar Chair in Global Logistics Management, Marketing
Dittenhoffer, Mort, Ph.D. (American University), Professor Emeritus, Accounting
Duarte, Diogo, Ph.D. (Boston University), Assistant Professor
Dupoyet, Brice, Ph.D. (University of Washington), Associate Professor and Faculty Director, MSF Program, Finance
Elam, Joyce, J., Ph.D. (University of Texas-Austin), Professor and James L. Knight Eminent Scholar in Management Information Systems, Information Systems and Business Analytics and Dean, University College
Elias, Desiree, M.Acc. (Florida International University), Visiting Instructor, Accounting
Ellis, S. Christopher, Ph.D. (Florida International University), Instructor, Decision Sciences and Information Systems

Zadeh Esmaeil, Pouyan, Ph.D. (University of Putra Malasia), Researcher, Information Systems and Business Analytics
Fainshmidt, Stav, Ph.D. (Old Dominion University), Assistant Professor, Management and International Business
Freybote, Julia, Ph.D. (Georgia State University), Assistant Professor, Tibor and Shelia Hollo School of Real Estate
Ganske, Sue, J.D. (The University of Toledo), Clinical Professor, Accounting
Garcia, Maria M., Ph.D. (University of Missouri), Visiting Instructor, Marketing
Gelman, Wendy, J.D. (University of Miami), Senior Instructor, Accounting
Gilbert, G. Ronald, Ph.D. (University of Southern California), Participating Faculty, Management and International Business
Gomes, Paulo J., D.B.A. (Boston University), Visiting Assistant Professor, Information Systems and Business Analytics
Gomez, Carolina, Ph.D. (University of North Carolina), Associate Professor, Management and International Business and Faculty Director, MBA Programs
Gooden, Doreen, D.B.A. (Nova Southeastern University), Senior Instructor, Management and International Business
Goodrich, Jonathan N., Ph.D. (State University of New York at Buffalo), Professor, Marketing
Gray, C. Delano, M.S. (New York University), CIA, CBA, CFE, CFSA, Instructor, Accounting
Grigoriou, Konstantinos, Ph.D. (Georgia Tech University), Assistant Professor, Management and International Business
Guess, Wendy, Ph.D. (Texas Women's University), Visiting Instructor, Marketing
Gungoraydinoglu, Ali, Ph.D. (University of Florida), Lecturer, Finance
Gupta, Manjul, Ph.D. (Iowa State University), Assistant Professor, Information Systems and Business Analytics
Gupta, Sushil K., Ph.D. (University of Delhi), Professor and Knight Ridder Center Research Fellow, Information Systems and Business Analytics
Haar, Jerry, Ph.D. (Columbia University), Clinical Professor, Management and International Business
Hamid, Shahid, Ph.D. (University of Maryland), Professor and Chair, Finance
Han, Hyeyoung, Ph.D. (Emory University), Assistant Professor, Information Systems and Business Analytics
Hardin, William, Ph.D. (Georgia State University), Professor and Tibor and Sheila Hollo School of Real Estate Fellow and Director, Tibor and Sheila Hollo School of Real Estate and Director, Jerome Bain Real Estate Institute; Director, MS in International Real Estate Program
Henry, Kenneth, Ph.D. (Florida International University), Clinical Assistant Professor, Accounting
Hertelendy, Attila J., Ph.D. (University of Mississippi), Visiting Assistant Professor, Information Systems and Business Analytics
Hiller, Nathan J., Ph.D. (Pennsylvania State University), Associate Professor and Knight-Ridder Research Fellow, Management and International Business
Hollander, Suzanne, J.D. (University of Miami), Instructor, Hollo School of Real Estate

Jang, Yeonju, Ph.D. (University of Kansas), Assistant Professor, Finance
Jansta, Stan, M.S. (Florida International University), Visiting Lecturer, Accounting
Jiang, Xiaoquan, Ph.D. (University of Houston), Associate Professor, Finance and Knight Ridder Center Research Fellow
Kang, Keumseok, Ph.D. (Purdue University), Assistant Professor, Information Systems and Business Analytics
Kang, Qiang, Ph.D. (University of Pennsylvania), Assistant Professor, Finance
Kerbel, Marcos, M.B.A. (Georgia State University), Participating Faculty, Finance
Keys, James D., M.B.A., M.S.F. (Florida International University), Senior Instructor, Finance
Khosravi, Shawn S., M.B.A. (Nova University), Participating Faculty, Management and International Business
Kim, Jung Hoon, Ph.D. (University of California, Berkeley), Assistant Professor, Accounting
Kleban, John, M.B.A. (University of Toledo), Participating Faculty, Management and International Business
Klein, Richard, Ph.D. (Georgia State University), Associate Professor, Assistant Chair and Knight Ridder Research Fellow, Information Systems and Business Analytics
Koulamas, Christos P., Ph.D. (Texas Tech University), Professor, Information Systems and Business Analytics; Ryder Eminent Scholar and Senior Associate Dean
Krippendroff, Kaihan, M.B.A. (Columbia University), Participating Faculty, Management and International Business
Kroeck, K. Galen, Ph.D. (University of Akron), Professor, Management and International Business
Kumar, Kuldeep, Ph.D. (McMaster University, Hamilton, Canada), Professor, Information Systems and Business Analytics
Kumaraswamy, Arun, Ph.D. (New York University), Associate Professor, Management and International Business
Kundu, Sumit, Ph.D. (Rutgers University), Professor and James K. Batten Eminent Scholar Chair in International Business, Associate Dean of International Program and Director, MIB Programs Management and International Business
Kyparisis, George J., D.Sc. (George Washington University), Professor and Knight Ridder Center Research Fellow, Information Systems and Business Analytics
Lampert, Curba, Ph.D. (University of Texas at Austin), Assistant Professor, Management and International Business
Lasaga, Manuel, Ph.D. (University of Pennsylvania), Clinical Professor, Finance
Lassar, Walfried M., Ph.D. (University of Southern California), Ryder Professor, Marketing
Lawrence, Edward R., Ph.D. (University of Nebraska), Associate Professor, Finance and Florida International Bankers Association Professorship
Li, Tiger, Ph.D. (Michigan State University), Associate Professor, Marketing
Lin, Stephen W., Ph.D. (University of Manchester), CPA, Professor, Ryder Eminent Scholar

Lin, Zhenguo, Ph.D. (University of Wisconsin at Madison), Associate Professor and Tibor and Shelia Hollo School of Real Estate Fellow, Tibor and Sheila Hollo School of Real Estate
Lorenzo, Victor, M.S. (Florida International University), Participating Faculty, Accounting
Luytjes, Martin C., M.B.A. (Florida International University), Participating Faculty, Management and International Business
Magnusen, Karl O., Ph.D. (University of Wisconsin Madison), Professor Emeritus, Management and International Business
Maidique, Modesto A., Ph.D. (Massachusetts Institute of Technology), Professor and Alvah H. Chapman Eminent Scholar Chair in Leadership, Management and International Business; FIU President Emeritus
Maiga, Adam, Ph.D. (University of Memphis), Assistant Professor, Accounting
Maloney, Greg, M.B.A. (University of Miami), Visiting Instructor, Marketing
Martinez, Laureano, M.B.A. (Fordham University, N.Y.) Participating Faculty, Finance
McEwen, Ruth Ann, Ph.D. (Georgia Institute of Technology), Professor and Director, Accounting
Melbourne, Louis, D.M. (University of Maryland, University College), Senior Instructor, Management and International Business
Mesia, Ron, D.B.A. (Nova Southeastern University), Instructor, Marketing
Milian, Jonathan, Ph.D. (University of Chicago), Assistant Professor, Accounting
Miniard, Paul, Ph.D. (University of Florida), Professor, Marketing
Mirzaei, Tala, Ph.D. (The University of North Carolina, Greensboro), Assistant Professor, Information Systems and Business Analytics
Mishra, Suchismita, Ph.D. (University of NebraskaLincoln), Associate Professor and Knight Ridder Center Research Fellow, Finance
Miyazaki, Anthony, Ph.D. (University of South Carolina), Macy's Retailing Professor and Chairperson, Marketing
Moncarz, Raul, Ph.D. (Florida State University), Professor Emeritus, Finance
Mosquera, Gustavo, M.B.A. (Florida International University), Visiting Instructor, Marketing
Most, Kenneth S., Ph.D. (University of Florida), CPA, F.C.A., Professor Emeritus, Accounting

Moysidis, Anastasios, M.S.F. (Florida International University), Instructor, Finance
Munro, Michael S., M.B.A. (Stanford University), Instructor, Marketing
Newburry, William, Ph.D. (New York University), Department Chair and Professor, Management and International Business and SunTrust Bank Professor
Oliveira, Manoel, Ph.D. (Florida International University), Senior Lecturer, Information Systems and Business Analytics
Oztekin, Ozde, Ph.D. (University of Florida), Associate Professor, Finance
Parente, Ronaldo, Ph.D. (Temple University), Associate Professor and Knight-Ridder Center Research Fellow, Management and International Business
Parhizgari, Ali, M., Ph.D. (University of Maryland), Professor, Finance

Parra, Carlos M., Ph.D. (Tokyo Institute of Technology), Clinical Professor, Information Systems and Business Analytics
Paul, Karen, Ph.D. (Emory University), Professor, Management and International Business
Paustian-Underdahl, Samantha, Ph.D. (The University of North Carolina at Charlotte), Assistant Professor, Management and International Business
Perry, Clifford R., Ph.D. (Purdue University), Distinguished Executive Professor, Management and International Business
Perry Frederick, Ph.D. (University of Miami), Clinical Professor, Accounting
Pissaris, Seema, Ph.D. (Florida Atlantic University), Clinical Professor, Management and International Business
Polak, Peter, Ph.D. (University of Pittsburgh), Instructor, Information Systems and Business Analytics
Pomeranz, Felix, Ph.D. (University of Birmingham), CPA, CSP, CFE, Professor Emeritus, Accounting
Prakash, Arun, Ph.D. (University of Oregon), Professor, Finance
Pujol, Juan, M.B.A. (Florida International University), Participating Faculty, Management and International Business
Raghunandan, Kannan, Ph.D. (University of Iowa), Professor and Ryder Eminent Scholar Chair in Business Leadership, Accounting
Ralston, David, D.B.A. (Florida State University), Professor, Management and International Business
Rao, Dileep, Ph.D. (University of Minnesota), Clinical Professor, Management and International Business
Rauseo, Nancy, D.B.A. (Nova Southeastern University), Lecturer, R. Kirk Landon Teaching and Student Engagement Fellow and Senior Lecturer, Marketing
Richmond, Nancy, Ed.D. (Northeastern University), Instructor, Marketing
Rixom, Jessica, Ph.D. (University of Utah), Assistant Professor, Marketing
Rodriguez, Leonardo, D.B.A. (Florida State University), Professor Emeritus, Accounting
Rody, Raymond C., Ph.D. (University of Southern California), Clinical Professor, Marketing
Roomes, Donald, D.M. (University of Maryland, University College), Assistant Chair and Senior Instructor, Management and International Business
Roussakis, Emmanuel, Ph.D. (Catholic University of Louvain), Professor Emeritus, Finance
Sabet, Badi, M.B.A. (Niagara University), Participating Faculty, Finance
Sanchez, Juan, Ph.D. (University of South Florida), Professor and Knight Ridder Byron Harless Eminent Scholar Chair in Management, Management and International Business
Sbaraglia, Andrew, Ph.D. (Pennsylvania State University), Assistant Professor, Accounting
Seaton, Bruce, Ph.D. (Washington University), Associate Professor, Marketing
Shepherd, Philip, Ph.D. (Vanderbilt University), Associate Professor, Management and International Business
Simon, Helen, D.B.A. (Nova Southeastern University), Senior Instructor, Finance
Simpson, Gladys, Ph.D. (Florida International University), Visiting Instructor, Information Systems and Business Analytics

Sinha, Jayati, Ph.D. (University of lowa), Assistant Professor, Marketing
Smith, Antoinette L., Ph.D. (University of South Florida), Assistant Professor, Accounting
Soloff, Robert, J.D. (Rutgers University), Participating Faculty, Management and International Business
Soltero, Rafael, M.B.A. (Rochester Institute of Technology), Instructor, Marketing
Subramanian, Hemang C., Ph.D. (Georgia Institute of Technology), Assistant Professor, Information Systems and Business Analytics
Surysekar, Krishnamurthy, Ph.D. (University of Maryland), Associate Professor, Accounting
Tanenbaum, Jaclyn, M.B.A. (University of Central Florida), Visiting Instructor, Marketing
Tarangelo, Thomas J., J.D. (University of Florida), Lecturer, Accounting
Taylor, Kimberly, Ph.D. (University of Pennsylvania), Associate Professor, Marketing
Tremblay, Monica, Ph.D. (University of South Florida), Associate Professor and Chair, Information Systems and Business Analytics
Tsalikis, John, Ph.D. (University of Mississippi), Professor, Marketing and BMI Marketing Professor
Upadhyay, Arun, Ph.D. (Temple University), Assistant Professor, Finance
Vander Meer, Debra, Ph.D. (Georgia Institute of Technology), Associate Professor, Information Systems and Business Analytics
Von Glinow, Mary Ann, Ph.D. (The Ohio State University), Professor and Knight Ridder Eminent Scholar Chair in International Management, Management and International Business
Vulcheva, Maria, Ph.D. (Emory University), Assistant Professor, Accounting
Walumbwa, Fred, Ph.D. (University of Illinois), Associate Professor, Management and International Business
Wang, Changjiang (John), M.S. (Texas Tech University), Assistant Professor, Accounting
Weinstein, Marc, Ph.D. (Massachusetts Institute of Technology), Clinical Associate Professor, Management and International Business and Faculty Director, MSHRM Program
Wernick, David, Ph.D. (Florida International University), Senior Lecturer, Management and International Business and Faculty Director, International Business Honors Society and Honors in International Business Program
Wheatley, Clark, Ph.D. (Virginia Polytechnic Institute), CPA, Associate Professor; Accounting
Wilson, David, M.P.P. (University of Maryland), Participating Faculty, Management and International Business
Wishart, Nicole, Ph.D. (Florida International University), Senior Instructor, Information Systems and Business Analytics
Wu, Zhonghua, Ph.D. (University of Wisconsin Madison), Associate Professor and Tibor and Sheila Hollo School of Real Estate Fellow
Xia, Weidong, Ph.D. (University of Pittsburgh), Associate Professor and Knight Ridder Center Research Fellow, Information Systems and Business Analytics
Yap, Andrew, M.B.A. (Florida International University), Participating Faculty, Management and International Business

Zdanowicz, John S., Ph.D. (Michigan State University), Professor, Finance

# College of Communication, Architecture + The Arts 

Dean<br>Interim Executive Director, Associate Dean, Cultural and Community Engagement<br>Brian Schriner Juliet Pinto<br>Associate Dean, Faculty Development Shahin Vassigh Associate Dean, Strategic Initiatives Marilys Nepomechie Associate Dean, Students<br>David Rifkind<br>Director, Finance and Personnel Lilia Silverio-Minaya Director, Facilities and Auxiliary Services Mark Marine<br>Principle Gift Officer<br>Chair, Architecture Department Lisa Merritt<br>Chair, Art and Art History Department Jacek Kolasinski Chair, Communication Department Maria Elena Villar Chair, Interior Architecture Department Janine King Chair, Journalism and Media Department Teresa Ponte Interim Chair, Landscape Architecture + Environmental and Urban Design Department Jason Chandler<br>Chair, School of Music<br>Robert Dundas<br>Chair, Theatre Department<br>Joel Murray

The College of Communication, Architecture + The Arts is comprised of eight departments-Architecture, Art and Art History, Communication, Interior Architecture, Journalism and Media, Landscape Architecture + Environmental and Urban Design, Music, and Theatre. The dynamics among the different disciplines make the college unique with programs that focus on art, design, communication, and performance. The college occupies a unique position in South Florida where students can prepare for a career in architecture or the arts within a major research university. Instruction in the college is enriched by a distinguished faculty of artists, designers, journalists, and performers who add dimensions of applicable experience, current issues, and ongoing research to the traditional concepts related to the disciplines and professions within the college.

The college promotes exploration, discovery, and innovation among its different programs and is strongly committed to interdisciplinary education breaking new ground in art, design and performance. Its diverse programs emphasize urban engagement and are informed by current thinking and new technologies.

Developing connections with a wide range of programs and resources in the university, the college is dedicated to being engaged as a leader in art and design as well as in the performing arts in South Florida, neighboring communities, the nation, and internationally. Collaborations with Fairchild Tropical Botanic Garden, the Metropolitan Center, the Wolfsonian-FIU, the BauhausDessau, the Coconut Grove Playhouse, Florida Keys Land and Sea Trust at Crane Point, the Concert Association of Florida, and the Università degli Studi di Genova offer students the opportunity to expand their ingenuity with a variety of resources.

The fusion of essential disciplines with applied professions in the college provides both depth and liberty in learning. In the fields of architecture, landscape architecture, interior architecture, and art, the major emphases are on creative processes and studio work with a variety of supportive lectures and seminar programs. In art history, the emphasis is on scholarly study of the arts through time; lectures, seminars, and independent
research are conducted on campus and in museums and libraries throughout the South Florida area. Music emphasizes skills and knowledge that are fundamental to the entire discipline: music theory, music history, performance, aural and keyboard training, orchestration, composition, conducting, and ensemble participation. Communication focuses on developing skills essential for effective leadership, critical decision making, and strategic influence through interpersonal and mediated communication. Our liberal arts and professional degrees prepare students for successful careers in organizational communication, advertising, and public relations in our diverse communities and our global digital ecosystem. Our graduate programs give students a global perspective in strategic communication to help them prepare for advancement in advertising, public relations, and integrated communications careers. Journalism and Media investigate, analyze, chronicle, and explain the complexities of the world around us. Theatre majors study the arts that contribute to theatre production-acting, costuming, directing, designing sets lighting and sound, writing plays, and theatre administration.

Admission to the College of Communication, Architecture + The Arts is selective and competitive. For information on the College of Communication, Architecture + The Arts, see http://carta.fiu.edu.

Students seeking to major in any of the college's departments must meet the requirements for admission to the university and the requirements for admission to the major by the respective department. Admission to the above referenced departments' majors is competitive and is not guaranteed. Criteria for selective admission to the departments major include indicators of ability, performance, creativity, and/or talent to complete required work within the desired major. Admission to the department's major will be offered based on space availability to those applicants judged by the respective Department Faculty Admissions Committee to have the greatest potential for successful completion of the program. Florida community college transfer students with Associate in Arts degrees are given equal consideration with FIU students.

## Hours of Operation / Location / Contact Information

Monday - Friday, 8:30am - 5:00pm
Paul L. Cejas Architecture Building, PCA 272,
Miami, FL 33199
Phone: (305) 348-7500, Fax: (305) 348-6716

## Student Services and Advising Center

Our advisors are here to assist you in the development of a meaningful educational plan that is compatible with your life goals. You can rely upon your academic advisors for information, assistance, and encouragement.

- Provide accurate and customized academic information.
- Educate students on how to plan effectively.
- Help students identify goals and develop education plans to reach them.
- Interpret and assure adherence to CARTA's academic policies and procedures.
- Consult with students experiencing academic difficulty and assist them in identifying reasons for problems and possible solutions.
- Help students understand degree requirements.
- Assist students in the selection and scheduling of courses.

| Architecture | Student Services and Advising <br> Center, PCA 272 <br> cartaadv@fiu.edu, (305) 348-7500 |
| :--- | :--- |
| Art and Art History | Student Services and Advising <br> Center, PCA 272 <br> cartaadv@fiu.edu, (305) 348-7500 |
| Communication | Student Services and Advising <br> Center, PCA 272 <br> cartaadv@fiu.edu, (305) 348-7500 |
| Interior Architecture | Student Services and Advising <br> Center, PCA 272 <br> cartaadv@fiu.edu, (305) 348-7500 |
| Journalism and Media | Student Services and Advising <br> Center, AC2 230 <br> sjmc@fiu.edu, (305) 348-7500 |
| Landscape Architecture + Student Services and Advising |  |
| Environmental and Urban Center, PCA 272 |  |
| cartaadv@fiu.edu, (305) 348-7500 |  |
| Design | Student Services and Advising <br> Center, WPCA 145B <br> cartaadv@fiu.edu, (305) 348-2442 |
| Music | Student Services and Advising <br> Center, WPCA 145B <br> cartaadv@fiu.edu, (305) 348-2442 |
| Theatre | 340 |

## Graduate Programs

The college offers academic programs leading to graduate degrees in Architecture, Interior Architecture, Landscape Architecture, Mass Communication, Music, Music Education, and Visual Arts.

## Certificate Programs

The college offers academic programs leading to graduate certificates in History, Theory and Criticism of Architecture, Furniture Design, Global Strategic Communications, Integrated Marketing Communication: Latin American Certification, Landscape Architecture, Cruise Ship and Super Yacht Design, Spanish-language Journalism: Investigative Reporting, Student Media Advising, and Museum Studies.

## School of Communication and Journalism

Dean Brian Schriner
Interim Executive Director Juliet Pinto
Associate Dean, Cultural and Community
Engagement John Stuart

Associate Dean, Faculty Development Shahin Vassigh
Associate Dean, Strategic Initiatives Marilys Nepomechie
Associate Dean, Students David Rifkind
Director, Finance and Personnel Lilia Silverio-Minaya
Director, Facilities and Auxiliary Services Mark Marine
Principle Gift Officer Lisa Merritt
Chair, Communication Department Maria Elena Villar
Chair, Journalism and Media Department Teresa Ponte
The School of Communication and Journalism offers professional education leading to the M.S. in Mass Communication with current specializations in global strategic communication, digital media, and Spanishlanguage journalism. The orientation of the graduate program is primarily professional, not theoretical. The program is designed to enhance graduates' abilities to work in the mass communication professions.

## Graduate Programs

The school offers academic programs leading to graduate degrees in Business Journalism, Global Strategic Communications, Mass Communication, Spanishlanguage Journalism, and Student Media Advising.

## Certificate Programs

The school offers academic programs leading to graduate certificates in Global Strategic Communications, Integrated Marketing Communication: Latin American Certification, Spanish-language Journalism: Investigative Reporting, and Student Media Advising.

## School of Music

Robert B. Dundas, Chair
Brenton Alston, Assistant Professor
Barry Bernhardt, Senior Instructor and Director of Marching Band
Federico Bonacossa, Instructor
Jason Calloway, Instructor
Gary Campbell, Professor
Robert Davidovici, Professor
David Dolata, Professor
Karen Fuller, Senior Instructor
Joel Galand, Associate Professor
Orlando J. García, Professor
Kemal Gekic, Professor
James Hacker, Senior Instructor
William Dan Hardin, Music Librarian
Fredrick Kaufman, Professor Emeritus
James Kelley, Assistant Professor
Vindhya Khare, Visiting Instructor
Michael Klotz, Senior Instructor
Marcia Littley, Instructor
Kathryn K. Longo, Assistant Professor
José López, Associate Professor
Michael Orta, Associate Professor
Jamie Ousley, Assistant Professor
Jacob Sudol, Assistant Professor
Michael Vitenson, Instructor
Kathleen L. Wilson, Professor

## Master of Music

The School of Music offers a Master of Music degree with specialization in the following areas: music composition, music technology, jazz, performing arts production, applied (winds/percussion, strings, voice, piano, piano accompanying, organ), and conducting (choral, orchestral, wind). In addition, the department offers the Master of Science in Music Education. For more information please contact the School of Music.

## Admissions Requirements

All students entering the graduate programs in the School of Music must possess an undergraduate Bachelor of Music degree from an accredited institution or the equivalent with a 3.0 GPA in the last 60 credits of study. The only exception to this requirement is found in the Music Management and Production, Music Education, and Music Technology areas, where students with undergraduate degrees in other related areas may be accepted, as long as they can demonstrate a sufficient musical background. In addition to the on-line application and documentation required by the University Graduate School, the School of Music graduate programs require an audition or interview and additional supporting materials. Please visit the Graduate Admissions website for School of Music admission requirements by degree and track.

Applicants who feel the earned GPA is not indicative of their ability to be successful in a graduate degree program may also submit scores on the Graduate Record Examination, which will be taken into consideration by the admission committee in its evaluation of the application.

- Wind/Percussion Performance: audition on instrument (and interview when feasible) - recordings acceptable
- String/Guitar Performance: audition on instrument (and interview when feasible) - recordings acceptable
- Keyboard/Organ Performance: audition on instrument (and interview when feasible) - recordings acceptable
- Vocal Performance: audition on voice (and interview when feasible) - recordings acceptable
- Conducting (choral, wind, orchestral): conducting audition (and interview when feasible) - video acceptable
- Jazz: audition on instrument (and interview when feasible) - recordings acceptable
- Composition: review of portfolio of scores (and interview when feasible)
- Music Management and Production: interview required
- Music Technology: portfolio of music or software, interview, CV, personal statement


## General Requirements

Music Theory (Analytical Techniques course required in all areas except jazz, music technology, music education, and performing arts production) ${ }^{1}$
Music History/Literature ${ }^{1}$ (see each area for specific courses)
Ensembles/applied/conducting (see each area for specific courses)
The above eight credits are included in the 36 credits required for most areas of concentration.
${ }^{1} \mathrm{~A}$ placement exam is required before students are allowed into these courses. Remedial work may be required before these courses are taken. A grade of " $B$ " or better must be earned in order for a course to count towards the MM in Music or the MS in Music Education.

## Areas of Concentration

## Composition ( 36 credit hours)

MUC 6251 Graduate Music Composition (3 semesters - 3

## credits each)

Composers Forum ( 4 semesters - 1 credit each) 4
Electronic Music 2 semesters ( 2 credits per semester beyond MIDI Tech class)
MUT $5629 \quad$ Analytical Techniques 3
Graduate Electives to be selected in consultation with the composition area director
MUH 6937 Special Topics in Music History 3
MUS 5711 Music Bibliography 2
Thesis/Recital (includes private lessons and 45 minute recital of student's compositions during last semester)

## Performance

Applied Piano ( 36 credit hours)
MVK 5451 Applied Piano (3 semesters - 3 credits each) 9
MUN 5515 Accompanying ( 2 semesters -1 credit each) 2
Chamber Music ( 2 semesters - 1 credit each) 2
MUS 5906 Master's Recital (includes private lessons and
recital during last semester)
MUT $5629 \quad$ Analytical Techniques 3
MUL 5405/5406 Keyboard Literature I and II (2
semesters - 3 credits each)
Major Ensemble ( 2 semesters - 1 credit each) 2
MVK $5651 \quad$ Piano Pedagogy 2
MUS 5711 Bibliography 2
MUH $6937 \quad$ Special Topics in Music History 2

## Piano Accompanying ( $\mathbf{3 8}$ credit hours)

Applied Piano (3 semesters - 3 credits each)
Instrumental Accompanying
Vocal Accompanying
Chamber Music (2 semesters - 1 credit each)
MUS 5906 Master's Recital (includes private lessons and recital during last semester)
Analytical Techniques
2 music literature courses to be chosen in consultation with advisor
MUS $5205 \quad$ Graduate Review Diction I
MUS 5206 Graduate Review Diction II
Major Ensemble (1 semester - 1 credit each) 1
MUS 5711 Music Bibliography 2
MUH $6937 \quad$ Special Topics in Music History 1
Applied Organ ( 36 credit hours)
Applied Organ (3 semesters - 3 credits each) 9
Accompanying (2 semesters - 1 credit each) 2
Organ Pedagogy
Analytical Techniques
Organ Literature I and II
Choral Conducting or Instrumental Conducting
Major Ensemble (2 semesters - 1 credit each)
MUS 5711 Bibliography
MUH $6937 \quad$ Special Topics in Music History 2
MUS 5906 Master's Recital (includes private Lessons and recital during last semester)
Applied Woodwinds, Brass, Percussion (36 credit hours)
Applied Instruction (3 semesters - 3 credits each) 9
Elective Ensembles (from orchestra/
wind/brass/percussion ensembles) (6 ensembles - 1 credit each)
MUN 5465 Chamber Music (2 semesters - 1 credit each) 2
MUS 5906 Master's Recital (includes private lessons and
recital during last semester)
Analytical Techniques
MUL 5505 or MUL 5456 Symphonic Literature or Wind Literature
Graduate Music Electives
MUS 5711 Music Bibliography 2
Applied Strings ( $\mathbf{3 6}$ credit hours)
Applied Strings (3 semesters-3 credits each) 9
MUN 5215 Orchestra or MUN 5485 Guitar Ensemble (4
semesters - 1 credit each)
MUN 5465 Chamber Music Elective (4 semesters - 1 credit each)
MUS 5906 Master's Recital (includes private lessons and recital during last semester)
MUT $5629 \quad$ Analytical Techniques 3
MUL 5505 Symphonic Literature or MUL 5435 Guitar Literature
MUH $6937 \quad$ Special Topics in Music History
3
MUS 5711 Music Bibliography 2
Graduate Music Electives
Applied Voice ( 36 credit hours)
MVV 5451 Applied Voice ( 3 semesters -3 credits each)
MUO 5505 Opera Workshop (4 semesters, 1 cr. each)
Elective Ensembles ( 3 semesters - 1 cr. each)
(to be chosen in consultation with Director of Vocal
Studies)
MVV $5651 \quad$ Graduate Vocal Pedagogy I
MUL 5671
Opera Literature

| MUL 5609 | Survey of Art Song Literature | 3 |
| :--- | :--- | :--- |
| MUT 5629 | Analytical Techniques | 3 |
| MUH 6937 | Special Topics in Music History | 1 |
| MUS 5711 | Music Bibliography | 2 |
| MUS 5906 Master's Recital (includes private lessons and |  |  |
| recital during last semester) | 6 |  |

## Conducting

## Choral Conducting ( $\mathbf{3 6}$ credit hours)

MUG 5205 Graduate Choral Conducting (3 semesters - 3 credits each)9

Choir Ensemble Electives (4 semesters - 1 credit each) ..... 4
lessons and recital during last semester) ..... 6
MUT 5629 Analytical TechniquesMUL 5645 Choral Literature
MUH 6937 Special Topics in Music History

MUS 5711 Music Bibliography
MVV $5651 \quad$ Graduate Vocal Pedagogy IGraduate Music Electives ${ }^{1}$4
Instrumental (Wind) Conducting (36 credit hours)
MUG 5307 Graduate Applied Instrumental Conducting (3semesters -3 credits each)9
Ensemble Electives (4 semesters - 1 credit each) ..... 4
MUS 5906 Master's Recital (includes private lessons andrecital during last semester)6
MUT 5629 Analytical Techniques ..... 3
MUL $5456 \quad$ Wind Instrument Literature ..... 3
MUH $6937 \quad$ Special Topics in Music History ..... 3
MUS 5711 Music Bibliography ..... 2
Graduate Music Electives ..... 6
Orchestral Conducting (36 semester hours)
MUG 6309 Graduate Applied Orchestral Conducting (3
semesters -3 credits each)
Elective Ensembles (4 semesters - 1 credit each) ..... 49
MUS 5906 Master's Recital (includes private conductinglessons and recital during last semester)
MUT 5629 Analytical Techniques ..... 36
MUL 5505 Symphonic Literature ..... 3
MUH 6937 Special Topics in Music History
MUS 5711 Music Bibliography ..... 2
Graduate Music Electives ..... 6
Jazz Performance ( $\mathbf{3 6}$ credit hours)
Applied Music (major instrument) (3 semesters - 3 credits each) ..... 9
Ensembles (from Studio Jazz Band/Combo/Latin JazzEnsemble) (4 semester - 1 credit each)4
MVJ 5150 Jazz Piano Techniques (2 semesters - 1 crediteach; not required of Jazz Piano principals who take 2credits of Classical Piano instead)2
MUS 5711 Music Bibliography ..... 2
Music Technology Elective (to be chosen in consultationwith advisor)2
MUT 5646, 5647: Advanced Jazz Techniques I and II ..... 6
MUH $6937 \quad$ Special Topics in Music History ${ }^{2}$Graduate Music Electives3

[^1]MUS 5906 Master's Recital (includes private lessons and recital during last semester)

## Music Management and Production (36 credit hours)

MUM 5725 Live Music Operations I 2
MUM 5795 Music Production Lab
MUM 5726 Live Music Operations II 3
MUS 5512 Sound Reinforcement 2
MUM $5809 \quad 3$
MUM 5705 Advanced Business of Music* 3
MUM $5808 \quad$ Grant Writing for the Arts 2
MUS 5971 Thesis 6
MUM $5946 \quad$ Performing Arts Internship 4
MUS 5711 Music Bibliography 2
MUH $6937 \quad$ Special Topics in Music History 3
MUT 5XXX Graduate Music Theory 3
Graduate Music Electives 2

* prerequisite MUM 4301 or equivalent

Music Technology ( 36 credit hours)
MUC 6405 Electronic Music Lab III
MUC 5406 Electronic Music IV
MUC 5635 Computer Music Seminar I
MUC 5636 Computer Music Seminar II 3
MUS 5711 Music Bibliography 2
MUS $5512 \quad$ Sound Reinforcement 2
PHY 5466 Physics of Music 3
MUT 5629 Analytical Techniques ${ }^{3}$ 3
MUH $6937 \quad$ Special Topics in Music History 1
MUS 5971 Thesis 6
MUM 5946 Performing Arts Internship 1-9

## Master of Science in Music Education Degree hours: (30)

## Admission Requirements

In addition to the general requirements listed under the Master of Music degree, an interview, writing sample, two letters of recommendation, and a video of classroom teaching are required.
Music Education: (12)

| MUE 6938 | Seminar in Music Education | 3 |
| :--- | :--- | :--- |
| MUE 6815 | Psychological Foundations of Music |  |
|  | Behavior | 3 |
| MUE 6785 | Research in Music Education | 3 |
| MUE 6190 | Curriculum and Policy Design in Music |  |
|  | Education | 3 |

Music Courses/Common Core: (6)
MUT $5629 \quad$ Analytical Techniques
MUT $5051 \quad$ Graduate Theory Survey
MUH $5688 \quad$ Graduate Music History Review IV or
Graduate Music History Elective
Personal Focus Courses: (9)
General Electives/Cognate Area

Research: (3)
MUE 6971
Thesis in Music Education
or
MUE $6910 \quad$ Directed Research

## Course Descriptions

## Definition of Prefixes

MUC-Music: Composition; MUE-Music: Education; MUGMusic: Conducting; MUH-Music: History/Musicology; MULMusic: Literature; MUM-Music: Commercial; MUN-Music: Ensembles; MUO- Music: Opera/Musical Theatre; MURMusic: Church; MUS-Music; MUT-Music: Theory; MVBApplied Music/Brass; MVJ-Applied Music/Jazz; MVKApplied Music-Keyboard; MVO-Applied Music/Other; MVP-Applied Music/Percussion; MVS-Applied Music/Strings; MVV-Applied Music/Voice; MVW-Applied Music/Woodwinds.

MUC 5406 Electronic Music IV (2). An advanced course in computer music providing students hands-on experience with recently developed hardware and software for the creation of music. Prerequisite: MUC 4400.

MUC 5407 Electronic Music V (2). Students develop new hardware and/or software for uses related to musical composition. Prerequisite: MUC 5406.
MUC 5615 Film Scoring (3). An in-depth analysis of film scores in the 20th and 21st century as well as scoring techniques used by film composers in acoustic music as well as scores created with new technologies. Prerequisites: Graduate standing in the School of Music and successful completion of 4 semesters of undergraduate music theory.
MUC 5635 Computer Music Seminar I (3). Introduces students to the historical contributions of computer music composers and engineers. Prerequisites: MUC 6305, MUC 6306. Corequisite: MUC 6405.
MUC 5636 Computer Music Seminar II (3). Introduces students to the compositional procedures used by computer music composers. Prerequisites: MUC 6305, MUC 6306, MUC 6405. Corequisite: MUC 5406.

MUC 5637 Computer Music Seminar III (3). Introduces students to the research technologies for making interactive sound projects including installations and exhibits. Prerequisites: MUC 6305, MUC 6306, MUC 6405, MUC 5406.

MUC 5935 Composition Forum (1). Student composers present their work for critique by faculty and topics relevant to composition are presented by faculty and guests. Prerequisite: Admission into the graduate composition program.
MUC 6251 Graduate Music Composition (3). The writing of evolved musical compositions with regard to each student's strengths and aesthetic development. Graduate standing in Music Composition and or permission of the instructor.
MUC 6305 Electronic Music Lab I (2). Exploration of the electronic medium including the history of electronic music, digital studio techniques, analog studio techniques, digital synthesis and analog synthesis. Prerequisites: MUC 5345 or permission of the instructor.

MUC 6306 Electronic Music Lab II (2). Continuation of Electronic Music Lab I with an emphasis on advanced MIDI applications including sampling, digital sequencing, digital signal processing and interactive MIDI software. Includes one large composition project. Prerequisite: MUC 6305.

MUC 6405 Electronic Music Lab III (2). Special projects in advanced electronic music programming environments including Csound, MAX, Interactor, HMSL and CHANT. Includes one large composition project. Can be repeated 4 times. Prerequisite: MUC 6305.
MUE 5485 Marching Band Techniques (3). A study of show design and concepts; marching band management and organizational procedures including booster organizations, inventory, handbooks, grading procedures, rehearsal techniques. Prerequisite: Permission of the instructor.
MUE 5695 Landscape of 21st Century Performing Arts (3). This course examines the ways in which, using critical thinking, creativity and communication proficiency, students will be able to recognize the challenges that face today's performing arts educator, artist and organization. It aims to develop multiple ways to articulate and discuss new ways of teaching, performing and working within the arts. The objective is to guide students to innovative and multiple ways to apply their musical experiences to fit today's challenges and adaptive arts landscape.
MUE 5907 Directed Study in Music Education (1-3). Individual investigation in one or more areas of music education.
MUE 5921 Choral Conducting Workshop (3). The study of various topics related to choral literature, conducting and techniques. Prerequisite: Permission of the instructor.
MUE 5922 String Workshop (3). The study of various topics related to string literature, conducting and techniques. Prerequisite: Permission of the instructor.
MUE 5923 Instrumental Conducting Workshop (3). The study of various topics related to instrumental ensemble literature, conducting and techniques. Prerequisite: Permission of the instructor.
MUE 5924 Jazz Workshop (3). The study of various topics related to jazz literature, conducting and techniques. Prerequisite: Permission of the instructor.
MUE 5928 Workshop in Music (3). Applications of materials and techniques in music in a laboratory or field setting.
MUE 5945 Supervised Teaching: Music Education (6). Supervised teaching. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and the subject matter area.
MUE 6190 Curriculum and Policy Design in Music Education (3). Examination of the relationship between curriculum theory, policy practice and philosophical ideals within music education. Evaluation of traditional and innovative models and impact on learning.
MUE 6305 Instruction in Early Childhood Music (3). Elective in masters program in early childhood education. Refines skills related to program development, methods of
teaching, selection of materials, and review of research, in preschool, kindergarten and primary grades.
MUE 6316 Instruction in Elementary Music (3). This course is designed to provide a balance and make connections between the study of theory and philosophy and the practice of music education and working with elementary-aged children.
MUE 6345 The Methodology and Analysis of Music Teaching (3). A data based analysis of methods and programs in the public schools and the development of music pedagogy skills. Reviews current research findings and applies them where applicable to the field of Music Education. Required for the Masters Degree. Prerequisite: Undergraduate Degree.
MUE 6396 Music in Special Education (3). The study of musical experiences for students with disabilities in mainstreamed and self-contained special education music classes. Musical adaptations and modifications are emphasized.
MUE 6785 Research in Music Education (3). A survey of current research and past research trends in music education. Applied training in techniques of design and data analysis.
MUE 6815 Psychological Foundations of Music Behavior (3). Overview of acoustical, psychological and physiological foundations of music as it influences human behavior. Covers musical acoustics, anatomy of human hearing, music perception, reactions, personality, mood and powers of music discrimination. Required for the Master of Science in Music Education degree. Prerequisite: Undergraduate degree.
MUE 6910 Directed Research (3). This course is designed to provide an opportunity for students to engage in high-level inquiry focusing on an area of specialization within the music education profession.
MUE 6925-26 Special Topics in Music Education (1-3). Applications of new, innovative or contemporary materials and/or techniques in music education. May be used for elective credit with permission of the program director.
MUE 6938 Seminar in Music Education (3). Seminar topics concerning historic music education programs in the United States and other countries, as well as current issues and problems facing the music educator. Required for the Master of Science in Music Education degree. Prerequisite: Undergraduate degree.
MUE 6971 Thesis in Music Education (1-3). Research and paper for Masters Candidates in Music Education. Prerequisites: MUE 6785 and permission of Graduate Advisor in Music Education.
MUG 5105 Advanced Conducting Techniques (1). An extension of form and analysis, with interpretation both in instrumental and choral conducting. Twentieth century scoring and symbol interpretation will be studied in depth, with actual conducting experience required.
MUG 5205 Graduate Applied Choral Conducting (3). Advanced study of choral conducting, including gesture, rehearsal techniques, and repertoire. Prerequisites: Graduate standing and permission of the instructor.

MUG 5307 Graduate Applied Instrumental Conducting (3). Advanced study of wind conducting, including gesture,
rehearsal techniques, and repertoire. Prerequisites: Graduate standing and permission of the instructor.
MUG 5935 Conducting Seminar (1). An examination of the principal issues of conducting, emphasizing score reading and study, rehearsal, interpretation, and contemporary techniques. Prerequisites: Graduate standing and/or permission of the instructor.
MUG 6309 Graduate Applied Orchestral Conducting (3). Advanced study of orchestral conducting, including gesture, rehearsal techniques and repertoire. May be repeated. Prerequisites: Graduate standing or permission of the instructor.
MUH 5025 History of Popular Music in the U.S. (3). Overview of Afro-American and Euro-American popular music and its historical development. Examination of musical style and social context in lecture-discussion format with film and video.
MUH 5057 Music of the World (3). Survey of folk, popular and classical musical traditions from around the world. Examination of musical style and social context with film and performance demonstrations.
MUH 5065 Latino Music in the United States (3). Survey of Latin American musical traditions brought through immigration. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.
MUH 5066 Music of Mexico and Central America (3). A survey of folk, popular and classical musical traditions in the region. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.
MUH 5067 Music of the Caribbean (3). Survey of folk, popular and classical musical traditions and their ongoing connection with Caribbean populations in the U.S. Class includes film and performance demonstrations.
MUH 5075 Women in Music (3). Introduces students to women musicians including performers, composers, and researchers from all genres.
MUH 5219 Graduate Music History Survey (1-3). Music history overview for entering graduate students. Prerequisite: Music history placement test.
MUH 5345 Musical Style and Practice in the Baroque Era (3). Detailed treatment of the genres, styles, and composers of the Baroque period within the wider context of Baroque aesthetics and culture. Exploration and application of Baroque performance practice.
MUH 5546 Music of the Americas (3). An exploration of the folk, popular, and art music of Latin America.
MUH 5575 Survey of Asian Music (3). Examines the major Asian musical traditions within the cultural framework of history, arts and traditions.
MUH 5685 Graduate Music History Review I (1-3). Examination of music history achievements from antiquity through the renaissance. Musical structures and composers from these eras are studied through lectures supplemented by recordings and musical analysis. Prerequisites: Graduate standing and permission of the instructor.

MUH 5686 Graduate Music History Review II (1-3). Examination of music history achievements of the Baroque and Classical eras. Musical structures and composers from these eras are studied through lectures supplemented by recordings and musical analysis. Prerequisites: Graduate standing and permission of the instructor.
MUH 5687 Graduate Music History Review III (1-3). Examination of music history achievements from the Romantic era to the present. Musical structures and composers from these eras are studied through lectures supplemented by recordings and musical analysis. Prerequisites: Graduate standing and permission of the instructor.
MUH 5688 Graduate Music History Review IV (1-3). The fourth semester of the music history sequence covers the history of music from 1945 to the present, and includes the detailed study of its literature through critical listening and analysis. Prerequisite: Music majors.
MUH 5815 Jazz History: The Innovators (2). The work of four artists whose innovations have profoundly defined the jazz idiom from its beginning through the present dayDuke Ellington, Charlie Parker, Miles Davis, and John Coltrane.
MUH 6937 Special Topics in Music History (1-3). Graduate seminar with rotating topics, each one focusing on a narrow historical era, geographical area, or subject related to the history of music and its performance. May be repeated. Prerequisites: Pass all sections of Music History Placement Test, MUH 5219, or MUH 5685-88.
MUL 5405 Keyboard Literature I (3). Study of solo works for the keyboard from historical beginnings to 1828. Performance practices and stylistic analysis will be emphasized, with illustrations of representative works.
MUL 5406 Keyboard Literature II (3). Study of solo works for the keyboard from 1828 to the present. Performance practices and stylistic analysis will be emphasized, with illustrations of representative works. Prerequisite: MUL 5405.
MUL 5435 Guitar Literature (3). Survey of solo, chamber, and concerto guitar literature from the 16th century to the present. Repertoires will be examined from historical, analytical, pedagogical, and text-critical perspectives.
MUL 5456 Wind Instrument Literature (3). The history and development of Wind Instrument Literature from ca. 1650 to the present day. Music appropriate for all levels of instruction from middle school through college level is included. Prerequisites: Graduate standing in Music and permission of the instructor.
MUL 5495 Survey of Organ Literature (3). Survey of organ literature, history, performance practice and organ design. Includes historic sound recordings and in-class performance. Prerequisites: Graduate standing in Music and permission of the instructor.
MUL 5496 Organ Literature I (3). Survey of organ literature from antiquity to 1750 in the German, French, Italian schools.
MUL 5497 Organ Literature II (3). Survey of organ literature from 1750 to the present in the German, French, and American schools.

MUL 5505 Symphonic Literature (3). The study of the symphony and the symphonic tone poem from its origin in the Baroque period to the twentieth century. Prerequisites: Graduate standing in Music and permission of the instructor.

MUL 5607 Vocal Literature I (2). A survey of solo vocal literature from the 17th century to the late 18th century. Emphasis will be placed on a discussion of ornamentation and performance-practice and comparisons of editions. Prerequisites: Graduate standing in Music and permission of the instructor.

MUL 5609 Survey of Art Song Literature (3). An historical survey of the literature for solo voice from the medieval period to the national schools of the contemporary era.

MUL 5624 Vocal Literature II (2). The German Lied and its poetry. Emphasis will be placed on a study of the poets and their poetry, important facts of the composers' lives and times and other musical and cultural developments. Prerequisite: Graduate Standing.
MUL 5625 Vocal Literature III (2). The French Melodie. Emphasis will be placed on a study of the poets and their poetry, their styles and schools, the composers' lives and times and other musical and cultural developments. Prerequisite: Graduate Standing.
MUL 5626 Vocal Literature IV (2). Twentieth-century art song. Emphasis will be placed on the rise of the nationalist schools, the development of atonalism and other modern schools of thought. Prerequisites: Graduate standing in Music and permission of the instructor.
MUL 5645 Choral Literature (3). A survey of sacred and secular choral literature from the Middle Ages to the present. Emphasis on stylistic analysis and performance practice for each style period. Includes score study, aural analysis of recorded performances and in-class performances. Prerequisites: Graduate standing in Music and permission of the instructor.

MUL 5671 Opera Literature (3). A chronological survey of operatic literature from the 17th century to the present day. Emphasis placed on the historical milieu in which the operatic form evolved through the ages. Prerequisites: Graduate standing in Music and permission of the instructor.
MUM 5705 Advanced Business of Music (3). Topics include strategic planning, employee development, and decision making. Also includes a study of publishing, collection agencies, creative unions, and contracts with composers and publishers. Prerequisites: MUM 4301 and permission of the graduate advisor.
MUM 5715 Performing Arts Production I (2). Focus on the various aspects of performing arts production. Students attend performances of every possible genre of performing arts and critique the production and the venue. Prerequisite: Permission of the graduate advisor.
MUM 5725 Live Music Operations I (2). How promoters and producers project a profit margin and the ability to oversee a profit; considering overhead, scheduling, accommodations, concessions, sound and light. Prerequisite: Permission of the graduate advisor.

MUM 5726 Live Music Operations II (3). Continuation of MUM 5725, Live Music Operations I. Emphasis on promoters', producers', and managers' ability to project a profit margin. An on-campus production is required as the final project. Prerequisites: MUM 5725 and permission of the graduate advisor.
MUM 5795 Music Production Laboratory I (1). Students are assigned to work in the production of $10-15$ individual concert productions. The productions are varied and provide the students the opportunity to put in practice work learned in the classroom. Prerequisite: Permission of the graduate advisor.
MUM 5796 Music Production Laboratory II (1). A continuation of Music Production Lab I. Students are assigned to work in the production of 10-15 individual concert productions. Prerequisites: MUM 5795 and permission of the graduate advisor.
MUM 5797 Music Production Laboratory III (1). A continuation of Music Production Lab II. Students are assigned to work in the production of 10-15 individual concert productions. Prerequisites: MUM 5796 and permission of the graduate advisor.
MUM 5808 Grant Writing for the Arts (2). Designed to familiarize the student with the tools and techniques in writing a successful grant proposal. Focuses on the perspective of the arts manager/administrator in relations to grant writing and grant management.
MUM 5809 Music Production Seminar (3). Explores issues and practical applications in the management of music centers, arts organizations and arts centers. Includes examination of local arts centers, local arts councils, music venues, performing arts venues, arts organization and arts service organizations. Prerequisites: Graduate standing or permission of instructor.
MUM 5946 Performance Arts Internship (1-9). Interns assist and/or observe in all job functions and duties at an entertainment venue. Areas include: production management; design services; technical production; talent booking and casting; and creative show development. Prerequisite: Permission of the graduate advisor.

MUN 5105 Golden Panther Band (3). A study and performance of pop, jazz, and rock musical selections for the instrumental medium. Students will demonstrate what they have learned by performing and through individualized playing examinations. Prerequisite: Permission of the instructor.
MUN 5125 Symphony Band (1). Concert Band ensemble for music majors on secondary instruments and non-music majors. Various types of concert band literature covered from differing grade levels. Course open to anyone who has previous experience playing a wind or percussion instrument.
MUN 5145 Symphonic Wind Ensemble (1). Readings and performances of wind ensemble music from the 18th century to the present. Open to wind and percussion instrumentalists. Prerequisite: Permission of the conductor.
MUN 5215 Orchestra (1). An instrumental ensemble performing works from the symphonic repertory. Prerequisites: Previous experience and permission of the conductor.

MUN 5245 String Ensemble (1). Performance of orchestra literature for large string ensembles. Prerequisite: Permission of the instructor.
MUN 5315 Concert Choir (1). A choral ensemble performing music written and arranged for mixed voices. Prerequisite: Permission of the instructor.
MUN 5325 Women's Chorus (1). A choral ensemble performing music written or arranged for women's voices. Prerequisite: Permission of the instructor.
MUN 5335 Men's Chorus (1). A choral ensemble performing music written or arranged for men's voices. Prerequisite: Permission of the instructor.
MUN 5345 University Chorale (1). A mixed choir performing repertoire from Renaissance to Modern, as well as multicultural works. Prerequisite: Permission of the conductor.
MUN 5385 Master Chorale (1). A chorus performing a repertoire primarily from great choral works. Large orchestral accompaniment as well as various instrumental ensembles will be utilized. Prerequisite: Permission of the conductor.
MUN 5435 University Brass Choir (1). A study and performance of literature written for the brass medium (trumpet, horn, trombone, euphonium, and tuba) from the pre-baroque, baroque, classical, romantic and contemporary periods. May be repeated. Prerequisite: Permission of the instructor.
MUN 5445 Percussion Ensemble (1). A study and performance of music literature characteristic of the percussion ensemble. Prerequisite: Permission of the instructor.
MUN 5455 Piano Ensemble (1). The presentation and performance of music literature characteristic of piano and pianos in ensemble.
MUN 5465 Chamber Music (1). Small ensemble in the performing of chamber music literature. Prerequisite: Permission of the conductor.
MUN 5477 Collegium Musicum (1). Collegium musicum provides a forum for the study and performance of the musical literature of the Medieval, Renaissance, and Baroque eras. Participation in the composition of program notes and rehearsal direction are additional components. Prerequisite: Permission of the instructor.
MUN 5485 Guitar Ensemble (1). The presentation and performance of music literature characteristic of the Guitar Ensemble. Prerequisite: Permission of the conductor.
MUN 5496 New Music Ensemble (1). A chamber group of varying instrumentation and size performing art music from the 20th century with emphasis on music from the past 20 years. Explores electronics, multimedia works, etc. Prerequisite: Permission of the instructor.
MUN 5515 Accompanying (1). Accompanying instrumental and vocal students in studio and recital situations.
MUN 5715 Studio Jazz Ensemble (1). An ensemble to provide creative professional-level experience in the contemporary popular idiom. Permission of the conductor.

MUN 5716 Jazz Combo Class (1). Harmonic practice, formal procedures, rhythmic and improvisational practices of jazz performance in the small group. Prerequisite: Permission of the conductor.
MUN 5725 Jazz Vocal Ensemble (1). Students learn to perform both as a soloist and ensemble singer. Expectations are progressive in accordance with student's class level. Ensemble includes a rhythm section to accompany the vocalists.
MUN 5785 Jazz Ensemble Rehearsal Techniques (1). An ensemble that provides its members a creative approach to jazz ensemble rehearsal techniques, literature, improvisation and related materials. Prerequisite: Permission of the instructor.
MUN 5795 Latin Jazz Ensemble (1). An ensemble to provide professional-level experience in the salsa/Latin jazz idiom. May be repeated. Prerequisite: Permission of the instructor.
MUN 5826 Latin American Music Ensemble (1). Study and performance of one or more folk and/or popular musical styles from Latin America.
MUO 5505 Opera Workshop (1). The presentation and performance of music literature indigenous to the opera stage. Prerequisite: Permission of the director.
MUR 5946 Organ Practicum (2). Study of practical aspects of organ performance as it pertains to employment within a sacred chamber music setting. MUS 5205 Graduate Review Diction I (2). To review the rules and methods of correct pronunciation of Italian, French and Latin lyric diction as applied to singing opera, oratorio and art song.
MUS 5205 Graduate Review Diction I (2). To review the rules and methods of correct pronunciation of Italian, French, and Latin lyric diction as applied to singing opera, oratorio, and art song.
MUS 5206 Graduate Review Diction II (2). A review of the rules and skills for proper enunciation of English, German and Spanish language in the performance of classical vocal music.

MUS 5345 MIDI Technology (2). Introduction to MIDI technology including sequencing, notation, patch editing and a variety of other applications. Prerequisites: Graduate standing in Music and permission of the instructor.
MUS 5512 Sound Reinforcement (2). Exploration of live music on location, dealing with commonly encountered acoustical problems and how to overcome them. Prerequisite: Permission of the graduate advisor.
MUS 5527 Laptop and Electronic Arts Ensemble (1). The Laptop and Electronic Arts Ensemble explores new combinations of live electronics with acoustic instruments and other media by performing a diverse repertoire of music and new works. May be repeated. Prerequisites: MUC 2301/MUC 6305.
MUS 5655 Expanding Artistic Expression (2). Focuses on expanding the horizons of the artistic vision of the student. Accomplished through a series of projects. Prerequisite: Permission of the graduate advisor.

MUS 5711 Music Bibliography (2). Library research methods and materials; documentation of research results in bibliographic style. Develops critical thinking and evaluative skills regarding sources of information, print and online. Prerequisites: Graduate standing in Music and permission of the instructor.
MUS 5905 Directed Study (VAR). Designed to provide areas of exploration and specialization beyond the basic selected study programs, such as electronic music, religious music literature, sound techniques, etc. Prerequisite: Permission of the instructor.
MUS 5906 Master's Recital (1-6). For students working on a recital for Master in Music. To be completed under the supervision of a faculty member. Prerequisites: Graduate standing and permission of the instructor.

MUS 5910 Research (VAR). Research composition or performance projects, under the guidance and direction of the music faculty. (May be repeated). Prerequisite: Permission of the instructor.
MUS 5971 Thesis (1-6). Research and/or performances towards completion of master's thesis work. Prerequisites: Graduate standing and permission of the instructor.
MUS 6658 Experimental Music and Arts (3). The course covers the history of interdisciplinary art created in the 20th century while giving students from different areas the opportunity to create interdisciplinary works.
MUT 5051 Graduate Theory Survey (1-3). Analytical, theoretical and aural skills required for successful graduate studies in music. Prerequisites: Graduate standing in Music and permission of the instructor.
MUT 5152 Comprehensive Musical Systems (3). Examination of various comprehensive theoretical systems utilized in the analysis of music. Prerequisites: Graduate standing in Music and permission of the instructor.
MUT 5316 Advanced Orchestration (3). Examination of orchestration techniques utilized by composers from the Baroque era through current times. Prerequisites: Graduate standing in Music and permission of the instructor.
MUT 5355 Advanced Jazz Arranging and Composition (2). Scores and recordings of various sized jazz ensembles are studied for technique and style. Students compositions and arrangements are performed. Topics include: forms, voicing techniques, instrumentation-live performance vs. recording session. Prerequisites: MUT 4353; MUT 4663; MUT 4664.
MUT 5381 Arranging (3). A course in practical arranging for the public school teacher, including choral, band, and popular arranging. Prerequisites: MUT 2117 and MUT 2227.

MUT 5411 Modal Counterpoint (3). Develop skills necessary to write in the Renaissance style and to analyze the masterworks of Palestrina, Lassus, Victoria, and others. Prerequisites: Graduate standing in Music and permission of the instructor.
MUT 5486 Advanced Jazz Rehearsal Techniques (2). Study and practical application of complete preparation, programming, and rehearsing of small and large jazz ensembles. Students study scores and recordings of
various jazz styles and rehearse school's ensembles. Prerequisites: MUN 4784; MUT 4643; MUT 4663; MUT 4664.

MUT 5585 Musical Styles Through Strict Composition (3). This course is designed to develop basic compositional skills for writing works in all forms. Prerequisites: Graduate standing in Music and permission of the instructor.
MUT 5627 Schenkerian Analysis (3). Advanced studies in Schenkerian analysis of tonal music. Prerequisites: Graduate standing in Music and permission of the instructor.
MUT 5628 Atonal Analysis (3). Advanced studies in set theory and serial techniques of twentieth-century music. Prerequisites: Graduate standing in Music and permission of the instructor.
MUT 5629 Analytical Techniques (3). Examination and practice of various techniques utilized in the analysis of art music from the common practice period through the 20th century. Prerequisites: Graduate standing in Music and permission of the instructor. Placement tests required.
MUT 5646 Advanced Jazz Techniques I (3). A comprehensive, theoretical study of topics related to jazz performance. Includes the nature of improvisation, advanced jazz harmony, theory of jazz improvisation, transcribing and analyzing solos of jazz masters. Prerequisite: MUT 4643.
MUT 5647 Advanced Jazz Techniques II (3). A continuing study of topics related to jazz performance. Includes analyzing solos of jazz masters, development of repertoire, style, and aesthetic concepts. Prerequisite: MUT 5646.
MUT 5746 Jazz Pedagogy (2). Materials, techniques, and philosophies related to teaching jazz. Includes preparation of courses, course outline and syllabi, lesson plans, lectures. Texts and other resources such as videos, recordings, periodicals, are examined. Prerequisites: MUT 4663; MUT 5355.
MUT 5930 Special Topics (3). Examination of composers, compositional schools, or other areas of specialization and/or interest to the theory/composition faculty. Prerequisites: Graduate standing in Music and permission of the instructor.
MVB 5251 Secondary Applied Trumpet (1). Individual instruction in applied music on trumpet as a secondary instrument. Prerequisite: Permission of the instructor.
MVB 5252 Secondary Applied French Horn (1). Individual instruction in applied music on French horn as a secondary instrument. Prerequisite: Permission of the instructor.
MVB 5253 Secondary Applied Trombone (1). Individual instruction in applied music on trombone as a secondary instrument. Prerequisite: Permission of the instructor.
MVB 5254 Secondary Applied Baritone Horn (1). Individual instruction in applied music on baritone horn as a secondary instrument. Prerequisite: Permission of the instructor.

MVB 5255 Secondary Applied Tuba (1). Individual instruction in applied music on tuba as a secondary instrument. Prerequisite: Permission of the instructor.
MVB 5351 Principal Applied Trumpet (2). Individual instruction in applied music on trumpet as a principal instrument. Music majors only.
MVB 5352 Principal Applied French Horn (2). Individual instruction in applied music on French horn as a principal instrument. Music majors only.
MVB 5353 Principal Applied Trombone (2). Individual instruction in applied music on applied trombone as a principal instrument. Music majors only.
MVB 5354 Principal Applied Baritone Horn (2). Individual instruction in applied music on baritone horn as a principal instrument. Music majors only.
MVB 5355 Principal Applied Tuba (2). Individual instruction in applied music on tuba as a principal instrument. Music majors only.
MVB 5451 Major Applied Trumpet (3). Individual instruction in applied music on trumpet as a major instrument. Music majors only.
MVB 5452 Major Applied French Horn (3). Individual instruction in applied music on French horn as a major instrument. Music majors only.
MVB 5453 Major Applied Trombone (3). Individual instruction in applied music on trombone as a major instrument. Music majors only.
MVB 5454 Major Applied Baritone Horn (3). Individual instruction in applied music on baritone horn as a major instrument. Music majors only.
MVB 5455 Major Applied Tuba (3). Individual instruction in applied music on tuba as a major instrument. Music majors only.
MVJ 5150 Jazz Piano Techniques (1). Performance of basic jazz standards. Includes basic techniques of the instrument, chord voicing, comping, lead sheet realization for non-pianists. Prerequisites: Graduate standing or permission of the instructor.
MVJ 5250 Secondary Jazz Piano (1). Individual instruction in applied jazz music on piano. Prerequisites: Preceding course in sequence or permission of the instructor.
MVJ 5253 Secondary Jazz Guitar (1). Individual instruction in applied jazz music on guitar. Prerequisites: Preceding course in sequence or permission of the instructor.
MVJ 5254 Secondary Jazz Bass (1). Individual instruction in applied jazz music on bass. Prerequisites: Preceding course in sequence or permission of the instructor.
MVJ 5255 Secondary Jazz Flute (1). Individual instruction in applied jazz music on flute. Prerequisites: Preceding course in sequence or permission of the instructor.
MVJ 5256 Secondary Jazz Saxophone (1). Individual instruction in applied jazz music on saxophone. Prerequisites: Preceding course in sequence or permission of the instructor.

MVJ 5257 Secondary Jazz Trumpet (1). Individual instruction in applied jazz music on trumpet. Prerequisites: Preceding course in sequence or permission of the instructor.
MVJ 5258 Secondary Jazz Trombone (1). Individual instruction in applied jazz music on trombone. Prerequisites: Preceding course in sequence or permission of the instructor.
MVJ 5259 Secondary Latin Jazz Percussion (1). Individual instruction in applied jazz music on percussion. Prerequisites: Preceding course in sequence or permission of the instructor.
MVJ 5350 Principal Applied Jazz: Keyboard (2). Individual advanced instruction on major instrument. An indepth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.
MVJ 5351 Principle Applied Jazz Voice (2). Individual instruction in the Jazz Vocal Idiom. Study includes health and vocal technique, advanced development of repertoire, specific and necessary skills for compelling public performance.
MVJ 5353 Principal Applied Jazz Guitar (2). Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.
MVJ 5354 Principal Applied Jazz: Bass (2). Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz. Prerequisite: MVJ 4344.
MVJ 5355 Principal Applied Jazz: Flute (2). Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.
MVJ 5356 Principal Applied Jazz: Saxophone (2). Individual advanced instruction on major instrument. An indepth study of overall instrumental technique. eminent jazz styles, and other performance practices that are particularly relevant to jazz.
MVJ 5357 Principal Applied Jazz: Trumpet (2). Individual advanced instruction on major instrument. An indepth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.
MVJ 5358 Principal Applied Jazz: Trombone (2). Individual advanced instruction on major instrument. An indepth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.
MVJ 5359 Principal Applied Jazz: Percussion (2). Individual advanced instruction on major instrument. An indepth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.
MVJ 5450 Major Applied Jazz Piano (3). Individual instruction in applied music at the graduate level. Prerequisite: Audition.

MVJ 5451 Major Applied Jazz Voice (3). Individual instruction in the Jazz Vocal Idiom at an advanced graduate level, consistent with the other courses in the MM in Jazz performance degree. Study includes healthy vocal technique, eminent vocal jazz and related musical styles, singing with a microphone, advanced development of repertoire, specific and necessary skills for a strong public and recorded performance.
MVJ 5453 Major Applied Jazz Guitar (3). Individual instruction on major instrument, focusing on the jazz idiom. An in-depth study of overall instrumental technique, eminent styles, and other performance practices that are particularly relevant to jazz and commercial performance. Prerequisite: Music majors only.
MVJ 5454 Major Applied Jazz Bass (3). Individual instruction on major instrument, focusing on the jazz idiom. An in-depth study of overall instrumental technique, eminent styles, and other performance practices that are particularly relevant to jazz and commercial performance. Prerequisite: Music majors only
MVJ 5455 Major Applied Jazz Drums (3). Individual instruction in applied music at the graduate level. Prerequisite: Audition.
MVJ 5456 Major Applied Jazz Saxophone (3). Individual instruction on major instrument. An in-depth study of overall instrumental technique, styles, and other performance practices particularly relevant to jazz. Prerequisite: Audition.
MVJ 5457 Major Applied Jazz Trumpet (3). Individual instruction in applied music on jazz trumpet at a major level. Prerequisite: Music majors only.
MVJ 5458 Major Applied Jazz Trombone (2). Individual instruction in applied music on jazz trombone at a major level. Prerequisite: Music majors only.
MVJ 5459 Major Applied Jazz Latin Percussion (3). Individual instruction in applied music on jazz percussion as a major instrument. Prerequisite: Music majors only.
MVK 5251 Secondary Applied Piano (1). Individual instruction in applied music on piano as a secondary instrument. Prerequisite: Permission of the instructor.
MVK 5253 Secondary Applied Organ (1). Individual instruction in applied music on organ as a secondary instrument. Prerequisite: Permission of the instructor.
MVK 5351 Principal Applied Piano (2). Individual instruction in applied music on piano as a principal instrument. Music majors only.
MVK 5353 Principal Applied Organ (2). Individual instruction in applied music on organ as a principal instrument. Music majors only.

MVK 5451 Major Applied Piano (3). Individual instruction in applied music on piano as a major instrument. Music majors only.
MVK 5453 Major Applied Organ (3). Individual instruction in applied music on organ as a major instrument. Music majors only.
MVK 5605 Organ Pedagogy (2). An overview of historical and modern organ methods, pedagogies and supporting material.

MVK 5651 Piano Pedagogy (2). Survey of current piano teaching methods.

MVK 5712 Survey of Dance Accompaniment (1). Survey of European dance tradition and musical accompaniment. Particular emphasis on the selection, improvisation/composition of musical accompaniment to Classical Ballet. Prerequisite: Graduate piano majors.

MVO 5651 Graduate Pedagogy (1). The development of teaching skills required by graduate assistants, including classroom skills, designing examinations, etc. Prerequisite: Graduate assistants.
MVP 5251 Secondary Applied Percussion (1). Individual instruction in applied music on percussion as a secondary instrument. Prerequisite: Permission of the instructor.
MVP 5351 Principal Applied Percussion (2). Individual instruction in applied music on percussion as a principal instrument. Music majors only.

MVP 5451 Major Applied Percussion (3). Individual instruction in applied music on percussion as a major instrument. Music majors only.

MVS 5251 Secondary Applied Violin (1). Individual instruction in applied music on violin as a secondary instrument. Prerequisite: Permission of the instructor.
MVS 5252 Secondary Applied Viola (1). Individual instruction in applied music on viola as a secondary instrument. Prerequisite: Permission of the instructor.
MVS 5253 Secondary Applied Cello (1). Individual instruction in applied music on cello as a secondary instrument. Prerequisite: Permission of the instructor.
MVS 5254 Secondary Applied Double Bass (1). Individual instruction in applied music on double bass as a secondary instrument. Prerequisite: Permission of the instructor.

MVS 5255 Secondary Applied Harp (1). Individual instruction in applied music on harp as a secondary instrument. Prerequisite: Permission of the instructor.
MVS 5256 Secondary Applied Guitar (1). Individual instruction in applied music on guitar as a secondary instrument. Prerequisite: Permission of the instructor.
MVS 5351 Principal Applied Violin (2). Individual instruction in applied music on violin as a principal instrument. Music majors only.
MVS 5352 Principal Applied Viola (2). Individual instruction in applied music on viola as a principal instrument. Music majors only.

MVS 5353 Principal Applied Cello (2). Individual instruction in applied music on cello as a principal instrument. Music majors only.
MVS 5354 Principal Applied Double Bass (2). Individual instruction in applied music on double brass as a principal instrument. Music majors only.
MVS 5355 Principal Applied Harp (2). Individual instruction in applied music on harp as a principal instrument. Music majors only.
MVS 5356 Principal Applied Guitar (2). Individual instruction in applied music on guitar as a principal instrument. Music majors only.

MVS 5451 Major Applied Violin (3). Individual instruction in applied music on violin as a major instrument. Music majors only.
MVS 5452 Major Applied Viola (3). Individual instruction in applied music on viola as a major instrument. Music majors only.
MVS 5453 Major Applied Cello (3). Individual instruction in applied music on cello as a major instrument. Music majors only.
MVS 5454 Major Applied Double Bass (3). Individual instruction in applied music on double brass as a major instrument. Music majors only.
MVS 5455 Major Applied Harp (3). Individual instruction in applied music on harp as a major instrument. Music majors only.
MVS 5456 Major Applied Guitar (3). Individual instruction in applied music on guitar as a major instrument. Music majors only.
MVS 5545 Orchestral Audition Repertoire (3). This course prepares upper string players, primarily violinists, for professional auditions by coaching them intensively in the standard audition repertoire and by holding mock auditions. Prerequisite: Permission of the instructor.
MVV 5251 Secondary Voice (1). Individual instruction in applied music on voice as a secondary instrument. Prerequisite: Permission of the instructor.
MVV 5351 Principal Applied Voice (2). Individual instruction in applied music on trumpet as a principal instrument. Music majors only.
MVV 5451 Major Applied Voice (3). Individual instruction in applied music on voice as a major instrument. Music majors only.
MVV 5651 Graduate Vocal Pedagogy I (2). An introduction to the history and development of vocal pedagogy for the graduate voice major. Emphasis will be placed on a study of the anatomy and acoustics of the human voice.
MVV 5652 Graduate Vocal Pedagogy II (2). Practical application of the principles of vocal technique in the studio. Emphasis will be placed on the psychological factors which apply to singing and the teaching of singing. Prerequisite: Graduate Vocal Pedagogy I.
MVW 5251 Secondary Applied Flute (1). Individual instruction in applied music on flute as a secondary instrument. Prerequisite: Permission of the instructor.
MVW 5252 Secondary Applied Oboe (1). Individual instruction in applied music on oboe as a secondary instrument. Prerequisite: Permission of the instructor.

MVW 5253 Secondary Applied Clarinet (1). Individual instruction in applied music on clarinet as a secondary instrument. Prerequisite: Permission of the instructor.
MVW 5254 Secondary Applied Bassoon (1). Individual instruction in applied music on bassoon as a secondary instrument. Prerequisite: Permission of the instructor.
MVW 5255 Secondary Applied Saxophone (1). Individual instruction in applied music on saxophone as a secondary instrument. Prerequisite: Permission of the instructor.

MVW 5351 Principal Applied Flute (2). Individual instruction in applied music on flute as a principal instrument. Music majors only.
MVW 5352 Principal Applied Oboe (2). Individual instruction in applied music on oboe as a principal instrument. Music majors only.
MVW 5353 Principal Applied Clarinet (2). Individual instruction in applied music on clarinet as a principal instrument. Music majors only.
MVW 5354 Principal Applied Bassoon (2). Individual instruction in applied music on bassoon as a principal instrument. Music majors only.
MVW 5355 Principal Applied Saxophone (2). Individual instruction in applied music on saxophone as a principal instrument. Music majors only.
MVW 5451 Major Applied Flute (3). Individual instruction in applied music on flute as a major instrument. Music majors only.
MVW 5452 Major Applied Oboe (3). Individual instruction in applied music on oboe as a major instrument. Music majors only.
MVW 5453 Major Applied Clarinet (3). Individual instruction in applied music on clarinet as a major instrument. Music majors only.
MVW 5454 Major Applied Bassoon (3). Individual instruction in applied music on bassoon as a major instrument. Music majors only.
MVW 5455 Major Applied Saxophone (3). Individual instruction in applied music on saxophone as a major instrument. Music majors only.

## Architecture

Jason R. Chandler, Chair and Associate Professor<br>Alfredo Andía, Associate Professor<br>Malik Benjamin, Senior Instructor<br>Claudia Busch, Instructor<br>Jaime Canavés, Professor<br>Nicholas Gelpi, Assistant Professor<br>Eric Goldemberg, Associate Professor<br>Nikolay Nedev, Instructor<br>Marilys R. Nepomechie, Professor and Associate Dean of Strategic Initiatives<br>Eric Peterson, Senior Instructor<br>Gray Read, Associate Professor<br>David Rifkind, Associate Professor and Associate Dean<br>of Students<br>Camilo Rosales, Associate Professor<br>Thomas Spiegelhalter, Associate Professor<br>John Stuart, Professor and Associate Dean for Cultural and Community Engagement, CARTA and Executive Director, Miami Beach Urban Studios<br>Shahin Vassigh, Professor and Associate Dean of Faculty Development<br>Hwang Yi, Assistant Professor

The Department of Architecture is dedicated to the education of future generation of ethical professionals, creative designers and informed citizens. We believe architecture to be a conceptually based endeavor and a form of critical inquiry that addresses the physical environment from the scale of the city to the scale of furniture. To realize these objectives, architectural design is taught as a critical and creative enterprise.

The Department offers two graduate degrees: The accredited Master of Architecture (M. Arch) and the advanced post-professional Master of Arts in Architecture (MAA).

Applicants to the school should plan for the financial aspects of a design education. These include the cost associated with required access to a laptop computer as well as the costs of software, travel and field trips, tools and equipment, and modeling supplies. Students in the program must have access to a laptop computer through purchase, lease or other arrangements. For further information contact the Department.

A broad interdisciplinary framework characterizes the program, with emphasis placed upon six thematic areas: architectural design, history/theory, building technologies, digital technology, ethics and professional practice, and general education.

The program maintains a commitment to excellence in teaching, creative activity, research and scholarship and seeks to attract a diverse student body with a variety of academic backgrounds, experiences and interests. Our students and faculty members reflect the diverse areas of knowledge that play a critical role in the making of the built environment and in the establishment of successful design practices.

Miami is an urban laboratory for the study of architecture. The region provides limitless possibilities for exploring historic architecture and urbanism, as well as contemporary works by many of the world's leading architects. At the same time, the challenges of rapid growth and urban development in Miami and the region have created an ideal environment for the study of these
issues. The program takes advantage of Miami's position as one of the principal academic and commercial gateways to Latin America and Europe.

## Professional Degree

The Master of Architecture (M.Arch) is a professional degree accredited by the National Architectural Accrediting Board (NAAB). This degree is available to students with or without pre-professional degrees in architecture. The Department offers the following professional degrees:

## Master of Architecture (non-pre-professional degree + 105 graduate credits)

Students with any undergraduate degree and no previous experience in architectural study follow the Professional Three-Year M. Arch Plan, consisting of 105 credit hours. It is typically completed in approximately three years.

## Master of Architecture (pre-professional degree + 60 graduate credits)

Students who have earned an undergraduate preprofessional four-year degree in architecture follow the Professional Two-Year M. Arch Plan, consisting of 60 credit hours. It is usually completed in two years.

## Master of Architecture (73 undergraduate credits + 102 graduate credits)

Students may also earn the M. Arch through the 175 credit hour track which begins freshman year with two years of pre-graduate coursework ( 73 credit hours) and concludes after an additional 102 credit hours of integrated graduate level credit hours taken over three or four years. Students will transition seamlessly between their pre-graduate and graduate study. The Professional Master of Architecture degree (M. Arch) is conferred at the conclusion of the entire course of study (175 credit hours). No undergraduate degree is awarded at any point in this plan.

## Post-Professional Degree

Applicants who already hold a professional degree in architecture (B. Arch or M. Arch) from a program accredited by the National Architectural Accrediting Board (NAAB) should apply for the One-Year Post-professional Master of Arts in Architecture (MAA) consisting of 36 credit hours. Students will pursue advanced and focused study and have the opportunity to work with faculty on research projects.

## NAAB Statement

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6 -year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited
professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Florida International University, College of Architecture and The Arts, Department of Architecture offers the following NAAB-accredited degree programs:
Master of Architecture (73 undergraduate credits + 102 graduate credits)
Master of Architecture (pre-professional degree +60 graduate credits)
Master of Architecture (non-pre-professional degree + 105 graduate credits)

Next accreditation visit for all programs: 2017

## Ownership of Student Work

Student work, submitted to the Department in satisfaction of course or degree requirements, becomes the physical property of the Department. However, students retain all rights to the intellectual property of such work. This work may include papers, drawings, models, and other materials. The Department assumes no responsibility for safeguarding such materials. At its discretion, the Department may retain, return, or discard such materials. The Department will not normally discard the materials of currently enrolled students without giving the student a chance to reclaim them.

## Admissions Requirements for all Professional Graduate Degrees in the Department of Architecture

All applicants must meet University graduate admissions requirements. Applicants to the Department of Architecture degree programs must also submit a portfolio of creative work for review.

The portfolio review examines evidence of creative ability, academic success, and professional achievement. It is an important component of the admissions process. Please contact the Department of Architecture for specific portfolio requirements. The deadline for portfolio submission is February 1st of each year. Portfolios submitted after this date will be considered if studio space is available.

Students who have successfully completed the portfolio review process must also meet the minimum requirements of an undergraduate degree from an accredited college or university with undergraduate grade point average (GPA) of 3.0 on a 4.0 scale, or hold a graduate degree from an accredited institution or have completed the entirety of the pre-graduate component of the Department's Accelerated MArch track to be fully admitted in the graduate program. When the academic record is less than 3.0 GPA, official Graduate Record Examination (GRE) scores is required.

## Progression Requirements

No grade below a ' C ' will be accepted for graduation in required courses or professional electives.

## Study Abroad

Study abroad is an important component of the Department of Architecture. Our study abroad center is located in Genoa, Italy. The Genoa center is ideally situated in the historic center of the city in a renovated former convent dating from the $13^{\text {th }}$ century. During the
semester abroad in Italy, students are afforded an opportunity to study those artistic, architectural, landscape and interior spaces and artifacts that have long been acknowledged for their exceptional and enduring value to culture. In addition to study abroad in Genoa during the Fall semester, study abroad opportunities are frequently made available during the summer.

## Miami Beach Urban Studios (MBUS)

MBUS offers architecture students a unique opportunity to study in one of the nation's most vibrant and artistic urban centers. While studying at MBUS, students gain valuable professional experience working with local design practitioners, and with innovative public and private organizations in the area. Located in the iconic 420 Lincoln Road building, MBUS provides architecture students expansive gallery/exhibition spaces, design studios, and classroom space, that encourage collaborative explorations with students studying in other areas of study within the College of Architecture and The Arts, including: Music, Art, Art History, Theater, and Communication Arts. MBUS provides students with a base from which they may explore local fine arts, designs, performances, museums and galleries, including FIU's The Wolfsonian-FIU, located only blocks away. Important areas of study for architecture students at MBUS include, but not limited to, Sustainability, Historic Preservation, Urbanism, Hospitality Design, Community Design, and Architecture and Real Estate Development.

## Master's Project/Thesis Requirement

Graduate students in all masters degree programs are required to undertake a master's project or a master's thesis as part of their course of study in the Department of Architecture.

## Master of Architecture

## Professional Degree Tracks

(Accredited by NAAB)

## THREE-YEAR TRACK - 105 Credits

A professional degree for students with a Bachelor of Arts or a Bachelor of Science, or equivalent, from an accredited institution.

## Degree Track (105)

Prerequisites: (11)
PHY $2053 \quad 4$
MAC 2147 Pre-Calculus 4
ARC 4058 Fundamentals of Digital Design 3
First Year (Fall Semester): (15)
ARC $5075 \quad$ Formative Studio I 6
$\begin{array}{ll}\text { ARC } 5711 & \begin{array}{l}\text { History of Design from Antiquity to } \\ \text { Middle Ages }\end{array}\end{array}$
ARC 5249 Introduction to Design Theories 3
ARC 5612 Environmental Systems in Architecture 1
First Year (Spring Semester): (18)
ARC $5076 \quad$ Formative Studio $2 \quad 6$
ARC 5733 History of Design Renaissance to 18403
ARC 5582 Structures 1 1
ARC 5582L Structures $1 \mathrm{Lab} \quad 2$
ARC 5467 Materials and Methods of Construction
SPC $5066 \quad$ Presentation Skills for Architects 3

| First Year (Summer Semester): (15) |  |  |
| :--- | :--- | :--- |
| ARC 5077 | Formative Studio 3 | 6 |
| ARC 5554 | Structures 2 | 1 |
| ARC 5554L | Structures 2 Lab | 2 |
| ARC 5176C | Computer Practice II | 3 |
| ARC Directed | Elective | 3 |
| Second Year (Fall Semester): (15) |  |  |
| ARC 5361 | Integrated Comprehensive Design | 6 |
| ARC 5205 | Adv. Design Theories | 3 |
| ARC 5483 | Integrated Building Systems | 3 |
| ARC 5744 | History of Design from the XIX Century |  |
|  | to Present | 2 |
| ARC 5744L | History of Design from the XIX Century |  |
|  | to Present Lab | 1 |

Second Year (Spring Semester): (12)

| ARC 5362 | Architectural Design 9: Sustainable |  |
| :--- | :--- | :--- |
|  | Practices | 6 |
| ARC 5555 | Structures 3 | 1 |
| ARC 5555L | Structures 3 Lab | 2 |
| ARC 5621 | Environmental Systems in Architecture |  |
|  | 2 | 3 |

Third Year (Fall Semester) (Miami or Genoa Italy): (15)
ARC 6356 Architectural Design 10
ARC Directed Elective 3
ARC Directed Elective 3
ARC Directed Elective 3
Third Year (Spring Semester): (15)
ARC 6970 Master's Project 6
ARC $6280 \quad$ Professional Office Practice 3
ARC Directed Elective 3
ARC Directed Elective 3

## TWO-YEAR TRACK - 60 Credits

A professional track for students who have completed a 4year pre-professional Bachelor of Arts in Architecture or Bachelor of Architectural Studies degree.

## Degree Track (60)

First Year (Fall Semester): (15)
ARC 5361 Integrated Comprehensive Design 6
ARC 5205 Adv. Design Theories 3
ARC 5483 Integrated Building Systems 3
ARC 5554 Structures 2* 1
ARC 5554L Structures 2 Lab* 2
First Year (Spring Semester): (15)
ARC $5362 \quad \begin{array}{ll}\text { Architectural Design 9: Sustainable } & \\ & \text { Practices }\end{array}$
ARC $5555 \quad$ Structures 3* 1
ARC 5555L Structures 3 Lab* 2
ARC $5621 \quad$ Environmental Systems in Architecture
SPC $5066 \quad$ Presentation Skills for Architects 3
First Year (Summer Semester): (3)
ARC 5176C Computer Practice II 3
Second Year (Fall Semester) (Miami or Genoa Italy): (12)

ARC $6356 \quad$ Architectural Design 10
ARC $5744 \quad$ History of Design from the XIX Century to Present*

ARC 5744L History of Design from the XIX Century to Present Lab*

1

## ARC Directed Elective

Second Year (Spring Semester): (15)
ARC 6970 Master's Project 6
ARC $6280 \quad$ Professional Practice 3
ARC Directed Elective 3
ARC Directed Elective 3
*May be replaced with ARC elective if the content of these courses has been satisfied in the pre-professional degree program. A minimum of one of these 3 credit classes is to be satisfied in the pre-professional degree program.

## Master of Arts in Architecture - 36 credits

## Post-Professional Degree (Not eligible for accreditation by NAAB)

The Master of Arts in Architecture is a 36 -credit postprofessional degree program that enables students to pursue advanced studies in three areas: theory, applied research and special topics in practice. Individual areas of concentration are pursued through course work and independent study and may include the philosophy and history of design, digital technologies and visualization, mapping, technology, sustainability, neuroscience and architecture, furniture and industrial design, advanced topics in design and sustainable development. These concentration areas are supported by focus topics in the FIU SOA curriculum and allow students to pursue advanced research combining cross-disciplinary course work with faculty areas of specialization.

## Admission Requirements

The following is in addition to the University's graduate admission requirements:

1. Applicants seeking admission to the program must have either an accredited Professional BArch degree with a 3.0 GPA or an accredited Professional March degree.
2. Applicants seeking admission to the program must have either an accredited Professional BArch degree with a 3.0 GPA based on the last 60 hours of undergraduate study or an accredited Professional March degree.
3. Applicants must submit a portfolio of creative work for review. The portfolio review examines evidence of creative ability, academic success, and professional achievement.
4. Applicants must submit three letters of recommendation.
5. Applicants must submit a Statement of Intent clearly indicating which area of specialization they intend to pursue and why. The statement should include the applicant's qualifications for research and a brief outline of their intent and goal. The statement should demonstrate the applicant's intellectual merit and motivation for pursuing advanced study. Applicants will be evaluated on strength of their statement, personal achievement, and their commitment to making a meaningful contribution to the field through their research.
6. Applicants must submit a writing sample that demonstrates the candidates' written communication
skills. The sample should be illustrative of their writing and does not have to be related to the proposed area of specialization.

## Graduation Requirements

The degree will be conferred when the following conditions are met:

1. Recommendation of the Primary Advisor and faculty of the Department.
2. Certification provided by the Department Chair, College Dean, and University Graduate School that all degree requirements have been met.
3. Completed undergraduate course deficiencies if specified at admission with no grades below a " $C$ " and a GPA $\geq 3.0$.
4. No grade below a "C" will be accepted for graduation in required course or professional electives.
5. Completed Research Option.

## Areas of Specialization

Students may choose a course of study that is either studio-based or non-studio-based. Any of the following areas of specialization may be chosen for either a studiobased or non-studio-based course of study.
I. Theoretical Research: Aesthetics and Politics, History and Philosophy of Design
II. Applied Research: Digital Technologies and Visualization, Mapping with a GIS Certificate Option, Technology and Sustainability, Furniture and Industrial Design, Neuroscience and Architecture, Advanced Design Studies
III. Advanced Topics in Design

## Course Requirements

Students in both studio-based and non studio-based options are assigned a primary faculty advisor upon entering who will work with them to formulate a formal course of 36 credit hours of study that is closely tailored to her or his specific area of specialization and directed by the primary faculty advisor.

All MAA students must take ARC 6947 Research Methods (3) in the first semester. The remainder of the courses shall be chosen from the electives in consultation with the student's primary advisor. A total of fifteen hours may be taken from courses offered by other departments.

## Research Options

## Non Studio-Based Research

Students seeking to conduct non studio-based research have the option to complete either a thesis or a research project.

Students opting to complete a thesis must submit a thesis proposal prior to their final semester. A copy of the proposal signed by the primary advisor must be submitted for approval to the Advanced Studies Committee. Students are permitted to register for the final term once the thesis proposal is approved. The primary advisor must be a full-time faculty member of the Department of Architecture. All Master's Theses must follow FIU University Graduate School Guidelines. Students opting to complete a thesis must enroll in the following course in their final semester:
ARC 6971 Master's Thesis
Students opting to complete a non studio-based master's project must submit a master's project proposal prior to
their final semester. The primary advisor will determine guidelines for the master's project. Prior to registering for the final semester a copy of the proposal signed by the primary advisor must be submitted for approval to the Advanced Studies Committee. Students are permitted to register for the final term once the research proposal is approved. The primary advisor must be a full-time faculty member of the Department of Architecture. All students on this track must enroll in the following course in their final semester:
ARC 6906 Independent Study

## Studio-Based Research

Students opting to complete a studio-based master project must register for the following course in their final semester of study:

| C 6970 | Master's Project |  |
| :---: | :---: | :---: |
| Genoa Italy Based Post-Professional Degree |  |  |
| First Year (Summer Modesto A. Maidique CampusBased) |  |  |
|  |  |  |
| ARC 5361 | Integrated Comprehensive Design | 6 |
| ARC 6906 | Independent Study: Italian Arch/ Urban Histories and Theories |  |
| ARC 5933 | Special Topics: The Architectural Treatise |  |
| First Year (Fall Genoa Based) |  |  |
| ARC 5xxx | Alternative Studio | 6 |
| ARC 5756 | Architecture and the City | 3 |
| ARC 5734 | Italian Language and Culture |  |

First Year (Spring Genoa Based)
$\begin{array}{lll}\text { ARC } 5362 & \text { Architectural Design 9: Sustainable } \\ & \text { Practices } & \end{array}$
ARC $5745 \quad$ Urban Architecture (Theory/History) 3
ARC $4450 \quad 3$
Miami Based Post-Professional Degree First Year (Fall Semester)
ARC 5361 Integrated Comprehensive Design 6
ARC 6947 Research Methods 3
ARC Directed Elective 3
First Year (Spring Semester)
ARC $5362 \quad \begin{array}{ll}\text { Architectural Design 9: Sustainable } \\ & \text { Practices }\end{array} \quad 6$
ARC $6910 \quad$ Graduate Seminar 3
ARC Directed Elective 3
First Year (Summer Semester)
Elective
Elective 3
Second Year (Fall Semester)
ARC $6971 \quad$ Master's Thesis 6
Urban Development Track First Year (Summer Semester)
ARC $5370 \quad 3$
ACG 6026 Accounting for Managers 3
REE 6435 Legal Environment of Real Estate 3
MAR 6805 Marketing Management in the Global
Environment

## First Year (Fall Semester)

ARC 5371 Urban Development 23
FIN $6428 \quad$ Corporate Finance 3
ARC $6910 \quad$ Graduate Seminar 3
MAN 6209 Organization Design and Behavior 3

First Year (Spring Semester)
ARC 6296 Professional Development 3
ARC 6970 Master's Project 6
LAA 6245 Theory of Urban Design 3

## Certificate in History, Theory and Criticism of Architecture

The Graduate Certificate in History, Theory and Criticism of Architecture offers exceptional students from the School of Architecture and throughout the university community a chance to follow a rigorous course of study in history, theory and criticism, including a required seminar devoted to research methodologies. For architecture students, we offer the further option of a pedagogical apprenticeship, where faculty members mentor students seeking to become teachers. For students outside the School of Architecture, we offer an opportunity to supplement their studies in history, anthropology, environmental science, art history, literature, area studies and other fields with an intense and systematic engagement with cultural production and the visual arts. The certificate program helps students hone their critical skills as they generate new knowledge and embark on self-directed research. Students admitted to a graduate degree program at FIU may apply for admission to the Graduate Certificate in History, Theory and Criticism of Architecture. This certificate program is open to degree-seeking students only.

## Certificate Requirements

Participants must fulfill the requirements outlined for the Graduate Certificate in History, Theory and Criticism of Architecture and complete each course with a satisfactory grade.

## Program Requirements (18 credits):

Required Courses: ( 9 credits)
ARC 5205 Advanced Design Theories
ARC 5744 History of Design from the XIX Century to Present
ARC $6947 \quad$ Graduate Research Methods (offered during fall semester)

## Electives: ( 9 credits)

The nine remaining credits hours may be drawn from a variety of courses. The following list represents examples of elective courses appropriate for the completion of the certificate program. Students should consult with faculty and advisors since new courses are frequently added. Up to six course credits in departments other than architecture may be included, as approved by the graduate advisor.
ARC 5035 Film and the Architecture of Modern Life
ARC $5381 \quad$ Architecture and the Performing Arts
ARC 5396 Case Studies in Architecture
ARC $5711 \quad$ History of Design Antiquity to Middle Ages
ARC 5733 History of Design Renaissance to XIX
ARC 5935
ARC 5943 Pedagogy Seminar
ARC 5744 History of Design from the XIX Century to Present
ARC $5745 \quad$ Urban Architecture and the 20th Century

ARC 5786

ARC 5798
ARC 5803

ARC 5933
ARC 5776

ARC 5037
ARC 5175
ARC 5745
ARC 6947
IND 5138
IND 5164
LAA 5235
LAA 5243
LAA 5716
LAA 6247

Urbanism: Social History of the Built Form
Hotels: Miami and La Habana at MidCentury
Preservation Architecture: Issues and Practices
Special Topics in Architecture Modern Architecture - Projects and Polemics
Architecture and Video Media Contemporary Digital Strategies Urban Architecture and the 20th Century Research Methods
History of Modern Interiors History of 21st Century Furniture Design
Theory of Landscape Architecture Regional Landscape Issues History of Landscape Architecture Modern Landscape Architecture

## Teaching Opportunities

Full-time graduate students have the opportunity to work as Graduate Assistants in courses related to the student's area of focus, including courses in history, theory and criticism, as well as design studios. Students enrolled in the Pedagogy Seminar discuss teaching methods with faculty members from the School of Architecture and from other disciplines across the university.

## Course Descriptions <br> Definition of Prefixes

ARC-Architecture; HUM-Humanities
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering.

ARC 5035 Film and the Architecture of Modern Life (3). Critical overview of social and spatial implications of film on architecture and design over the course of the 20th century.

ARC 5036 Miami in Film (3). How the natural and built environment of South Florida are portrayed in films.
ARC 5037 Architecture and Video Media (3). This course will examine intersections between architecture and video media from critical historical and contemporary perspectives.
ARC 5075 Formative Studio (6). Introduction to concept development, spatial expression, and representational techniques in architecture. (F)

ARC 5076 Formative Studio 2 (6). A continuation of Architectural Design investigations begun in Formative Studio. Prerequisite: ARC 5075. (S)

ARC 5077 Formative Studio 3 (6). An Architectural Design Studio that builds upon concepts and approaches presented in Formative Studio and Formative Studio 2. Prerequisite: ARC 5076. (SS)
ARC 5165 Graduate Digital Fabrication (3). This course considers digital design and fabrication methodologies and techniques in architecture with an emphasis upon the use of laser cutting, enc milling and 3d printing at the graduate level. Prerequisite: ARC 4058.

ARC 5175 Contemporary Digital Strategies (3). Study of advanced digital techniques as generative tools for design and representation. Focus on surface and spatial modeling and parametric relationships. Prerequisites: ARC 4058, ARC 5176.
ARC 5176C Computer Practices in Design II (3). Advanced study in concepts, issues and methods in computer-aided architectural design. Prerequisites: ARC 4058 or equivalent. Corequisite: ARC 5362.
ARC 5177 Topology and Performance (3). Exploration of the relationship between form and performance through the use of animation and scripting techniques. Prerequisite: Program approval.
ARC 5184 Architecture and the Virtual Environment (3). Implementation of virtual reality technology in architectural representations of existing and proposed built environments for presentation and design research. Prerequisites: ARC 4173, ARC 4174.
ARC 5186 Interactive Media (3). Presentation of digital images through an interactive and animated interface online or offline, as well as exploration of ideologies of interactive media.
ARC 5189 Visual Effects (3). Introduction of digital video and audio post-production techniques that add sound, text and visual effects to animations, as well as exploration of ideologies of digital animation.
ARC 5193 Design Presentation Graphics (3). Exploration of design presentation techniques and portfolio design through the use of digital photography, digital illustration, desk top publishing and web page.
ARC 5205 Advanced Design Theories (3). This seminar analyzes western and non-western examples of critical ideology through the investigation of key historical moments and current architectural theory and practice. (F)
ARC 5249 Introduction to Design Theories (3). Introduction to the environmental parameters, morphological concepts and ideological principles that generate form and meaning in architecture. Explorations of related spheres of cultural production will also be explored in lectures, readings, and student assignments. Corequisite: ARC 5075.
ARC 5311 Building Information Modeling (3). This course will familiarize students with numerous foundational concepts such as parametric modeling, assembly modeling, associativity generative and interactive drafting.
ARC 5329 Architectural Design 5 (6). Integration of structure and construction techniques in the production of a small to mid-sized public project that incorporates site considerations, materials and structure. Prerequisites: ARC 2304, ARC 2580 and admission to the major. (F)
ARC 5335 Architectural Design 6 (6). This studio focuses on housing and related components including the repetitive spatial and structural elements, circulation and contextual considerations. Prerequisites: ARC 3243, BCN 4561. (S)

ARC 5340 Architectural Design 7 (6). A flexible framework for appropriate investigations of complex spatial, programmatic, contextual, constructional and ethical issues involved in design projects. Course content
varies with instructor. Prerequisites: ARC 4553, ARC 3463. (F,S,SS)

ARC 5343 Architectural Design 8 (6). Architectural design explorations of site, building codes, community objectives will be undertaken through individual programming, process and design initiatives for a complex building project. ( $\mathrm{F}, \mathrm{S}$ )
ARC 5361 Integrated Comprehensive Design (6). Exploration of arch systems; structural, environmental, lifesafety, assembly and enclosure on building form, content and expression. Students will assess and integrate systems into the design process. Corequisite: ARC 5483. (F,SS)
ARC 5362 Architectural Design 9: Sustainable Practices (6). Architectural projects of medium scale. Exploration and application of sustainable practices emphasizing relation of site and environmental issues to architectural production and design methodology. Prerequisites: Graduate standing and ARC 5361. (S)
ARC 5370 Urban Development 1 (3). Introduction to the planning and management of urban development projects.
ARC 5371 Urban Development 2 (3). Advanced planning and management of urban development projects. Prerequisite: ARC 5370.
ARC 5381 Architecture and the Performing Arts (3). This seminar will consider what architects might learn from the performing arts, particularly how stagecraft can inform design for social spaces in the city.
ARC 5392 Urban Vertical Surface (3). Analysis of the mechanisms of surfaces: wall section, the bay, frame, grid, and their transformations.
ARC 5396 Case Studies in Architecture (3). The course explores the vast array of decisions that create the architectural experience of outstanding built works.
ARC 5467 Materials and Methods of Construction (3). Study of the types of construction and materials used in institutional, residential, and office building assemblies. How materials are installed and inspected, including the use of special equipment. Explorations of the theories and histories of construction will be explored.
ARC 5483 Integrated Building Systems (3). Exploration of arch systems integration and specifications in design and construction processes; structural, environmental, lifesafety, assembly and enclosure systems are included. Corequisite: ARC 5361. (F)
ARC 5486 Architectural Installations (3). This course will examine the traces of history of architectural fabrications and its relations to the visual arts, media, and technology.
ARC 5554 Structures 2 (1). This is the second course in the structures sequence and will introduce fundamentals of structural analysis and design for timber and steel buildings using quantitative process. Prerequisites: ARC 2580 or ARC 5582 or ARC 4586.
ARC 5554L Structures 2 Lab (2). The lab sessions will supplement lectures through additional practice and hands-on exercise problems that are designed to enhance the application of structural concepts. Prerequisites: ARC 2580 or ARC 4586 or ARC 5582. Corequisite: ARC 5554.

ARC 5555 Structures 3 (1). This is the third course in the structures sequence. It is focused on analysis and design of reinforced concrete structures and lateral resistive systems. Prerequisite: ARC 5554.
ARC 5555L Structures 3 Lab (2). The lab sessions will supplement lectures through additional practice and hands-on problems that are designed to enhance the application of structural concepts. Prerequisite: ARC 5554. Corequisite: ARC 5555.
ARC 5582 Structures 1 (1). Through the study of statics and strength of materials this course provides a scientific basis for understanding structural systems behavior. Prerequisites: PHY 2053 and MAC 2233 or MAC 1114 or MAC 1147.
ARC 5582L Structures 1 Lab (2). The lab sessions will supplement lectures through additional practice and hands-on problems that are designed to enhance the application of structural concepts. Prerequisites: PHY 2053 and MAC 2233 or MAC 1114 or MAC 1147. Corequisite: ARC 5582.
ARC 5612 Environmental Systems in Architecture 1 (3). This course considers thermal, electrical, mechanical and conveyance systems and their integration in the architectural design process. Prerequisite: ARC 2304.
ARC 5621 Environmental Systems in Architecture 2 (3). This course considers the role of acoustic and luminous behaviors in architecture and the architectural design process. Topics including daylighting, artificial lighting, electrical systems and acoustics. Prerequisite: ARC 2304.
ARC 5623 Design Ecology and Technology (3). This course explores the environmental impact of design decisions, their philosophical underpinnings and the role played by technology.
ARC 5711 History of Design: Antiquity to Middle-Ages (3). Survey of architectural, interior, and landscape design from antiquity to the middle ages, including Western and non-Western traditions. Explorations of related and causal ideologies will be covered in lectures, readings, and student assignments. Corequisite: ARC 5075.
ARC 5733 History of Design: Renaissance to XIX Century (3). Survey of architectural, interior, and landscape design from the Renaissance to the nineteenth century, including Western and non-Western traditions. Explorations of related and causal ideologies will be covered in lectures, readings, and student assignments. Corequisite: ARC 5076.
ARC 5734 Culture and Art in Italy (3). Course describes the evolution of culture and aesthetics and their immediate relationship with the creation of these works. Consists of site visits and class lectures. Additional readings and project for graduate students.
ARC 5744 History of Design from the XIX Century to Present (2). Survey and advanced analysis of architecture, interior architecture, and landscape architecture from the XIX century to the present, including western and non-western traditions. Explorations of related and causal ideologies will be covered in lecture. Corequisite: ARC 5744L.

ARC 5744L History of Design from the XIX Century to Present Lab (1). Laboratory section for ARC 5744. Reading and discussion of course texts and writing assignment. Laboratory work in conjunction with set lab. Prerequisites: ARC 2701, ARC 2702. Corequisite: ARC 5744.

ARC 5745 Urban Architecture and the 20th Century (3). The course will examine debates on urban architecture surrounding the rise of Modernism in the 1920s and will follow those lines of thought into current discussions of architectural design in cities.
ARC 5750 Architectural History of the Americas (3). Historical analysis of the development of built forms and styles in tropical and subtropical Americas, investigating its socio-political and artistic context. Prerequisite: Permission of the instructor.

ARC 5756 The Architecture of the City (3). To analyze the layering that composes Rome's urban form and to offer a necessary basis of historical and theoretical information in order to take advantage of the Roman experience. Different periods of history of Rome are presented in lectures and site visits. Additional readings and projects.
ARC 5770 Historiographic Methods in Architecture (3). Seminar course designed to introduce graduate students to historiographic methodologies in architecture through close readings of key texts. Prerequisite: Graduate standing.
ARC 5776 Modern Architecture - Projects and Polemics (3). This seminar focuses on close readings of primary sources drawn from key works of architectural theory. The course also explores key historical text, architectural theory and criticism. Prerequisite: ARC 5744.
ARC 5786 Urbanism: Social History of the Built Form (3). This course introduces students to historical analysis, theories, techniques and aesthetics as they relate to urban design.
ARC 5798 Hotels: Miami and La Habana at MidCentury (3). A research-based, in-depth study of midcentury modern hotels constructed in Miami/Miami Beach, Florida and La Habana, Cuba just prior to the Cuban revolution.

ARC 5803 Preservation Architecture: Issues and Practices (3). This course explores issues and practices of architectural preservation as an integral concern of architecture.
ARC 5905 Solar Decathlon (1). Research based course to develop the architectural and engineering concepts for the solar decathlon house.
ARC 5933 Special Topics (1-6). Coursework on a particular aspect of architecture under the direction of faculty in a classroom format. Prerequisite: Program approval.
ARC 5935 Special Topics (3). Coursework on a particular aspect of architecture under the direction of faculty in a classroom format.
ARC 5936 Cejas Eminent Scholar Graduate Seminar (1-3). Seminar/workshop course taught by distinguished educators, scholars, and designers. Lectures, critical
readings and discussions of thematic topics make up the course.
ARC 5938 Special Topics Design Studio (6). An architectural design studio based on a particular aspect of architectural design and relevant ideologies under the direction of appropriate faculty.
ARC 5939 GreeN: Designing for Sustainability (3). This course will review established and emerging principles of sustainable design/construction, and test strategies for their implementation in design practice. Prerequisite: Graduate standing.
ARC 5941 Internship Experience (0). Experience in architectural practice learned through work with licensed professionals.
ARC 5943 Pedagogy Seminar (3). Seminar course designed to train graduate teaching assistants, who lead discussion sections and evaluate undergraduate student assignments in the accompanying undergraduate history survey course.
ARC 5945 Architecture Internship (3). Advanced issues in architecture practice learned through work experience with licensed professionals.
ARC 6280 Professional Office Practice (3). Study of the ethical, legal, financial, and managerial aspects of professional practice in architecture.
ARC 6296 Professional Development (3). In-depth exploration of current legal, administrative and financial aspects of architectural practice.
ARC 6356 Architectural Design 10 (6). Architectural project emphasizing design development preparation of details and design documents for buildings of intermediate complexity. Prerequisites: Graduate standing and ARC 5362. Corequisite: ARC 6910. (F)

ARC 6906 Independent Study (1-6). Coursework on a particular aspect of Architecture under the direction of faculty in an individual study format. Prerequisite: Program approval.
ARC 6910 Graduate Seminar (3). Coursework under the direction of faculty in preparation for a master's thesis or master's project in architecture. Prerequisite: ARC 6947. Corequisite: ARC 6356.
ARC 6947 Research Methods (3). Methods of data acquisition, analysis, and interpretation used in architecture research. Corequisite: ARC 5362.
ARC 6970 Master's Project (6). Coursework under the direction of faculty for the completion of project by candidate for the degree of Master of Architecture. Prerequisite: ARC 6910.
ARC 6971 Master's Thesis (1-6). Coursework under the direction of faculty for the completion of a research or design thesis by candidate for the degree of Master of Architecture. Prerequisite: ARC 6910.
HUM 5258 Ways of Seeing: Modern Perception in Literature and Architecture (3). Interdisciplinary elective on modern definition of perception in literature, architecture and the arts in the first half of the 20th century.

## Art and Art History

Jacek J. Kolasinski, Associate Professor and Chair
Tori Arpad, Associate Professor
Sharon (Pip) Brant, Associate Professor
William Burke, Professor
Robert Chambers, Visiting Assistant Professor
Carol Damian, Professor
Eduardo del Valle, Professor
Mirta Gómez, Professor
Daniel Guernsey, Associate Professor
Clive King, Professor Emeritus
William Maguire, Professor
Juan Martínez, Professor Emeritus
Michael Namkung, Assistant Professor
Andrew Nigon, Visiting Assistant Professor
Alpesh Kantilal Patel, Assistant Professor and Director, Graduate Studies
Silvia Pease, Visiting Instructor
Gretchen Scharnagle, Senior Instructor
Carmen Tiffany, Visiting Instructor
Constantino Torres, Professor Emeritus
Barbara Watts, Associate Professor
Lidu Yi, Assistant Professor
Benjamin Zellmer, Assistant Professor

## Master of Fine Arts in Visual Arts

The MFA in Visual Arts is an intense, production-oriented studio art program directed toward individual development. The curriculum is designed for maximum flexibility to accommodate both those seeking advanced training in a particular studio area and those whose interests may involve more media cross-over. Graduates of the program will be prepared for careers as professional artists. The MFA is the terminal degree in Studio Art.

## Graduate Admission Requirements

Application to the MFA in Visual Arts is a two-step process.
First, please complete and FIU Graduate Application from that can be completed online via the following link: http://gradschool.fiu.edu/admissions.shtml. As part of this application, you will need to provide the following:

1. Successful completion of the bachelor's degree or equivalent;
2. Certified transcripts of all college level work;
3. Three (3) letters of recommendation from persons who are in a position to evaluate the applicant's previous professional, academic, and personal performance, and his or her potential for success in the graduate program;
4. For international and foreign graduated domestic applicants whose language of instruction for the undergraduate degree was not English, an IELTS score of 6.5 or TEOFL score of 550 paper-based/80 internet-based is required; and
5. Please note that the Department of Art + Art History does not require GRE test scores.
Secondly, please upload the following to Get Accepted (separate nominal fee charged by Get Accepted):
6. A written statement of intent (no more than 500 words), which should enhance the Graduate Admissions Committee's understanding of the
applicant's creative work and outlined plan for its development in the program;
7. A portfolio that includes 20 images ( 300 dpi , jpeg format); and
8. Your CV.

## Degree Requirements

The MFA requires 60 semester hours of course work at the graduate level to be distributed as follows:
Tutorial Instruction in Studio Area Concentration 18
Tutorial Instruction in Studio Electives 17
ART 5938C Studio Pedagogy 1
ART 5939 Graduate Art Seminar I 3
ARH $5805 \quad$ Critical Studies in the Visual Arts 3 and
(3) Art History electives

ART $6971 \quad$ Graduate Prospectus \& Exhibition Preparation
ART 5907C Directed Study 3
Elective(s)
3
Note: The catalog descriptions for the following courses are for MFA students as well as MS Art Education students.
ART 5930C Drawing, ART 5391C Figure Drawing, ART 5408C Printmaking, ART 5580C Painting, ART 5740C Sculpture, ART 5792C Figure Sculpture, PGY 5116C Color Photography, PGY 5425C Photography
A committee will be formed during the second semester of enrollment and will meet periodically to supervise the candidate's progress during the entire period of study.

Upon completion of twenty hours of course work and prior to the completion of thirty hours, the candidate must submit his/her work to the faculty committee, which will determine the student's progress and capability for continued enrollment in the MFA program. This review will focus on issues such as growth of the student's work, the consistency of production at the graduate level, and the demonstrated ability to fulfill the expectations of a graduate degree. All of the student's work completed by this time will be assembled and reviewed and the student will be questioned about specific issues related to his/her work. Successful completion of this examination is prerequisite for continuing as a candidate for the degree.

In the last semester of enrollment, the candidate will present a graduate exhibition to be displayed in the Patricia and Phillip Frost Art Museum at FIU or at an appropriate alternative space. Each student's committee will conduct an oral examination with the candidate. This will take place in the exhibition space during the display of the candidate's graduate exhibition. It will focus on the exhibition and the development of the candidate's work. This examination must be completed successfully in order for the candidate to be awarded his/her degree.
Note: Please see student graduate handbook for most up-to-date information:
http://carta.fiu.edu/arts/academics/graduate/studenthandbookl

## Master of Fine Arts in Visual Arts: Animation, Video and Digital Media Track

The Animation, Video and Digital Media track of the Master of Fine Arts in Visual Arts reinforces the Department of Art + Art History's commitment to exploring the links between practice of traditional visual arts and new media practices. The track will prepare graduate students to have a strong base in visual arts with an opportunity to develop conceptual and technical focus in digital arts and creating synergy in fine arts practice, technology and contemporary thought.

## Degree Requirements

The MFA requires 60 semester hours of course work at the graduate level to be distributed as follows:
ART 5938C Studio Pedagogy 1
ART 5939 Graduate Art Seminar I 3
ARH $5805 \quad$ Critical Studies in the Visual Arts 3
ARH 5776C History of Digital Art 3
and
(2) Art History electives

ART $6971 \quad$ Graduate Prospectus \& Exhibition Preparation
ART 5907C Directed Study 2
Elective(s)
Tutorial Instruction in Animation, Video and Digital Media
Studio Concentration from the following:
ART 5931C New Media Seminar
ART 6939 Graduate Art Seminar II
ART 5685C Advanced Time Art
ART 5655C Digital Art Lab
ART 5017C 2D Animation
ART 5018C 3D Animation
ART 5676C Animation Studio
ART 5167C New Media and Experimental Animation
ART 5677C Experimental Video Art
ART 5667C Storytelling and Character Development
Tutorial Instruction in Studio Electives from the following: 18
Any 5000 or 6000 level ART course
ARC 5037 Architecture and Video Media
ARC 5177 Topology and Performance
ARC 5186 Interactive Media
MUC 6305 Electronic Music Lab I
MUS 5345 Midi Technology
MUS 6658 Experimental Music and Arts
Research for the written account of the work will be directed by a faculty committee composed of the candidate's major professor, a member of the studio faculty, and an art historian. The committee will be formed during the second semester of enrollment and will meet periodically to supervise the candidate's progress during the entire period of study. Upon completion of twenty hours of course work and prior to the completion of thirty hours, the candidate must submit his/her work to the faculty committee, which will determine the student's progress and capability for continued enrollment in the MFA program. This review will focus on issues such as growth of the student's work, the consistency of production at the graduate level, and the demonstrated ability to fulfill the expectations of a graduate degree. All of the student's work completed by this time will be assembled and reviewed and the student will be questioned about specific
issues related to his/her work. Successful completion of this examination is prerequisite for continuing as a candidate for the degree.

In the last semester of enrollment, the candidate will present a graduate exhibition to be displayed in the Patricia and Phillip Frost Art Museum at FIU or at an appropriate alternative space. The exhibition will be curated by the MFA candidate and the members of his/her committee. At the same time, the committee will conduct an oral examination with the candidate. This will take place in the exhibition space during the display of the candidate's graduate exhibition. It will focus on the exhibition and the development of the candidate's work. This examination must be completed successfully in order for the candidate to be awarded his/her degree.

## Master of Fine Arts in Visual Arts: Curatorial Practice Track

This track reinforces Department of Art and Art History's commitment to exploring the links between practice and theory and studio art and art history; it will prepare students to take a responsible and critical approach to the expanding role curators play in creating a vibrant cultural life in a post-millennial global society, increasingly being re-defined, re-drawn, and re-charted. The MFA is the terminal degree in Curatorial Practice.

## Graduate Admission Requirements

Application to the MFA in Visual Arts: Curatorial Practice Track requires a similar, yet slightly different process:
First, please complete and FIU Graduate Application from that can be completed online via the following link: http://gradschool.fiu.edu/admissions.shtml. As part of this application, you will need to provide the following:

1. Successful completion of the bachelor's degree or equivalent;
2. Certified transcripts of all college level work;
3. Three (3) letters of recommendation from persons who are in a position to evaluate the applicant's previous professional, academic, and personal performance, and his or her potential for success in the graduate program;
4. For international and foreign graduated domestic applicants whose language of instruction for the undergraduate degree was not English, an IELTS score of 6.5 or TEOFL score of 550 paper-based/80 internet-based is required; and
5. Please note that the Department of Art + Art History does not require GRE test scores.
Secondly, please upload the following to Get Accepted (separate nominal fee charged by Get Accepted):
6. A 500-words description of goals and objectives for entering program;
7. A 1000-word proposal in pdf from for a "dream" exhibition with images (lo-res is fine) you would like to realize; and
8. Your CV.

## Degree Program Requirements

The MFA in Curatorial Practice requires 60 semester hours of course work at the graduate level to be distributed as follows:
Tutorial Instruction in Studio Area Concentration

| Tutorial Instruction in Studio Electives |  | 17 |
| :---: | :---: | :---: |
| ART 5938C | Studio Art Pedagogy | 1 |
| ART 5939C | Graduate Art Seminar I | 3 |
| ARH 5805 | Critical Studies in the Visual Arts and | 3 |
| (3) Art History Electives |  | 9 |
| ART 6971 | Graduate Prospectus and Exhibition Preparation | 3 |
| ART 5907C | Directed Study | 3 |
| Elective(s) |  | 3 |

Note: Please see student graduate handbook for most up-to-date information:
http://carta.fiu.edu/arts/academics/graduate/studenthandbook/

## Master of Fine Arts in Visual Arts Graphic Design Track

The Graphic Design track of the Master of Fine Arts in the Department of Art + Art History aims to offer students a path for the links between practice of traditional visual arts and commercial graphic design and visual communication. This track will prepare students to have a strong base in visual arts with an opportunity to develop conceptual and technical focus in graphic design, creating hybridization in fine arts practice and design.

## Degree Program Requirements

The MFA in Graphic Design requires 60 semester hours of course work at the graduate level to be distributed as follows:

| ART 5938C | Studio Art Pedagogy |
| :---: | :---: |
| ART 5939C | Graduate Art Seminar I |
| ARH 5805 | Critical Studies in the Visual Arts |
| ARH 5725 | History of Graphic Design and |
| (2) Art History Electives |  |
| ART 6971 | Graduate Prospectus and Exhibition Preparation |
| ART 5907C Elective(s) | Directed Study |

ARH 5805

Elective(s)

## Graphic Design Studio Concentration (18 credits)

Tutorial instruction in Graphic Design Studio concentration from the following:

| GRA 5535 | Typography | 3 |
| :--- | :--- | :--- |
| GRA 5932L | Design Studio | 3 |
| GRA 5930 | Design Seminar I: Methodologies and |  |
|  | Practice | 3 |
| GRA 5931 | Design Seminar II: Experience Design | 3 |
| ARH 5725 | History of Graphic Design | 3 |
| GRA 5941 | Graduate Design Internship | 3 |

## Studio Electives (17 credits)

Tutorial instruction in Studio Electives from the following:
Any 5000 or 6000 level ART or GRA course

## Master of Fine Arts in Visual Arts Object Design Track

The Object Design track of the Master of Fine Art in the Department of Art + Art History aims to offer students a path for the links between practice of traditional visual arts and object oriented design including a mastery of craft,
fabrication and applied technologies. This track will prepare students to have a strong base in visual arts with an opportunity to develop conceptual and technical focus in object design, creating hybridization in fine arts practice and functional design objects.

## Degree Program Requirements

The MFA in Object Design requires 60 semester hours of course work at the graduate level to be distributed as follows:

| ART 5938C | Studio Art Pedagogy |  |
| :---: | :---: | :---: |
| ART 5939C | Graduate Art Seminar I |  |
| ARH 5805 | Critical Studies in the Visual Arts |  |
| ARH 5725 | History of Graphic Design and |  |
| (2) Art History Electives |  |  |
| ART 6971 | Graduate Prospectus and Exhibition Preparation |  |
| ART 5907C | Directed Study |  |
| Elective |  |  |
| Object Design Studio Concentration (18 credits) |  |  |
| Tutorial instruction in Object Design Studio concentration from the following: |  |  |
| GRA 5932L | Design Studio |  |
| ART 5282C | Designed Object and Fabrication |  |
| ART 5668 | 3D Digital Sculpture and Experimental Virtual Environments |  |
| ART 5156 | Small Scale Metal Castings |  |
| ART 5746 | Methods and Materials of Mold Making and Casting |  |
| ART 5135C | Graduate Fibers |  |
| ART 5790C | Ceramics |  |
| GRA 5930 | Design Seminar I: Methodologies and Practice |  |
| GRA 5931 | Design Seminar II: Experience Design |  |

Studio Electives (17 credits)
Tutorial instruction in Studio Electives from the following:
Any 5000 or 6000 level ART or GRA course

## Graduate Certificate in Museum Studies

The Graduate Certificate in Museum Studies is an 18credit program intended to prepare students for professional employment in museums and historic sites. The program offers graduate level courses appropriate for museum work as well as some cross-listed courses from associated academic disciplines. Courses are most appropriate for people interested in museum careers and are designed to give a broad overview of museum history as well as a solid grounding in museological theory and practice. In accordance with the mission of FIU, attention is given to issues of diversity and multiculturalism, and the relationship of museums to changing populations and interdisciplinary trends in a variety of different collecting environments ranging from the arts to history, anthropology, archaeology, and the sciences. This certificate program is open to both degree- and nondegree seeking students.

Two core courses and an internship are required. Students are encouraged to pursue a variety of courses of study to address diverse museum situations. Internships for 6 credits may be completed at approved institutions.

## Program Requirements: (18 credits)

## Required Courses: (6 credits)

ARH 5851 Introduction to Museum Ethics, Policies and Procedures 3

ARH 5850 Introduction to Museum Studies: History and Philosophy of Museums3

Required Internship: (6 credits)
ARH 5940 Internships 3-6
Electives: (6 credits)
$\begin{array}{ll}\text { ARH 5xxx } & \begin{array}{l}\text { Collection and Conservation } \\ \text { Management and Practices }\end{array}\end{array}$
ARH 5xxx Non-Profit Business Practices 3
ARH 5797 Museum Education 3
ARH $5855 \quad$ Curatorial Methods and Practices 3
ARH 5xxx Museum Exhibitions: Theory and Practice
ARH 5xxx Special Topics in Museum Studies 3
ARH 5xxx Managing Museum Technology 3
HIS $5067 \quad$ Public History Theory and Practice 3
HIS $5084 \quad$ History, Memory and the Public 3
HIS 5xxx Archeology and Museum Practices 3
MUM $5808 \quad$ Grant Writing for the Arts 3
MUM 5946 Performance Arts Internship 1-9
MUM $5715 \quad$ Performing Arts Production 3
MUM $5705 \quad$ Advanced Business of Music 3
ACG 5507 Issues and Problems in Accounting for Non-Profit Entitles

3
On occasion, the Chair may grant students permission to include courses from associated Departments of History, Environmental Science, Art History; Biology, Architecture, Anthropology.

## Course Descriptions <br> Definition of Prefixes

ARH-Art History; ART-Art; GRA-Graphic Arts; PGYPhotography.

ARH 5325 Graduate Art in Renaissance Florence (3). For study in Florence. Course examines art of Renaissance from its beginnings in Florence with on-site classes. Prerequisite: Graduate standing.
ARH 5362 Baroque Art (3). Baroque art and architecture of the seventeenth and eighteenth centuries in Europe. Slide lectures and discussions, advanced research required.
ARH 5363 Graduate 18th-Century Art in Europe (3). A study of European academies of art, Rococo, Neoclassicism, and early Romanticism. Artists to be considered include Poussin, Watteau, Hogarth, Reynolds, Barry, Fuseli, and David. Prerequisite: Graduate standing.
ARH 5421 Graduate Enlightenment and Romanticism (3). Examines the art of the European Enlightenment and Romantic movement from 1700 to 1848. Artists to be considered include Watteau, David, Goya, Blake, Ingres, Gericault, Delacroix, and Friedrich. Prerequisite: Graduate standing.
ARH 5440 Graduate Nineteenth Century Art (3). An advanced survey of 19th-century art in its social, political, and historical context. Includes French, English, Spanish artists. Prerequisite: Graduate standing.

ARH 5441 Graduate Realism, Impressionism, and Post-Impressionism (3). Examines the widespread engagement with modern life in European art from 1848 to 1900. Artists to be considered include Courbet, Manet, Monet, Renoir, Seurat, Van Gogh, Gauguin, Cezanne, and Munch. Prerequisite: Graduate standing.
ARH 5442 Advanced Modern Art in Europe, 1880-1915 (3). Examines the widespread engagement with modern life in European art from 1880 to 1915. Art movements considered include Post-Impressionism, Symbolism, Expressionism, Fauvism, Cubism, and Futurism.
ARH 5465 Modern Art (3). Offers a history of modern art from ca 1880 to 1940. It concentrates on the study of European and American Avant-garde visual art movements with emphasis on art and modern society.
ARH 5482 Graduate Contemporary Art (3). Course examines the visual arts in Europe and the U.S. from the 1960's to the present with focus on major art movements, artists, and artwork. Prerequisite: Graduate standing.
ARH 5532 Beliefs Made Visible (3). This course investigates art, religion and literature in Asia. We will examine the close connections between literary history and art history, and doctrines and visual images.
ARH 5550 Advanced Arts of China and Japan (3). This course is an introduction to and overview of the arts of China and Japan from antiquity to present covering a wide range of media in their historical, philosophical and religious contexts.
ARH 5561 Literati Vision in Chinese Painting (3). In examination of the social history of Chinese painting, this course looks into masters, masterpieces and art patrons of the last 3000 years.
ARH 5663 Graduate Art of Spain and Her Colonies (3). Course explores art of Spain from 1492 through early 19th century, the encounter between Spain and the Americas after the conquest, and the art of the colonies. Graduate level readings.
ARH 5671 Seminar in 20th Century Latin American Art (3). This course will examine the art of the 20th century in Latin America in a seminar focusing on painting and sculpture from the end of the 19th century to the present.
ARH 5675 Graduate History of Cuban Art (3). A study of visual arts of Cuba in the 20th century, within historical, social, and cultural context. Prerequisite: Graduate standing.
ARH 5677 Caribbean Art: Myth and Reality (3). A survey of the contemporary art of the Caribbean with a brief introduction to its early history and a discussion of its complex social structures from country to country.
ARH 5715 History of Photography (3). A chronological examination of the work of the world's most significant photographers from photographic works and ideas from invention to the 1940s.
ARH 5716 History of Photography Since 1945 (3). An examination of the most significant photographic works, critical concepts, and new trends which have arisen since WWII. Prerequisite: ARH 4710.

ARH 5717 History of Photography of Architecture (3). The history of photography from 1839 to now with strong emphasis on the photography of architecture.
ARH 5725 History of Graphic Design (3). This course aims to examine the significant designs from the history of visual communications with a concentration on the 20th century.

ARH 5776C History of Digital Art (3). This course examines major developments in the practice, methods and theories of digital arts in a historical context with focus on art history and visual culture.
ARH 5785 History of Object Design (3). This course aims to examine the significant objects from the history of craft and design with a concentration on the 20th century.
ARH 5797 Museum Education (3). Course examines educational functions of a museum including interpretive principles and techniques, program design and community outreach.

ARH 5805 Critical Studies in the Visual Arts (3). Introduction to the methods and concerns of recent art history. Discussion of students' work in context of the contemporary art world. Prerequisites: ARH 4450 and ARH 4470 or graduate level equivalents. Required for MFA Students.

ARH 5807 Graduate History of Aesthetic Thought in Europe, 1760-1900 (3). A study of the history of aesthetic thought in Europe from 1760 to 1900. Theorists to be considered include Winckelmann, Lessing, Diderot, Kant, Hegel, Baudelaire, and Nietzsche. Prerequisite: Graduate standing.
ARH 5837 Exhibition Development (3). This course will examine the history, theory, and practical aspects of museum exhibitions, including exhibition planning, design, and interpretation.

ARH 5845 Graduate Spanish Art (3). Explores the Art of Spain from 1492 through the early 20th century. Painting, sculpture and architecture covered in slide lectures.
ARH 5850 Introduction to Museum Studies: History and Philosophy of Museums (3). Introduces the wide range of topics and issues associated with different types of American museums. Museums are examined as cultural, political, and educational institutions. Prerequisites: Graduate Standing or permission of Director of Museum Studies.

ARH 5851 Museum Ethics, Policies and Procedures (3). The legal, ethical status of museums and the obligation to the public regarding their governance, policymaking and financial planning. Includes theoretical and practical discussions with attention to museums. Prerequisites: Graduate Standing or permission of Director of Museum Studies.
ARH 5852 Museum Registration Methods (3). A course in Museum Registration is designed to provide Museum Studies students with competency in all areas of object care, registration and information management. Prerequisites: Graduate Standing or permission of Director of Museum Studies.
ARH 5855 Curatorial Methods and Practices (3). This course examines museum history and theory; exhibit planning, design, and interpretation. Emphasis on
contemporary art practices with room for the discussion of other disciplines.

ARH 5872 History of Women Artists (3). Surveys the history of women artists with some discussion of the history of images of women.
ARH 5874 Women in Latin American Art (3). Introduces women in Latin American art from its Pre-Columbian beginnings through the twentieth century. Emphasis will be on painting and sculpture of the twentieth century.
ARH 5881 Advanced Art and Politics (3). The course explores the political role of art in Europe and Latin America from ancient Greece to the present. It also traces how the idea of the "political" changed from the ancient to modern periods. Prerequisite: Graduate standing.
ARH 5896 Seminar in the History and Criticism of Art (3). Examines particular periods or subject areas in the history of art. Course content varies from semester to semester, and with a change in theme, the course may be repeated. Prerequisites: Graduate standing or permission of the instructor.

ARH 5897 Special Topics in Art History (3). Rotating special topics on the graduate level in art history. May be repeated with change of topic. Prerequisites: ARH 4450 and ARH 4470 or graduate level equivalents.
ARH 5907 Directed Studies (1-6). A group of students, with the approval of the art faculty, may select a master teacher of theory, research or criticism in selected areas as film, painting, sculpture, architecture, crafts, art history, multimedia art, etc. Arrangements must be made at least a semester before course is offered. May be repeated.
ARH 5913 Research (1-6). Art history, criticism, and theory in areas not covered by the present program and which the student wishes to study. Prerequisite: Permission of the instructor. May be repeated.

ARH 5940 Internship Experience (3-6). Supervised work experience in approved institution. Prerequisite: Permission of Director of Museum Studies. May be repeated.

ART 5017C 2D Animation (3). This course will introduce graduate students to advanced terminology, concepts, and techniques of creating computer generated 2D animation.

ART 5018C 3D Animation (3). This course will introduce graduate students to advanced terminology, concepts, and techniques of creating computer generated 3D animation.
ART 5135C Graduate Fibers (3). Graduate level studio course, explores issues of the fiber medium and its context in contemporary art practice. Prerequisite: Fiber Based Painting ART 5565C.
ART 5156 Small Scale Metal Casting (3). This course offers an introduction to the technical and conceptual understanding needed to cast and fabricate small scale metals to create objects. May be repeated.
ART 5167C New Media and Experimental Animation (3). Advanced studies to the basic practices of new media with emphasis on fundamental strategies for making experiments in animation, installation and sound art. May be repeated.

ART 5282C Design Object and Fabrication (3). This course offers graduate students techniques and methods
used in the process of designing and fabricating art objects. May be repeated.
ART 5390C Drawing (3). Advanced drawing. May be repeated. Prerequisites: ART 4315C or permission of the instructor.
ART 5391C Figure Drawing (3). Advanced figure drawing. May be repeated. Prerequisites: ART 4333C, or equivalent, or permission of the instructor.
ART 5408C Printmaking (3). Advanced printmaking. May be repeated. Prerequisite: Permission of the instructor.
ART 5580C Painting (3). Advanced painting. May be repeated. Prerequisite: Permission of the instructor.
ART 5655C Digital Art Lab (3). This is an advanced graduate level studio course in the digital arts experimenting with and finding compelling strategies for digital arts production.
ART 5667C Storytelling and Character Development (3). This class explores methods of animation focusing on storytelling and character development at a graduate level. Students will experiment with mixed media, animation, audio and video projects. May be repeated.
ART 5668 3D Digital Sculpture and Experimental Virtual Environments (3). An advanced study of 3D digital sculpture and new media with emphasis on fundamental strategies for making experiments in digital modeling, 3D printing and assemblage of mixed media. May be repeated.
ART 5676C Animation Studio (3). This course is an advanced investigation to the terminology, concepts, and techniques of creating complex computer-generated animation. May be repeated.
ART 5677C Experimental Video Art (3). Graduate level research of digital media with emphasis on fundamental strategies for making video/audio work. May be repeated.
ART 5685C Advanced Time Art (3). Advanced course to refine students' skills in electronic and digital media production. Students are required to produce a multidisciplinary project. Course may be repeated. Prerequisites: ART 3681C or permission of the instructor.
ART 5740C Sculpture (3). Advanced sculpture. May be repeated. Prerequisite: Permission of the instructor.
ART 5746 Methods and Materials of Mold Making and Casting (3). This course offers graduate students techniques and methods used in the process of mold making and casting. May be repeated.
ART 5790C Ceramics (3). The advanced student will explore all aspects of expression in clay and glaze. Students will be expected to be mostly self-directed. Prerequisite: Permission of the instructor. May be repeated.
ART 5792C Figure Sculpture (3). Advanced Figure Sculpture. May be repeated. Prerequisite: Permission of the instructor.
ART 5815C Graduate Seminar: Body and Art (3). Focuses on the relationship between the body, materials and space as used in art and exhibitions and examines the social conventions that order our understanding of these issues. Prerequisite: Graduate standing.

ART 5844C Installation Art (3). Explores the genre of installation art and site-specific art through history and provides a context for collaboration with the Wolfsonian Museum as both site and subject for art specific installation by students. Prerequisite: Permission of the instructor.
ART 5853 Visual Arts Marketing (3). Students seeking a degree in studio art will be able to appraise and present a portfolio to an appropriate organization. Prerequisite: Graduate Standing.
ART 5855 Graduate FIU in New York (3). A study of New York's art world and contemporary artists in New York City.
ART 5897 Advanced Art Writing: A Seminar for Artists, Curators, and Historians (3). Students write professional venues appropriate to artistic and curatorial practices in a dialog between artists, art historians and curators on contexts influencing art's production and reception. Prerequisites: Current standing as an MFA candidate in the Art \& Art History Department or permission of the instructor.

ART 5907C Directed Study (VAR). A course of study in a selected area under the supervision of an appropriate faculty member. Mandatory for MFA students in semester of graduation. Advance approval by faculty and graduate advisory required (3cr). May be repeated.
ART 5910C Research (1-6). Students may study or research an individual art project with an art faculty member. Complexity and amount of work will determine the number of credit hours granted. May be repeated.
ART 5930C Special Topics in Studio Art (3). Rotating special topics in Studio Arts. May be repeated with change of content.
ART 5931C New Media Seminar (3). This seminar course examines major developments in the practice, methods and theories of new media in a contemporary context with focus on art history and visual culture. May be repeated.
ART 5938C Studio Art Pedagogy (1). Instruction in the principles and methods of teaching in the area of visual arts; specifically the application of these principles to the studio situation. Required for MFA students. Prerequisite: Graduate standing.
ART 5939C Graduate Art Seminar I (3). Students will locate and discuss their own work within the context of the contemporary art world. Also, issues and practical concerns for the professional artist will be addressed, such as dealing with guidelines, grant writing and business procedures. Required for MFA students. Prerequisite: Graduate standing.
ART 6939 Graduate Art Seminar II (3). Discussion of students work within the context of the contemporary art world. Issues and practical concerns for the professional artist will be addressed, such as dealing with galleries, grant writing and business procedures. Mandatory for MFA students. Prerequisites: Graduate standing and ART 5939C.
ART 6971 Graduate Prospectus and Exhibition Preparation (3). Offers students the opportunity to complete the research and preparation of written
components required for graduation, including thesis and artist statement. Prerequisites: Completion of graduate program courses other than ART 5907C.
GRA 5535 Typography (3). This is an advanced course where graduate students will master typographic terms, classical and contemporary fonts and technologies. May be repeated.
GRA 5930 Design Seminar I: Methodologies in Design Practice (3). This seminar course examines major developments in the practice, methods and theories design in contemporary context with focus on art history and visual culture.
GRA 5931 Design Seminar II: Experience Design (3). This seminar course examines major developments in the practice, methods and theories of design in a contemporary context with focus on interactivity, technology and culture.
GRA 5932L Design Studio (3). This is an advanced and graduate level research lab for graphic design and object design students. May be repeated.
GRA 5941 Graduate Internship (3). Students will complete an internship aimed at experiential learning in the context of an art or design related profession. May be repeated.
PGY 5425C Photography (3). Advanced photography. May be repeated. Prerequisites: PGY 4155C, or equivalent, or permission of the instructor. For graduate students.
PGY 5530C Color Photography (3). Advanced color photography. Course may be repeated. Prerequisites: PGY 4154C or permission of the instructor. For graduate students.
PGY 5649C Advanced Digital Photography II (3). Advanced documentary digital photography, requiring highly evolved technical skill and aesthetic direction. May be repeated. For graduate students who have completed prerequisites. Prerequisites: PGY 4823C or permission of the instructor.

## Communication

Maria Elena Villar, Associate Professor and Chair
Margo Berman, Professor
Nurhayat Bilge, Assistant Professor
Daniel Blaeuer, Assistant Professor
Joann Brown, Senior Instructor
Grizelle De Los Reyes, Instructor
Christiane Delboni, Instructor
Nathalie Desrayaud, Visiting Assistant Professor
Lynn Farber, Assistant Professor
Aileen Izquierdo, Visiting Assistant Professor
Yu Liu, Assistant Professor
Maria Ines Marino, Instructor
Elizabeth Marsh, Assistant Professor
Elif Ozkaya, Assistant Professor
David Park, Associate Professor
Raquel Perez, Visiting Instructor
Sigal Segev, Assistant Professor
John Virtue, Director, International Media Center
Weirui Wang, Assistant Professor
Lynne Webb, Professor
Adjunct Faculty
Jessica Delgado
Christine Donaldson
Fernando Ganivet
Shane Gunderson
Nathan Kurland
Steve Luscher
Lorraine Rodriguez
Michael Rodriguez

## Brian Siress

Sabrina Vollrath-Bueno

## Master of Science in Mass Communication

The Department of Communication in the School of Communication and Journalism offers professional graduate education leading to the M.S. degree in Mass Communication with specializations in global strategic communication and digital media. The orientation of the graduate program is primarily professional, designed to enhance graduates' abilities to work in the strategic communication professions. However, students wishing to pursue further graduate study may select courses that will prepare them for academic research.

## Admission Requirements

To be eligible for admission to the graduate program, applicants must meet the following requirements:

1. All applicants must have a bachelor's degree from a regionally accredited college or university.
2. All candidates must show promise of success in graduate studies. Applicants must meet the following criteria, in addition to any program-specific requirements:
A. Meet minimum GPA: Candidates must have a minimum grade point average (GPA) of 3.0 earned during the last 60 hours of upper-level work.
B. Students applying to the Global Strategic Communications must submit and essay. Topic should reflect professional goals consistent with the objectives of the master's program.
C. Students must submit a professional and current resume.
D. Students must submit 2 letters of recommendation from individuals suited to evaluate their potential as a graduate student.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. A minimum TOEFL score of 500 for the Spanish Language Program and 550 for the Global Strategic Communications Program is acceptable. Candidates who have passed the TOEFL more than two years before they apply for admission to the program have to repeat the test with the required score.
4. Students applying to the Global Strategic Communications program are required to take the GRE, GMAT, LSAT or alternative standardized test utilized for graduate school admission. Those who can demonstrate a record or professional accomplishment, hold a master's degree from a regionally accredited college or university and/or demonstrate exceptional academic credentials may petition for a waiver of the standardized exam requirement. Students applying to the Spanish Language Program are required to take the EXADEP or GRE with no minimum required score.
5. Students applying to the Global Strategic Communications - Creative Track program will not be required to take the GRE, but will be subject to a rigorous portfolio review of their creative work for admission.

## Application Procedures

A student applying for admission to the graduate program must:

1. Complete online graduate admissions application available at http://gradschool.fiu.edu.
A. Have two official copies of transcripts from all colleges or universities attended sent to the Graduate Admissions Office. (Copies submitted by applicants will be rejected.)
B. Submit appropriate test scores and documents to the Graduate Admissions Office.

## Admission Deadline

Students should adhere to the Florida International University graduate admissions deadlines for Fall, Spring and Summer terms. These deadlines are listed in the Graduate Catalog in the Graduate Admission section.
Note that domestic students and international students have different deadlines. The current deadlines are as follows:
Domestic Students
Fall June $1^{\text {st }}$
Spring October $1^{\text {st }}$
Summer March $1^{\text {st }}$
International Students
Fall February 1 ${ }^{\text {st }}$
Spring September $1^{\text {st }}$
Summer February $1^{\text {st }}$

If you have any questions regarding these deadlines, please call the Graduate Admissions office at (305) 3482455.

## Degree Requirements Plan of Study/Commencement of Program

Upon admission to the graduate program in mass communication, each student will be assigned a faculty advisor. In most cases, this will be the coordinator of the appropriate graduate program. The advisor will be responsible for developing the student's plan of study, requesting applicable transfer of credit where appropriate, monitoring the student's academic progress, and ensuring the fulfillment of the requirements for the master's degree by completing the student's Program of Studies with the student. This will also include a timetable for completion of the work. Any changes in the plan must be approved by the faculty advisor and the appropriate chairperson. It is also the faculty advisor's responsibility to complete a Graduate GPA Course Inclusion Form for classes that are part of the master's program but were taken prior to the student's full admission and/or are lower division classes.
In addition to the development of a plan of study, the advisor must evaluate any deficiencies including, but not limited to the following areas which may require additional course work.

## Competency in Statistics

Competence in the fundamentals of statistics is required of all graduate students. In order to register for MMC 5440 (Applied Research Methods in Mass Media) students must demonstrate a knowledge of statistics in one of three ways: by having taken a course in statistics within the last three years, passing an examination in the subject, or taking a special seminar, offered simultaneously with the commencement of the graduate research course.

## Professional Experience

Professional experience in a field directly related to the specialization is an advantage. Applicants without such professional experience may be required to complete up to 9 credits of additional undergraduate course work and/or to complete an internship with a professional organization. After an interview with the applicant, the student's faculty advisor will determine the amount of undergraduate work and the undergraduate courses to be completed.

## Transfer Credit

Students may petition the appropriate advisor to transfer up to six hours of graduate credit toward the degree. To be approved for transfer, the courses must have been previously taken at a regionally accredited college or university; the student's advisor must judge the courses relevant to the student's plan of study; the student must not have used the credits toward another degree; the student must have earned a ' B ' or higher in the courses, and meet the University requirements. No transfer courses will substitute for skills courses in any area of specialization in the SJMC master's program. All transfer credit must have been completed within the six-year period preceding the date the degree is granted.

## Time Limit

All work applicable to the degree, including transfer credit, must be completed within six years of first enrollment in the master's program.

## Grades

Students must maintain a minimum GPA of 3.0 in all courses required for the degree. No more than two ' C ' grades will be allowed.

## Professional Project, Thesis

Students complete a professional project in their areas of specialization. Work on the project generally will be completed during the final semester. Projects will be graded by the student's graduate committee. Students must receive a ' B ' or higher on the project for it to be accepted. Students may also opt to do a thesis; GPA requirements are the same.

## Required Courses

To earn the M.S. in Mass Communication, students must meet the following requirements:

1. Students must take at least 30 hours of acceptable graduate credit. Of those hours, all courses in the School taken toward graduation must be at the graduate level.
2. At least 27 hours must be taken in the School of Communication and Journalism, unless otherwise approved by the Department chair.

## Global Strategic Communications (30 credits)

This program is designed to give students a general background in strategic communications and to help them prepare for advancement in advertising, public relations, and integrated communications careers while providing knowledge and understanding for addressing global, national, and local audiences and communication issues. Most students complete the program in 18 to 24 months. In addition, this GSC program can be completed fullyonline in 12 months if taken full time.

## Core Curriculum: (15 credits)

All students must take the following core courses:
MMC $6402 \quad \begin{aligned} & \text { Theories of Mass Communication (must } \\ & \text { be taken the first year) }\end{aligned}$
MMC $5440 \quad$ Applied Research Methods in the Mass
Media (must be taken the first year) 3
PUR 6607 Global Strategic Communication Management
MMC 6213 Ethics and Social Responsibility 3
MMC $6950 \quad 3$
MMC 6970 Mass Communication Master's Thesis 3
(prereq: completion of 27 credit hours)

## GSC Required Electives: (15 credits)

Choose five of the following:
PUR $6610 \quad$ Global Reputation Management 3
DIG 5569 Digital Media Management 3
PUR $6806 \quad$ Global Account Planning 3
MMC 6416 Media Planning 3
DIG 5167 Social Media Metrics and Evaluation 3
MMC 6412 Applied Media Communication Skills 3
MMC $5932 \quad$ Special Topics Seminar 3

MMC 5306 Global Communications 3
PUR 5406 Multi-Cultural Communications 3
ADV 6805C Advertising and Public Relations Creative Strategy
MMC 6900 Independent Study

## Global Strategic Communications Creative Track (39 credits)

The Global Strategic Communications creative program is a rigorous, tuition-plus-fee program that is limited to a select number of qualified students who have shown above average creative potential and wish to combine a theoretical knowledge of communications with a more indepth exposure to creative concepts. A portfolio review is required for admission.

The Global Strategic Communications - Creative Track incorporates these unique features:

- Unique combination of academic and creative courses
- Interaction with top creative professionals
- Access to Miami Ad School guest speakers, courses and facilities
- Five semesters of courses, offered on a lock-step basis
- The option of a semester away and internships at top advertising agencies


## Core Curriculum: ( 21 credits)

Being a lockstep program, all students must take the following core courses: 21 credits

| MMC 6402 | Theories of Mass Communication | 3 |
| :--- | :--- | :--- |
| MMC 5440 | Applied Research Methods in the Mass |  |
|  | Media | 3 |
| MMC 6950 | Professional Project | 3 |
| ADV 6805C | Advertising and Public Relations |  |
|  | Creative Strategy | 3 |
| MMC 6213 | Ethics and Social Responsibility | 3 |
| MMC 5306 | Global Communications | 3 |
| VIC 5205 | Trends in Graphics \& Design | 3 |

In addition, all students must take the following skills courses at partner school, Miami Ad School: 15 credits

| PUR 6935 | Advanced Communications Seminar | 3 |
| :--- | :--- | :--- |
| ADV 6503 | Seminar in Advanced Creativity | 12 |

ADV 6503 Seminar in Advanced Creativity12

## Certificate Programs

## Global Strategic Communications

The objective of the Global Strategic Communications certificate is to train interested community professionals in up-to-date strategies and methodologies in global strategic communications. This certificate program is open to non-degree-seeking students only.

| Required Courses: (9 credits) |  |  |
| :--- | :--- | :--- |
| PUR 6607 | Global Strategic Communication |  |
|  | Management |  |
| PUR 6806 | Global Account Planning | 3 |
| MMC 5306 | Global Communications | 3 |
| Plus any two of the following: ( $\mathbf{6}$ credits) |  |  |
| MMC 5440 | Applied Research Methods in the Mass |  |
|  | Media | 3 |
| MMC 6213 | Ethics and Social Responsibility | 3 |


| PUR 5406 | Multi-Cultural Communication | 3 |
| :--- | :--- | :--- |
| PUR 6935 | Advanced Communications Seminar | 3 |
| ADV 6805C | Advertising and Public Relations <br> Creative Strategy |  |
|  |  | 3 |

For additional information about the Global Strategic Communications program, please call (305) 919-5625 or email sjmc@fiu.edu.

## Course Descriptions Definition of Prefixes

ADV-Advertising; COM-Communications; DIG-Digital Media; JOU-Journalism; MMC-Mass Media Communication; PUR-Public Relations; RTV-Radio: Television; VIC-Visual Communication.
All courses required for the degree will be offered at least once during the term of the student's enrollment.

ADV 6355 Advertising and Society (3). The relationship between advertising, economic, political, moral, and ethical issues.
ADV 6503 Seminar in Advanced Creativity (3). Theoretical and practical application of variable topics including creative problem solving, design, web advertising, pop culture, and IMC tools. Progressive level of difficulty. Prerequisite: Permission of the instructor.
ADV 6805C Advertising and Public Relations Creative Strategy (3). Focuses on the conceptualization of breakthrough strategies and their application to all integrated communication tools. (Offered at least once a year).
COM 5606 Environmental Communication (3). This graduate level course is designed to bring theoretical principles and professional skills associated with mass communication together with environmental issues and themes. Prerequisites: Completion of the six-credit project or internship requirement (EVR 5907) and permission of the instructor or department.
DIG 5167 Social Media Metrics and Evaluation (3). This course introduces strategic aspects of social media analytics by highlighting metrics for assessing effectiveness of social media strategies for global advertising, public relations and marketing.
DIG 5438 Strategic Storytelling and Digital Content Creation (3). This course offers a view of storytelling paradigms and provides the opportunity to apply digital storytelling for strategic purposes using interactive multimedia tools.
DIG 5569 Digital Media Management (3). This course examines various methods and perspectives of managing digital media platforms and content in a strategic communication setting.
MMC 5207 Ethical and Legal Foundations of the Student Press (3). Examines ethical and legal foundations underlying the operation of the student press on American campuses, stressing both rights and responsibilities and how to organize publications to protect both. (Offered at least once a year).

MMC 5268 Communication in the Digital Age (3). This course is designed to develop and enhance students' understanding of the foundations for digital
communication, including an overview of the historical development of digital communication.

MMC 5306 Global Communications (3). This course explores global markets and intercultural communications while providing advanced study, evaluation and application of cultural context, theories, stakeholders, and trends in media, advertising, and public relations. Analysis of ethical, legal, political, and social communications issues around the globe.
MMC 5440 Applied Research Methods in the Mass Media (3). An advanced course in the acquisition and use of secondary data, including media data, as well as the design, execution and utilization of research studies. Students will conduct an original proprietary study. (Offered at least once a year).

MMC 5655 Mass Communication and the Environment (3). The course brings theoretical principles and professional skills associated with media communication together with environmental issues. Prerequisites: Graduate standing or permission of the instructor.
MMC 5932 Special Topics Seminar (3). A variable topic seminar dealing with issues of interest to the community. Examples are rights of high school journalists, cable TV, the use of mini-computers in creative communication. Prerequisite: Permission of the instructor. (Offered at least once a year).

MMC 6108 Theories of Mass Communication and Writing (3). The course examines writing theories and processes and explores media responsibility to society including communication principles and techniques found in contemporary communication theories.
MMC 6135 Multimedia Production and Design (3). The course offers introduction in the theory and practice of multimedia production including digital photography, videography, non-linear video editing and sound design.
MMC 6213 Ethics and Social Responsibility (3). This course familiarizes students with professional ethics and standards in advertising and public relations and examines the regulatory environment in which strategic communication takes place. Prerequisite: Permission of the instructor. (Offered at least once a year).
MMC 6257 Media Management and Entrepreneurship (3). Introduction to the basic functions of media management with an emphasis on television and new media in a global marketplace; provides an understanding of business models and decision-making processes.
MMC 6402 Theories of Mass Communication (3). Examines theories and processes of mass communication as well as media responsibility to society and the social and ethical responsibility of communicators. (Offered at least once a year). Prerequisite: Permission of the instructor.

MMC 6412 Applied Media Communication Skills (3). This advanced skills course covers a broad range of written, interpersonal, social media, presentation, and team communication skills for the advertising, marketing and public relations professions.
MMC 6416 Media Planning (3). This course is intended to be a survey of the media planning discipline of advertising. Prerequisite: Permission of the instructor.

MMC 6900 Independent Study (3). Specialized intensive study in an area of special interest to the student with a focus on directed, independent research. Prerequisites: Requires prior approval by instructor, graduate standing, and full admittance in the program.

MMC 6940 Graduate Internship in Strategic Communication (1-3). On-the-job learning in activity at selected and approved organizations. May include advertising and PR agencies, as well as private, governmental or non-profit organizations. Prerequisite: Graduate standing.
MMC 6950 Mass Communication Professional Project (1-3). Designed to demonstrate student's excellence in an area of communication studies. Prerequisites: Permission of the instructor, 24 credit hours to align with the GSC track requirements; this would not apply to Spanish Language Journalism Program.
MMC 6951C Professional Project II (1). Demonstrates the student's excellence in an area of communication study. Must be taken if student doesn't complete MMC 6950 in one semester. Prerequisite: MMC 6950.

MMC 6970 Mass Communication Master's Thesis (1-3). This course is designed to demonstrate the student's excellence in an area of communication study. This course provides guidelines and direction to graduate students completing their Master's Thesis. Prerequisites: Completion of 27 credit hours, MMC 5440.
PUR 5406 Multi-Cultural Communications (3). Explores the multicultural dimensions of communications with diverse audiences within the United States.
PUR 6607 Global Strategic Communication Management (3). This course acquaints students with the professions and practice of global advertising and public relations in a multicultural world. Prerequisite: PUR 6806.

PUR 6610 Global Reputation Management (3). This course introduces students to the role and value of strategic communication in developing and sustaining an organization's global reputation.
PUR 6806 Global Account Planning (3). This course introduces students to contemporary account planning and global strategic communication techniques. Prerequisite: Permission of the instructor. (Offered at least once a year).
PUR 6935 Advanced Communications Seminar (3). The class will consist of a series of readings, discussions and presentations to immerse students in contemporary issues in Advertising and Public Relations. Prerequisite: Permission of the instructor. (Offered at least once a year).

VIC 5205 Trends in Graphics and Design (3). Design principles and how they relate to trends in student and professional media, including newspapers, magazines and yearbooks. Deals with graphics, packaging, typography and modern design. Prerequisite: Permission of the instructor. (Offered at least once a year). (Supplies fee assessed).
VIC 6005 Web Design for Journalists (3). The course explores the relationship between images and messages in the media and how journalists can best convey information in web page formats.

## Interior Architecture

Janine King, Associate Professor and Chair Philip Abbott, Instructor<br>Katie Rothfield, Instructor

Florida International University's Department of Interior Architecture is situated within two very compelling conditions: the diverse international community within South Florida and the rich interdisciplinary environment in the College or Architecture and The Arts. This unique context inspires our interpretation of the interior design profession as an occupation that exercises many types of knowledge and operates within complex social, cultural, technological, and artistic settings.

FIU's Department of Interior Architecture provides students with a value added education that consists of small student-to-faculty ratios, studio facilities where students have their own workspace, study abroad options, and computer and fabrication labs offering advanced technology. The Department of Interior Architecture is an ideal setting where students are actively involved in learning and exploring the current and future roles of the interior design profession within a global society. More particularly, this context challenges our students to critically investigate the diverse roles of interior design and interior architecture, and inspires us to explore new avenues of thought and attitudes toward why and how we make human environments.

We focus on preparing well-rounded design professionals. Our interdisciplinary foundation coursework and our unique three years of professional graduate curriculum prepare our students to meet the profession head-on. Our graduates work in many different settings in the design of residential, commercial, and institutional projects. This exciting program has a strong emphasis on interior architecture and incorporates the recommendations and standards of national and local professional societies into the development of its curriculum.

The Master of Interior Architecture provides professional degree tracks that are intended for individuals with bachelor degrees from a variety of fields. This course of study has three tracks: a five-year track for students who begin as undergraduates, a two-year track for students with bachelor degrees in architecture or landscape architecture, and a three-year track for students with bachelor degrees in other disciplines.

The Accelerated Master of Interior Architecture (MIA) program provides a seamless course of study leading from undergraduate freshman year to the conferral of the Professional Master of Interior Architecture degree. The Accelerated MIA is comprised of 160 credit hours of integrated pre-graduate and graduate coursework. The degree consists of 73 credit hours of pre-graduate coursework taken over two years followed by 87 credits hours of graduate coursework. At the conclusion of 73 credit hours of pre-graduate study, students move directly to graduate study. A transition from undergraduate to graduate standing occurs during the fourth year after completion of 120 credits. Students must be in good standing with a 3.0 or higher GPA in graduate level coursework (5000 level or higher). A Bachelor degree is not awarded at any point in the program.

The department maintains close ties with interior design professionals. Our professional advisory board periodically reviews the curriculum to maintain program relevance.

Students applying to the department should plan for the financial aspects of a design education. This includes the costs of computers, software, travel and field trips, tools and equipment, and modeling supplies. All students must have continuing access to a laptop computer through purchase, lease or other arrangements.

## Ownership of Student Work

Student work, submitted to the department in satisfaction of course or degree requirements, becomes the physical property of the department. However, students retain all rights to the intellectual property of such work. This work may include papers, drawings, models, and other materials. The department assumes no responsibility for safeguarding such materials. At its discretion, the department may retain, return, or discard such materials. The department will not normally discard the materials of currently enrolled students without giving the student an opportunity to reclaim them.

## Admissions Requirements for all Graduate Degrees in the Department of Interior Architecture

All applicants must meet University graduate admissions requirements. Applicants to the Department of Interior Architecture degree programs must also submit a portfolio of creative work for department review. The portfolio review examines evidence of creative ability, academic success, and professional achievement. It is an important component of the admissions process. Please contact the Department of Interior Architecture for specific portfolio requirements. The deadline for portfolio submission is February 1st of each year. Portfolios submitted after this date will be considered if studio space is available.

Students who have successfully completed the portfolio review process must also meet the minimum requirements of an undergraduate degree from an accredited college or university with undergraduate grade point average (GPA) of 3.0 on a 4.0 scale, or hold a graduate degree from an accredited institution to be fully admitted in the graduate program. When the academic record is less than 3.0 GPA, the applicant must submit Graduate Record Examination (GRE) scores.

## Thesis Requirement

Graduate students in all master degree programs are required to undertake a master's project or a master's thesis as part of their course of study at the Department of Interior Architecture.

## Master of Interior Architecture

## Professional Degree Tracks

The Graduate Program in Interior Architecture prepares expert interior designers with strong professional and content background, capable of engaging in evidencebased design and able to conduct and apply research. The program is a comprehensive, interdisciplinary degree program designed to engage students in advanced study regarding public interiors. The unique curriculum provides students with firsthand experience of a wide range of
interior design issues in specialized areas of study such as hospitality design, healthcare facility design, and workplace design.

The Master of Interior Architecture provides professional degree tracks that are intended for individuals with bachelor degrees from other fields. This course of study has two tracks: a two-year track for students with bachelor degrees in architecture or landscape architecture, and a three-year track for students with bachelors degrees in other disciplines. Both of these tracks begin Summer Semester.

## THREE YEAR TRACK - 90 Credits

A professional degree for students with a Bachelor of Arts or a Bachelor of Science, or equivalent, from an accredited institution. Leveling courses may be required for students without a design background. These are in addition to degree requirements.

## Summer Leveling

| IND 5319 | Visual Notation for Interior Design | 3 |
| :--- | :--- | :--- |
| IND 5475 | Computer Applications in Design | 3 |
| IND 5285 | Design Foundations | 3 |

## Summer Semester

| IND 5325 | Color Theory and Application for the <br> Built Environment | 3 |
| :--- | :--- | ---: |
| Fall Semester |  |  |
| IND 6255 | Graduate Design 1 | 6 |
| IND 5477 | Computer Applications in Design II | 3 |
| IND 5486 | Materials for Interior Design | 3 |
| IND 6616C | Interior Architecture Theory I | 3 |

Spring Semester

| IND 6256 | Graduate Design 2 | 6 |
| :--- | :--- | :--- |
| IND 5438 | Lighting Design | 3 |
| IND 5645 | Structures 1 | 1 |
| IND 5645L | Structures 1 Lab | 2 |

Summer Semester

| IND 5427 | Construction Documents in Interior <br> Architecture | 3 |
| :--- | :--- | ---: |
| IND 5629 | Computer Applications in Design III <br> IND 5138 | 3 |
|  | History of Modern Interior Design <br> (online) | 3 |
| Fall Semester |  | 6 |
| IND 6257C | Graduate Design 3 | 6 |
| IND 5485 | Advanced Construction Documents in | 3 |
| IND 5615 | Interior Architecture | Building Systems for Interior Designers |

Spring Semester
IND 6258C Graduate Design 4 6
IND 5625 Interior Architecture Theory II (online) 3
IND 5937 Special Topics 3
Fall Semester
IND 6259C Graduate Design $5 \quad 6$
IND 5626 Project Programming 3
IND 6639 Research Methods 3
Spring Semester
IND $6970 \quad$ Master's Project 6
Directed Elective (graduate seminar) 3
Directed Elective (Internship) 3
IND $5508 \quad$ Professional Office Practice 3

## TWO YEAR TRACK - 63 Credits

A professional degree for students with a Bachelor of Arts or a Bachelor of Science, or equivalent, in Architecture or Landscape Architecture from an accredited institution.

| Summer Semester |  |  |
| :---: | :---: | :---: |
| IND 5325 | Color Theory and Application for the Built Environment | 3 |
| IND 5629 | Computer Applications in Design III | 3 |
| Fall Semester |  |  |
| IND 6257C | Graduate Design 3 | 6 |
| IND 5485 | Advanced Construction Documents in Interior Architecture | 3 |
| IND 5486 | Materials for Interiors | 3 |
| IND 6616C | Interior Architecture Theory I | 3 |
| Spring Semester |  |  |
| IND 6258C | Graduate Design 4 | 6 |
| IND 5625 | Interior Architecture Theory II (online) | 3 |
| IND 5937 | Special Topics | 3 |
| Summer Semester |  |  |
| IND 5138 | History of Modern Interiors (online) | 3 |
| Directed Elective |  | 3 |
| Fall Semester |  |  |
| IND 6259C | Graduate Design 5 | 6 |
| IND 5626 | Project Programming | 3 |
| IND 6639 | Research Methods | 3 |
| Spring Semester |  |  |
| IND 6970 | Master's Project | 6 |
| IND 5438 | Lighting Design | 3 |
| IND 5508 | Professional Office Practice | 3 |

## Master of Arts in Interior Architecture

## Post-Professional Degree

Individuals with an undergraduate degree in Interior Design or Interior Architecture from an accredited professional program are eligible for admission to the program provided University requirements are met. This 36 credit hour degree prepares students who wish to conduct research, teach and undertake advanced studies in Interior Design. One year of full-time study in residency is normally required. However, a part-time study option is available subject to the review and approval of the Program. Satisfactory completion of 36 credits in the following course of study is required.

| First Year (Summer Semester) |  |  |
| :---: | :---: | :---: |
| IND 5937 | Special Topics | 3 |
| IND 6639 | Research Methods | 3 |
| Directed Elective |  | 3 |
| First Year (Fall Semester) |  |  |
| STA 6166 | Statistical Methods in Research 1 | 3 |
| IND 6979 | Thesis Research | 3 |
| IND 6910 | Graduate Seminar | 3 |
| First Year (Spring Semester) |  |  |
| IND 6906 | Independent Study | 1-3 |
| Directed Elective |  | 3 |
| IND 6973 | Thesis Seminar | 3 |
| Second Year (Summer Semester) |  |  |
| IND 6970 | Master's Project or | 6 |
| IND 6971 | Master's Thesis | 6 |

## Directed Elective

## Certificate in Cruise Ship and Super Yacht Design

The Interior Architecture Department has assembled a team of professionals and educators to offer a unique curriculum that will prepare designers for the specific issues associated with designing cruise ship and yacht interiors. The certificate program is offered to students who are enrolled in the FIU's Master of Interior Architecture program and involves international workshops with designers from overseas venues. Enrollment in the certificate program offers FIU students the opportunity to form specialized knowledge in this area of design prior to graduation with their Master of Interior Architecture degree.

Entrance into the program is limited to students entering their fourth year of the MIA curriculum who have earned a 3.0 or better grade point average in the graduate program. All applicants should access the appropriate application through the University Graduate School website, at: http:/lgradschool.fiu.edu/admissions.html. The application is in paper form and must be completed by the student to Graduate Admissions in PC 230. At the conclusion of the certificate program, students will be issued a Certificate of Cruise Ship and Super Yacht Design from Florida International University. This certificate program is open to degree-seeking students only.

## Program Requirements

The certificate program consists of 15 credit hours of courses currently embedded within the existing Master of Interior Design curriculum: two specialized sixteen-week studio courses; plus an industry specific internship course coordinated through FIU's interior design program.

| IND 6257C | Graduate Design 3 | 6 |
| :--- | :--- | ---: |
| IND 6258C | Graduate Design 4 | 6 |
| IND 5948 | Interior Architecture Graduate Internship |  |
|  | (Industry specific) | 3 |

## Certificate in Furniture Design

The Certificate in Furniture Design offers students the ability to explore, design, and create furniture for commercial and residential purposes. This program serves FIU students who wish to extend their design education into this area of specialized study. Focused on creative design process and on bringing products to market, the four courses in this certificate develop students' skills, knowledge, and critical thinking about the design, making, and marketing of furniture products for industry, retail, and gallery markets. This certificate program is open to degree-seeking students only.

Entrance into the program is limited to students enrolled at FIU who have earned a 3.0 or better grade point average. All applicants should access the appropriate application through the University Graduate School website. The application is in paper form and must be completed by the student to Graduate Admissions in PC 230. At the conclusion of the certificate program, students will be issued a Certificate in Furniture Design from Florida International University.

## Program Requirements

Studio Courses
IND 5445C Introduction to Furniture Design 3
IND 5447C Advanced Furniture Design 6
Subject Area Courses
IND $5164 \quad$ History of 21st Century Furniture Design 3
IND 5446 Professional Practice and
Entrepreneurship in Furniture Design
3

## Course Descriptions <br> Definition of Prefixes

IND-Interior Design
F-Fall semester offering; S-Spring semester offering; SS-
Summer semester offering.
IND 5029 Art in Public Interiors (3). Examination of the creative place making and the integration of artwork into the interior architecture of public places.
IND 5137 History of Design from the Renaissance to XIX Century (3). Survey of the architectural, interior and landscape design from the Renaissance to the XIX century, including western and non-western traditions.
IND 5138 History of Modern Interiors (3). An analysis of the history of architectural interiors, furniture and decorative arts from the Neo-Classical period to the present time.
IND 5164 History of $21^{\text {st }}$ Century Furniture Design (3). Students will research and analyze the social, political, technical economic and theoretical forces that contribute to new movements in late $20^{\text {th }}$ century and early $21^{\text {st }}$ century furniture design.
IND 5235 Formative Studio 1 (6). Introduction to concept development, spatial expression, and representational techniques in architecture.
IND 5285 Design Foundations (3). The course is a rigorous introduction to design fundamentals. It builds a design language through lectures, practical exercises, exploring techniques, materials, skills, making and critical thinking. Prerequisite: Program approval.
IND 5319 Visual Notation for Interior Design (3). Course will develop drawing skills in multiple media, actively engaging in projects of drawing as a medium of investigation, documentation, memory, observation and presentation for interior design. Prerequisite: Program approval.
IND 5325 Color Theory and Application for the Built Environment (3). Use of color in the built environment including principal color systems, methods of color harmony, effects of visual phenomena, and various psychological, cultural and historical implications.
IND 5418 Design at Sea (3). Study of Interior Architecture of Cruise Vessels. Students learn spatial material and regulatory issues associated with marine design.

IND 5427 Construction Documents in Interior Architecture (3). Conceptual framework for design of building assemblies, understanding of construction technologies and properties of interior building materials. Construction drawings and specifications are produced. Prerequisite: Graduate standing.

IND 5428 Materials and Methods (3). Research and analysis of building materials and methods. Properties of materials and performance in a variety of light building, interior and environmental assemblies are investigated.
IND 5438 Lighting Design (3). Exploration of theories and applications of lighting design. Emphasis on studying research about interactions between light, people and articulation of interior space.

IND 5445C Furniture Design (3). Providing a general overview of furniture design process, this design/build studio course teaches students about ergonomics, scale, space, structure and materiality related to furniture design.
IND 5446 Professional Practice and Entrepreneurship in Furniture Design (3). Learn about industry standards and entrepreneurial strategies that successful designers and furniture companies use when bringing new designs to different markets.

IND 5447C Advanced Furniture Design (6). Research, analyze and design furniture using wood, metals and plastics. Instruction will include advanced technical skills and emphasis on qualitative and conceptual aspects of design.
IND 5475 Computer Applications in Design (3). Study of computer software packages applicable to the architecture office environment, with particular emphasis on CAD software, graphics packages and desktop publishing.
IND 5477 Computer Applications in Design II (3). Intermediate study of computer software applicable to the architecture and interior design office environment, with particular emphasis of CADD software, graphics packages and desktop publishing.
IND 5485 Advanced Construction Documents in Interior Architecture (3). Experimental approach to new materials and methods applicable to the field of construction. Field and laboratory exercises in the evaluation of technical support assemblies for buildings.

IND 5486 Materials for Interiors (3). Analysis and research of critical issues affecting selection and application of interior finish materials.

IND 5508 Professional Practice (3). Advanced study office administration, contract negotiation, fee structure, professional ethics, client and public relations. Investigations and analysis of business organizations and project management. Prerequisite: Program approval.
IND 5615 Building Systems for Interiors (3). Study of building environmental systems and building performance issues that impact the design of building interiors and affect the health, safety, welfare, and performance of building occupants. Prerequisite: IND 5628.

IND 5625 Interior Architecture Theory II (3). Overview of the environmental parameters, morphological concepts and ideological principles that generate form and meaning in interior design, architecture, and landscape architecture.
IND 5626 Project Programming (3). Students perform pre-design research and analysis aimed at programming the design of a specific facility. Students ultimately prepare a program of requirements for their master's project. Prerequisites: IND 5937, IND 6639. Corequisite: IND 6259C.

IND 5628 Sustainable Practices in Interior Architecture (3). Analysis and application of theoretical, practical, and professional issues involved in designing sustainable interior environments.

IND 5629 Computer Applications in Design III (3). Students learn advanced techniques in digital design through using 3 dimensional modeling and rendering software within the design process.

IND 5645 Structures 1 (1). Through the study of statics and strength of materials this introductory course provides a scientific basis for analysis of how various structural systems work and withstand loading. Prerequisites: PHY 2053 and MAC 2233 or MAC 1114 or MAC 1147.

IND 5645L Structures 1 Lab (2). The lab sessions will supplement lectures through additional practice and hands-on problems that are designed to enhance the application of structural concepts. Prerequisites: PHY 2053 and MAC 2233 or MAC 1114 or MAC 1147. Corequisite: IND 5645.
IND 5937 Special Topics (3). Examination of the conceptual framework supporting the theory, and research applications in specialized area of interior design. Prerequisite: Program approval.

IND 5938 Cejas Eminent Scholar Seminar (1-3). This is a seminar/workshop course taught by distinguished educators, scholars, and designers. Lectures, critical readings, and discussions of thematic topics make up the methodology of the course.

IND 5941 Internship Experience (0). Experience in interior design practice learned through work with licensed professionals.
IND 5948 Interior Architecture Graduate Internship (3). Advanced issues in professional practice learned through work experience with design professionals.

IND 5950 Interior Architecture Travel, Culture, and Design (3). Study of Interior Architecture through travel. Adopting a global view, students learn to weigh design decisions within the parameters of ecological, socioeconomic, and cultural contexts.

IND 6255 Graduate Design 1 (6). Exploration of highly articulated projects utilizing innovative research methods to strengthen and clarify design concepts taken to a detailed resolution. Corequisite: IND 5427.
IND 6256 Graduate Design 2 (6). Advanced design topics explored. Focus on student specialization interest. Emphasis on integration of design process from conceptual formulation and programming to design development and reflection. Prerequisite: IND 6255.
IND 6257C Graduate Design 3 (6). Advanced content with focus on developing and applying of design criteria to create highly articulated interior environments for work, retail, and recreation. Prerequisite: IND 6256. Corequisite: IND 5485.
IND 6258C Graduate Design 4 (6). Focus on developing a global approach to designing with awareness and respect for cultural and social differences, and the implications of conducting the practice of design within a world market. Prerequisite: IND 6257C.

IND 6259C Graduate Design 5 (6). Complex issues associated with the design of institutional environments are used to explore issues of environment and behavior, universal design, plus issues of health, safety, and welfare. Prerequisite: IND 6258C. Corequisite: IND 5626.

IND 6616C Interior Architecture Theory I (3). Students analyze and explore the application of pivotal theories regarding the relationships between human behavior and the design of interior environments.
IND 6639 Research Methods (3). Methods of data acquisition, analysis, and interpretation used in interior design research. Prerequisite: Program approval.
IND 6906 Independent Study (1-3). Coursework on a particular aspect of Architecture under the direction of faculty in an individual study format. Prerequisite: Program approval.
IND 6910 Graduate Seminar (3). Coursework under the direction of faculty in preparation for a master's thesis or master's project in interior design. Prerequisites: IND 6906, program approval.
IND 6970 Master's Project (1-6). The curriculum was reordered and the Master's project is now the terminal studio for all students.

IND 6971 Master's Thesis (1-6). Coursework under the direction of faculty for the completion of thesis by candidate for the degree of Master of Interior Design. Prerequisites: Program approval and IND 6910.
IND 6973 Thesis Seminar (3). Students develop an independent research strategy that will enable them to address their thesis question. Prerequisite: IND 6979.
IND 6979 Thesis Research (1-3). Design, development, and execution of research project for master's thesis in interior design. Prerequisites: IND 5937, IND 6639.

## Journalism and Media

Teresa Ponte, Associate Professor and Chair
Frederick R. Blevens, Professor
Mario Diament, Associate Professor
Daniel Evans, Visiting Associate Professor
Leonardo Ferreira, Professor
Robert Gutsche, Jr., Assistant Professor
Susan Jacobson, Assistant Professor
Kate MacMillin, Assistant Professor
Lilliam Martinez-Bustos, Assistant Professor
Juliet Pinto, Associate Professor
Neil Reisner, Associate Professor
Allan Richards, Associate Professor
Michael Sheerin, Associate Professor
Moses Shumow, Assistant Professor
Carlos Suris, Senior Instructor
Lorna Veraldi, Associate Professor
Mercedes Vigon, Associate Professor

## Master of Science in Mass Communication

The Department of Journalism and Media in the School of Communication and Journalism offers professional education leading to the M.S. in Mass Communication with current specializations in Spanish-language journalism. The orientation of the graduate program is primarily professional, not theoretical. The program is designed to enhance graduates' abilities to work in the mass communication professions.

## Admission Requirements

To be eligible for admission to the graduate program, applicants must meet the following requirements:

1. All applicants must have a bachelor's degree from a regionally accredited college or university.
2. All candidates must show promise of success in graduate studies. Applicants must meet the following criteria, in addition to any program-specific requirements:
A. Meet minimum GPA: Candidates must have a minimum grade point average (GPA) of 3.0 earned during the last 60 hours of upper-level work.
B. Students must submit a 500-750 word essay. Topic should reflect why the program is a suitable fit for the applicant's needs.
C. Students must submit a professional and current resume.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. A minimum TOEFL score of 500 for the Spanish Language Program is acceptable. Candidates who have passed the TOEFL more than two years before they apply for admission to the program have to repeat the test with the required score.
4. Students applying to the Spanish Language Program are required to take the EXADEP or GRE with no minimum required score.

## Application Procedures

A student applying for admission to the graduate program must:

1. Complete online graduate admissions application available at http://gradschool.fiu.edu.
A. Have two official copies of transcripts from all colleges or universities attended sent to the Graduate Admissions Office. (Copies submitted by applicants will be rejected.)
B. Submit appropriate test scores and documents to the Graduate Admissions Office.

## Admission Deadline

Students should adhere to the Florida International University graduate admissions deadlines for Fall, Spring and Summer terms. These deadlines are listed in the Graduate Catalog in the Graduate Admission section.
Note that domestic students and international students have different deadlines. If you have any questions regarding these deadlines, please call the Graduate Admissions office at (305) 348-2455.

## Degree Requirements Plan of Study/Commencement of Program

Upon admission to the graduate program in mass communication, each student will be assigned a faculty advisor. In most cases, this will be the coordinator of the appropriate graduate program. The advisor will be responsible for developing the student's plan of study, requesting applicable transfer of credit where appropriate, monitoring the student's academic progress, and ensuring the fulfillment of the requirements for the master's degree by completing the student's Program of Studies with the student. This will also include a timetable for completion of the work. Any changes in the plan must be approved by the faculty advisor and the appropriate chairperson. It is also the faculty advisor's responsibility to complete a Graduate GPA Course Inclusion Form for classes that are part of the master's program but were taken prior to the student's full admission and/or are lower division classes.
In addition to the development of a plan of study, the advisor must evaluate any deficiencies including, but not limited to the following areas which may require additional course work.

## Competency in Statistics

Competence in the fundamentals of statistics is required of all graduate students. In order to register for MMC 5440 (Applied Research Methods in Mass Media) students must demonstrate a knowledge of statistics in one of three ways: by having taken a course in statistics within the last three years, passing an examination in the subject, or taking a special seminar, offered simultaneously with the commencement of the graduate research course.

## Professional Experience

Professional experience in a field directly related to the specialization is an advantage. Applicants without such professional experience may be required to complete up to 9 credits of additional undergraduate course work and/or to complete an internship with a professional organization. After an interview with the applicant, the student's faculty advisor will determine the amount of
undergraduate work and the undergraduate courses to be completed.

## Transfer Credit

Students may petition the appropriate advisor to transfer up to six hours of graduate credit toward the degree. To be approved for transfer, the courses must have been previously taken at a regionally accredited college or university; the student's advisor must judge the courses relevant to the student's plan of study; the student must not have used the credits toward another degree; the student must have earned a ' $B$ ' or higher in the courses, and meet the University requirements. No transfer courses will substitute for skills courses in any area of specialization in the SCJ master's program. All transfer credit must have been completed within the six-year period preceding the date the degree is granted.

## Time Limit

All work applicable to the degree, including transfer credit, must be completed within six years of first enrollment in the master's program.

## Grades

Students must maintain a minimum GPA of 3.0 in all courses required for the degree. No more than two ' $C$ ' grades will be allowed.

## Professional Project, Thesis

Students complete a professional project in their areas of specialization. Work on the project generally will be completed during the final semester. Projects will be graded by the student's graduate committee. Students must receive a ' B ' or higher on the project for it to be accepted. Students may also opt to do a thesis; GPA requirements are the same.

## Required Courses

To earn the M.S. in Mass Communication, students must meet the following requirements:

1. Students must take at least 30 or 36 hours of acceptable graduate credit, depending on the program. Of those hours, all courses in the SJMC taken toward graduation must be at the graduate level.
2. At least 27 hours must be in School of Communication and Journalism.

## Student Media Advising

Designed primarily for journalism teachers and/or student media advisors on all levels, the program trains teachers/advisors or those aspiring to the profession in areas related to everyday work.

## Core Curriculum

All students must take the following core courses:

| MMC 6402 | Theories of Mass Communication | 3 |
| :--- | :--- | :--- |
| MMC 5440 | Applied Research Methods in the Mass |  |
|  | Media | 3 |
| MMC 6950 | Professional Project | 3 |

In addition to the core courses, students in the student media advising specialization must take the following courses:
JOU 5806
Student Media Advising

MMC $5207 \quad$ Ethical and Legal Foundations of the
Student Press 3

MMC 6213
VIC 5205
Ethics and Social Responsibility
Trends in Graphics and Design
Students must also take two additional three-credit graduate courses in the School of Communication and Journalism in an appropriate area of emphasis. Courses must be approved by the student's advisor.

Nine hours must be in a field of concentration outside the School of Communication and Journalism. A minimum of three of those credits have to be at the graduate level ( 5000 or 6000 level).

For additional information about the Student Media Advising program please call (305) 919-5625 or email simc@fiu.edu.

## Spanish-language in Multimedia Journalism

The Spanish-language journalism track is geared toward Spanish-speaking students educated in the United States who wish to expand their professional options in the Spanish-language media market. It is also designed for Latin American students and journalists who need to acquire writing and reporting skills to work for Spanish print or broadcast media.

This is a one-of-a-kind program offered entirely in Spanish, and it specializes in investigative journalism, a concept incorporated in all the skills courses.

The program, designed to start in the fall, may be completed in one year and consists of 36 credits (12 courses of three credits each). Two are electives and can be taken outside SCJ. The courses are only offered once a year in the semester indicated below, except for the Final Professional Project, which is offered in the fall, spring and summer terms.
Course Offerings: ( $\mathbf{3 6}$ credits)

| MMC 6108 | Theories of Mass Communication \& |  |
| :--- | :--- | :--- |
|  | Writing | 3 |
| JOU 6185 | Reporting Social and Ethnic Issues | 3 |
| MMC 5440 | Applied Research Methods | 3 |
| JOU 6107 | New Media Techniques | 3 |
| JOU 6118 | Investigative Journalism | 3 |
| JOU 6119 | Advanced News Writing | 3 |
| MMC 6257 | Media Management and |  |
|  | Entrepreneurship |  |
| RTV 6309 | Visual Storytelling and Production | 3 |
| MMC 6635 | Ethics and Social Responsibility | 3 |
| Elective (graduate level approved by the coordinator) | 3 |  |
| Elective (graduate level approved by the coordinator) | 3 |  |
| MMC 6950 | Mass Communication Professional |  |
|  | Project | 3 |
| MMC 6951C | Professional Project II (if needed) | 1 |

For additional information about the Spanish-language Journalism program please call (305) 919-4169 or email sjmc@fiu.edu.

## Spanish-language Journalism with a Track in Latin American and Caribbean Studies

The Spanish-language Master's Program in Journalism with a track in Latin American and Caribbean Studies is
designed for graduate students who are new to journalism, and for those who want to further their knowledge in this field. It also offers them the opportunity to specialize in areas of political science that are fundamental for journalists who want to cover Latin American issues. This interdisciplinary program will enable students to delve into the political and historical Latin American context of the stories they will cover as reports. As a result, they have a better understanding of the issues they will be confronted with; they will produce in-depth journalistic work.

The program will consist of 36 credits ( 12 courses of three credits each). Four courses will be offered through the Latin American and Caribbean Center (LACC) [in English] and eight by the School of Communication and Journalism (SCJ) [in Spanish]. The professional Project must be completed in Spanish, and it will be supervised and graded by faculty members of SJMC's SpanishLanguage Master's Program in Journalism.

## Course Offerings: (36 credits)

## LACC Courses

| INR 6008 | Colloquium in International Studies <br> Survey of Latin America and the | 3 |
| :--- | :--- | :--- |
| LAS 6003 | Caribbean | 3 |
| LAH 5935 | Topics in Latin American History | 3 |
| SJMC Courses |  |  |
| JOU 6193 | Thinking Like a Writer |  |
| JOU 6119 | Advanced News Writing | 3 |
| RTV 6309 | Visual Storytelling and Production | 3 |
| MMC 6402 | Theories of Mass Communication | 3 |
| JOU 6107 | New Media Techniques | 3 |
| MMC 5440 | Applied Research Methods | 3 |
| JOU 6118 | Investigative Journalism | 3 |
| MMC 6950 | Professional Project | 3 |

For additional information about the Spanish-language Journalism program please call (305) 919-4169 or email sjmc@fiu.edu.

## Spanish-English Language Journalism Track

The Spanish-English language journalism track caters to Spanish-speaking students educated in the United States who wish to expand their professional options in the English-language and rich Spanish-language media market. It is also designed for Latin American students and journalists who need to acquire writing and reporting skills to work for Spanish and English print and broadcast media.

The courses and the bilingual component of this program also intend to meet a demand for bilingual training in journalism in the United States, stemming from increasing media coverage of Hispanic communities and the consequent need for multi-ethnic newsrooms.

The Spanish-English Master's Program in Journalism consists of 36 credits ( 12 courses of three credits each). Six are offered in English and six, in Spanish. Of the six courses in English, two are offered in areas outside journalism. Students must complete their final project in English.

## Course Offerings: (36 credits) <br> Courses in Spanish

$\begin{array}{ll}\text { JOU } 6193 & \text { Thinking Like a Writer } \\ \text { JOU } 6119 & \text { Advanced News Writing }\end{array}$

| RTV 6309 | Visual Storytelling and Production | 3 |
| :--- | :--- | :--- |
| JOU 6107 | New Media Techniques | 3 |
| MMC 5440 | Applied Research Methods | 3 |
| RTV 6xxx | Advanced On-Camera Reporting | 3 |
| Courses in | English |  |
| MMC 6402 | Theories of Mass Communication | 3 |
| VIC 6005 | Web Design for Journalists | 3 |
| JOU 6118 | Investigative Journalism | 3 |
| MMC 6950 | Professional Final Project | 3 |
| Courses in English (outside SJMC) |  |  |
| INR 6008 | Seminar on Latin American Politics | 3 |
| LAH 5935 | Comparative History of State and |  |
|  | Society in Latin America | 3 |

For additional information about the Spanish-language Journalism program please call (305) 919-4169 or email simc@fiu.edu.

## Business Journalism Track

## Admission Requirements

To be considered for admission to the graduate program in the School of Communication and Journalism (SCJ), the following criteria must be met:

## 1. Degrees

A student seeking admission into a graduate program of the University must have a bachelor's degree or equivalent from a regionally accredited institution or, in the case of foreign students, an institution recognized as an institution of higher learning.
2. Minimum GPA

A minimum grade point average (GPA) of 3.0 earned during the junior and senior undergraduate years.
3. Entrance Examination

The Graduate Record Examination (GRE) is required for admission into all programs taught in English. In some cases, the Graduate Management Admission Test (GMAT) is accepted upon the approval of the graduate coordinator. GRE scores with a minimum of 153 on the verbal portion. Graduates of non-U.S. institutions must be academically eligible for further study in the country where the degree was earned. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). Applicants must receive a total of 80 on the iBT TOEFL - equivalent to 550 on the paper-based version, or 213 on the computerbased version of the Test of English as a Foreign - or 6.5 overall on the IELTS.
4. Resume

All applicants must submit a professional resume.

## Course Offerings: (36 credits)

## SJMC

JOU 6358

The Cyberjournalist
JOU 6125

JOU 6352 Advanced Business Feature Writing
JOU $6931 \quad \begin{aligned} & \text { Special Topics/Economic News } \\ & \text { Reporting }\end{aligned}$
MMC 5932 Special Topics in Journalism/Advanced Economics Reporting
JOU 6355 Applied Research Methods in Business Journalism

3
Business Reporting: Public Affairs 3 $\begin{array}{ll}\text { Advanced Business Feature Writing } & 3 \\ \text { Special Topics/Economic News } & \\ \text { Reporting } & 3\end{array}$ 3 3

## MMC 6950

Mass Communication Professional Project3

MMC 6402

Theories of Mass Communication

## Business

ACG 6026
FIN 5307
Accounting for Managers
FIN 5307
Financial Markets and Analysis
FIN 6428
Corporate Finance

## General

One course from the following:
FIN 6656 Latin American Financial Markets 3
FIN 6638 International Capital Markets 3
ECS 5406 Latin American Economies 3
ECS 7435 Economics of the Caribbean 3
ECS 7445 Economics of Central America 3
ECO 5709 The World Economy 3
ECO 5735 Multinational Corporations 3
CPO 6105-6721 Seminars on Regional Politics 3
MAR $6805 \quad$ Marketing Management in the Global Environment
MAN 6606 International Business Environment 3
INR 5007-6936 Seminar on International Politics 3
For additional information about the Business Journalism program please call (305) 919-4169 or email sjmc@fiu.edu.

## Certificate Programs

## Student Media Advising

This professional certificate program is designed primarily for journalism teachers and for student media advisors on all levels and for those aspiring to the profession. This certificate program is open to both degree- and nondegree seeking students. This program will satisfy the requirements of the certification, recertification or incentive credits for current public school teachers in the field. The Certificate in Student Media Advising requires 15 credits to be taken as follows:
Required Courses: ( 9 credits)

| JOU 5806 | Student Publications Supervision | 3 |
| :--- | :--- | :--- |
| MMC 5207 | Ethical and Legal Foundations of the |  |
|  | Student Press | 3 |
| VIC 5205 | Trends in Graphics and Design | 3 |

## Elective Courses: (6 credits)

Students must take two of the following:
MMC 6402 Theories of Mass Communication 3
MMC 6213 Ethics and Social Responsibility 3
PUR 4101 Digital Editing and Design
or
other courses upon approval of the faculty advisor.
For additional information about the Student Media Advising program please call (305) 919-5625 or email sjmc@fiu.edu.

## Spanish-language Journalism: Investigative Reporting

The objective of the Professional Certificate in Spanishlanguage Journalism is to develop skills and techniques that will allow working journalists to be more responsive to the demands of their profession as well as the opportunity to become more familiar with Spanish-language journalism in general. The focus of the program will be on reading,
writing, and thinking. All courses will be taught in Spanish. Some courses may be offered off-campus. This certificate program is open to non-degree-seeking students only.

Interested students should contact the department for additional information and course requirements.

For additional information about the Spanish-language Journalism program please call (305) 919-4169 or email sjmc@fiu.edu.

## Joint Certificate in Integrated Marketing Communications: Latin American Certification

The Joint Graduate Certificate in Integrated Marketing Communications: Latin American Certification is an 18hour program with two required courses each from ICAP and International Relations, plus several electives from both areas. The objective of this graduate level certificate program is to prepare working communications professionals with the skills necessary to develop and implement communications programs in Latin America. It is also appropriate to provide international relations professionals who have gained communications responsibilities with a broad overview of the basic concepts and tasks of mass communications. This certificate program is open to non-degree-seeking students only.

| Required Courses - ICAP Program |  |  |
| :---: | :---: | :---: |
| PUR 6806 | Global Account Planning | 3 |
|  | (Prerequisite: Permission of the instructor) |  |
| PUR 6607 | Global Strategic Communication |  |
|  | Management | 3 |
|  | (Prerequisite: PUR 6806) |  |
| Elective Courses - ICAP Program |  |  |
| MMC 6402 | Theories of Mass Communication | 3 |
|  | (Prerequisite: Permission of the instructor) |  |
| PUR 6935 | Advanced Communications Seminar (Prerequisite: Permission of the instructor) | 3 |
| Required Courses - International Relations |  |  |
| INR 6107 | U.S. Foreign Policy | 3 |
| INR 6609 | Dynamics of International Relations in the 20th Century | 3 |
| Elective Courses - International Relations |  |  |
| INR 4031 | The Media and International Relations | 3 |
| INR 6089 | International Relations and Human |  |
|  | Rights | 3 |
| INR 6209 | Comparative Foreign Policy of Latin America | 3 |
| INR 6604 | International Relations Theory I | 3 |
| INR 6606 | Political Psychology of International |  |
|  | Relations | 3 |

Current selections from the Latin American and Caribbean Center as offered.

For additional information about the Integrated Marketing Communications program please call (305) 919-5625 or email sjmc@fiu.edu.

## Course Descriptions

## Definition of Prefixes

ADV-Advertising; COM-Communications; DIG-Digital Media; JOU-Journalism; MMC-Mass Media Communication; PUR-Public Relations; RTV-Radio: Television; VIC-Visual Communication.
All courses required for the degree will be offered at least once during the term of the student's enrollment.
ADV 6355 Advertising and Society (3). The relationship between advertising, economic, political, moral, and ethical issues.
ADV 6503 Seminar in Advanced Creativity (3). Theoretical and practical application of variable topics including creative problem solving, design, web advertising, pop culture, and IMC tools. Progressive level of difficulty. Prerequisite: Permission of the instructor.
ADV 6805C Advertising and Public Relations Creative Strategy (3). Focuses on the conceptualization of breakthrough strategies and their application to all integrated communication tools. (Offered at least once a year).
COM 5606 Environmental Communication (3). This graduate level course is designed to bring theoretical principles and professional skills associated with mass communication together with environmental issues and themes. Prerequisites: Completion of the six-credit project or internship requirement (EVR 5907) and permission of the instructor or department.
DIG 5167 Social Media Metrics and Evaluation (3). This course introduces strategic aspects of social media analytics by highlighting metrics for assessing effectiveness of social media strategies for global advertising, public relations and marketing.
DIG 5438 Strategic Storytelling and Digital Content Creation (3). This course offers a view of storytelling paradigms and provides the opportunity to apply digital storytelling for strategic purposes using interactive multimedia tools.
DIG 5569 Digital Media Management (3). This course examines various methods and perspectives of managing digital media platforms and content in a strategic communication setting.
JOU 5806 Student Media Advising (3). Designed to assist teachers and advisors of journalism at the high school and junior college level, this course emphasizes the technical aspects of producing student newspapers, yearbooks, and magazines, as well as the legal and ethical considerations facing today's advisor. In addition, attention is given to matters pertaining to curriculum and methodology for effective journalistic instruction. (Offered at least once a year).
JOU 6107 New Media Techniques (3). This course will develop skills in news writing for TV, radio, and print platforms and their respective online converged multimedia formats. Prerequisite: Graduate standing.
JOU 6118 Investigative Journalism (3). The emphasis in this class is on the new media and the possibilities of combining basic news reporting and writing skills with new electronic resources and tools available to journalists.

JOU 6119 Advanced News Writing (3). This course will study the various kinds of advanced reporting and writing techniques a master level journalism student is expected to dominate before graduation. Prerequisite: JOU 6193.
JOU 6125 The Cyberjournalist (3). Students progress beyond a simple knowledge of how to use electronic databases into the realm of mining and manipulating vast data pools such as the U.S. Census.
JOU 6183 Judicial System Reporting (3).
JOU 6185 Reporting Social and Ethnic Issues (3). This course is an introduction to basic elements of journalistic storytelling with special emphasis in how to broaden the understanding on social and ethnic issues. Prerequisite: Graduate standing.
JOU 6186 Covering Social and Ethnic Issues (3). Theme coverage on race, gender, and ethnicity. Enterprise reporting with significance and context, and with its legal, social, political, economic, and ethical implications of diversity.
JOU 6187 Covering the City III (3). Students produce the prototype for a city magazine, from start to finish. Readings: a broad sampling of magazines.
JOU 6193 Thinking Like a Writer (3). Principles and techniques that are common to good writing, regardless of the medium. Students learn to read, observe and think as writers.
JOU 6194 Thinking Like a Writer II (3). Continuation of 1st writing course, with emphasis on elegance at sentence level. Also explores interrelationships of storytelling, editing and design. Readings: Poynter anthology.
JOU 6196 Thinking Like a Writer III (3). Continuation of 1st and 2nd semester writing courses, with emphasis on producing the long piece. Direct support of the writing of Professional Project. Readings/viewings: Pulitzer, Emmy winners.

JOU 6352 Advanced Business Feature Writing (3). Advanced study in the development of in-depth business articles, emphasizing the crucial role of bright writing and eye-catching graphics.

JOU 6355 Applied Research Methods in Business Journalism (3). Techniques in locating and understanding financial data of corporations and other entities whose finances are subject to public disclosure as well as demographic and economic research produced by government, universities, and private research organizations.

JOU 6358 Business Reporting: Public Affairs (3). Advanced study in the use of economic analysis and financial investigation to analyze social and demographic trends for business reporting.
JOU 6931 Seminar on Special Topics (1-3). Instruction in specialized areas of journalism. Prerequisite: Graduate standing.
MMC 5207 Ethical and Legal Foundations of the Student Press (3). Examines ethical and legal foundations underlying the operation of the student press on American campuses, stressing both rights and responsibilities and how to organize publications to protect both. (Offered at least once a year).

MMC 5268 Communication in the Digital Age (3). This course is designed to develop and enhance students' understanding of the foundations for digital communication, including an overview of the historical development of digital communication.
MMC 5306 Global Communications (3). This course explores global markets and intercultural communications while providing advanced study, evaluation and application of cultural context, theories, stakeholders, and trends in media, advertising, and public relations. Analysis of ethical, legal, political, and social communications issues around the globe.
MMC 5440 Applied Research Methods in the Mass Media (3). An advanced course in the acquisition and use of secondary data, including media data, as well as the design, execution and utilization of research studies. Students will conduct an original proprietary study. (Offered at least once a year).
MMC 5655 Mass Communication and the Environment (3). The course brings theoretical principles and professional skills associated with media communication together with environmental issues. Prerequisites: Graduate standing or permission of the instructor.
MMC 5932 Special Topics Seminar (3). A variable topic seminar dealing with issues of interest to the community. Examples are rights of high school journalists, cable TV, the use of mini-computers in creative communication. Prerequisite: Permission of the instructor. (Offered at least once a year).
MMC 6108 Theories of Mass Communication and Writing (3). The course examines writing theories and processes and explores media responsibility to society including communication principles and techniques found in contemporary communication theories.
MMC 6135 Multimedia Production and Design (3). The course offers introduction in the theory and practice of multimedia production including digital photography, videography, non-linear video editing and sound design.
MMC 6213 Ethics and Social Responsibility (3). This course familiarizes students with professional ethics and standards in advertising and public relations and examines the regulatory environment in which strategic communication takes place. Prerequisite: Permission of the instructor. (Offered at least once a year).
MMC 6257 Media Management and Entrepreneurship (3). Introduction to the basic functions of media management with an emphasis on television and new media in a global marketplace; provides an understanding of business models and decision-making processes.
MMC 6402 Theories of Mass Communication (3). Examines theories and processes of mass communication as well as media responsibility to society and the social and ethical responsibility of communicators. (Offered at least once a year). Prerequisite: Permission of the instructor.

MMC 6412 Applied Media Communication Skills (3). This advanced skills course covers a broad range of written, interpersonal, social media, presentation, and team communication skills for the advertising, marketing and public relations professions.

MMC 6416 Media Planning (3). This course is intended to be a survey of the media planning discipline of advertising. Prerequisite: Permission of the instructor.
MMC 6900 Independent Study (3). Specialized intensive study in an area of special interest to the student with a focus on directed, independent research. Prerequisites: Requires prior approval by instructor, graduate standing, and full admittance in the program.
MMC 6940 Graduate Internship in Strategic Communication (1-3). On-the-job learning in activity at selected and approved organizations. May include advertising and PR agencies, as well as private, governmental or non-profit organizations. Prerequisite: Graduate standing.
MMC 6950 Mass Communication Professional Project (1-3). Designed to demonstrate student's excellence in an area of communication studies. Prerequisites: Permission of the instructor, 24 credit hours to align with the GSC track requirements; this would not apply to Spanish Language Journalism Program.
MMC 6951C Professional Project II (1). Demonstrates the student's excellence in an area of communication study. Must be taken if student doesn't complete MMC 6950 in one semester. Prerequisite: MMC 6950.
MMC 6970 Mass Communication Master's Thesis (1-3). This course is designed to demonstrate the student's excellence in an area of communication study. This course provides guidelines and direction to graduate students completing their Master's Thesis. Prerequisites: Completion of 27 credit hours, MMC 5440.
PUR 5406 Multi-Cultural Communications (3). Explores the multicultural dimensions of communications with diverse audiences within the United States.
PUR 6607 Global Strategic Communication Management (3). This course acquaints students with the professions and practice of global advertising and public relations in a multicultural world. Prerequisite: PUR 6806.
PUR 6610 Global Reputation Management (3). This course introduces students to the role and value of strategic communication in developing and sustaining an organization's global reputation.
PUR 6806 Global Account Planning (3). This course introduces students to contemporary account planning and global strategic communication techniques. Prerequisite: Permission of the instructor. (Offered at least once a year).
PUR 6935 Advanced Communications Seminar (3). The class will consist of a series of readings, discussions and presentations to immerse students in contemporary issues in Advertising and Public Relations. Prerequisite: Permission of the instructor. (Offered at least once a year).
RTV 5801 Telecommunication Management Structures (3). Intensive study of telecommunication management problems, theory of same, solutions of same through practical application and examination of case studies. Prerequisite: Graduate standing.

RTV 5935 Seminar in International Comparative Broadcasting Systems (3). Introduction to international telecommunication systems with special emphasis on broadcasting. Comparison with other countries.

Prerequisite: Graduate standing or permission of the instructor.

RTV 5936 Seminar in New Mass Communication Technologies (3). Discussion of new communication technologies and their influence on the society. Prerequisite: Graduate standing.
RTV 6237 On Camera Reporting (3). Techniques to strengthen "on camera" reporting skills. Students will be challenged to share their progress, design story ideas, and improve creative and communicative skills in front of a TV camera. Prerequisite: RTV 6309.
RTV 6309 Visual Storytelling and Production (3). The course is designed to teach students the reporting, preproduction and production skills required in multimedia journalism. Prerequisite: MMC 4940.
RTV 6465C Field Production Practicum (3). The student will be responsible for the organization and complete preproduction, production, and post-production of his/her project(s). Prerequisite: Graduate standing.
RTV 6468C Studio Production Practicum (3). The student will be responsible for the organization and complete pre-production, production and post-production of his/her project(s). Will also be required to do directing and I.D. work. Prerequisite: Graduate standing.
RTV 6937 Decision Making in Broadcast Journalism (3). The roles and ratings, research, visuals, technology and non-news management in choice of news personnel, assignments, content and scheduling. analysis of legal and ethical implications. Prerequisite: Graduate standing.
VIC 5205 Trends in Graphics and Design (3). Design principles and how they relate to trends in student and professional media, including newspapers, magazines and yearbooks. Deals with graphics, packaging, typography and modern design. Prerequisite: Permission of the instructor. (Offered at least once a year). (Supplies fee assessed).
VIC 6005 Web Design for Journalists (3). The course explores the relationship between images and messages in the media and how journalists can best convey information in web page formats.

# Landscape Architecture + Environmental and Urban Design 

Jason R. Chandler, Interim Chair<br>Juan Antonio Bueno, Professor<br>Marta Canavés, Instructor<br>Ebru Ozer, Assistant Professor<br>Roberto Rovira, Associate Professor

The Landscape Architecture + Environmental and Urban Design (LAEUD) Department focuses on the development of the basic knowledge, skills, and abilities appropriate to the practice of landscape architecture, with a special emphasis on tropical and sub-tropical environments and urban design. Situated between two of the richest coastal and inland ecosystems in the world, Miami presents unparalleled opportunities as an important design laboratory. The city's multilingual, diverse, and everexpanding needs reflect what many parts of the world will look like in the coming decades. Our focus on leveraging landscape architecture in urbanized regions and especially in tropical and subtropical environments makes for a program that is profoundly relevant to addressing the issues that will affect the estimated six of the ten billion people who will live in similar parts of the world by 2100.

Our goal is to educate individuals who can serve and lead the community through the aesthetic, meaningful, and sustainable design of the physical environment. Our program focuses on design and draws from art, science and technology via a rich design studio sequence that benefits from small student-to-faculty ratios, cutting edge technology, individual workspaces, and study abroad options. Students explore environmental, ecological and urban issues, and propose innovative solutions in the design of public spaces, infrastructure, urban planning, industrial reclamation, ecotourism, environmental mitigation, and many other areas at the center of the relationship between human beings and their surroundings.

The Master of Landscape Architecture (MLA) provides professional degree tracks within a rigorous academic framework intended for individuals with or without pre-professional degrees in landscape architecture. The MLA is structured into three tracks.

The Three-Year Track (MLA3), a first-professional Master of Landscape Architecture (MLA) is for persons who hold an undergraduate degree in a field other than landscape architecture, and intend to become landscape architecture practitioners. Applicants to the program need to check with the College Advising Center to obtain prerequisite course information.

The Two-Year Track (MLA2) is a professional degree for individuals with an undergraduate degree in planning, urban design, architecture, or interior design from an accredited program, or with a pre-professional undergraduate degree in planning, landscape architecture, urban design, architecture, or interior design.

The One-Year Track (MLA1) is a professional degree for individuals with a graduate degree planning design, urban design, or architecture from an accredited professional program.

The Post-Professional Degree Master of Arts in Landscape Architecture (MALA) is intended for individuals
with a professional undergraduate degree in landscape architecture who wish to undertake research or teach and pursue advanced study.

For students seeking to begin their professional design studies as undergraduates, the Landscape Architecture Department offers the Master of Landscape Architecture (MLA), which provides a seamless course of study leading from undergraduate freshman year to the conferral of the Professional Master of Landscape Architecture degree. The Accelerated MLA is comprised of 155 credit hours of integrated pre-graduate and graduate coursework. The degree consists of 71 credit hours of pregraduate coursework taken over two years followed by 84 credit hours of graduate coursework.

The department maintains close ties with architecture, and interior design professionals. Professional advisory boards periodically review the curriculum to maintain program relevance.

Students applying to the Landscape Architecture Department should plan for the financial aspects of a design education. This includes the costs of computers, software, travel and field trips, tools and equipment, and modeling supplies. All students must have continuing access to a laptop computer through purchase, lease or other arrangements. For further information contact the Advising Center.

The first professional Master of Landscape Architecture (MLA) degree is fully accredited by The Landscape Architectural Accreditation Board (LAAB), an autonomous committee of the American Society of Landscape Architects.

## Admissions Requirements

All applicants must meet University graduate admissions requirements. Applicants must also submit a portfolio for departmental review that demonstrates the candidate's creative aptitudes. The design portfolio is evaluated based on a candidate's demonstrated sense of composition, attention to detail, graphic communication skills, expressive quality, and sense of space, accuracy, and observation.

Design portfolios may include two-dimensional storyboards (a sequence of still images that show a story), computer printouts, and photographs of three-dimensional models/projects.

Digital design portfolios should be formatted to fit on $8.5^{\prime \prime} \times 11^{\prime \prime}$ pages within a single, multi-page PDF file. Please refer to the departmental website for submission details.

Portfolios submitted after the Application Deadline will be considered if studio space is available. Details on portfolio requirements can be reviewed through the departmental website.

Students who have successfully completed the portfolio review process must also meet the minimum requirements of an undergraduate degree from an accredited college or university with undergraduate grade point average (GPA) of 3.0 on a 4.0 scale, or hold a graduate degree from an accredited institution to be fully admitted into the graduate program. When the academic record is less than 3.0 GPA, the applicant must submit Graduate Record Examination (GRE) scores.

## Ownership of Student Work

Student work submitted to the department in satisfaction of course or degree requirements becomes the physical property of the department. However, students retain all rights to the intellectual property of such work. This work may include papers, drawings, models, or other materials. The department assumes no responsibility for safeguarding such materials and at its discretion may retain, return, or discard such materials. Students must petition the department in writing for any deviation from these established policies.

## Progression Requirements

No grade below a ' C ' will be accepted for graduation in required courses or required electives.

## Study Abroad

Study abroad is an important component of the Department of Landscape Architecture. Our study abroad center is located in Genoa, Italy. The Genoa center is ideally situated in the historic center of the city in a renovated former convent dating from the 13th century. During the semester abroad option in Italy, students are afforded the opportunity to study those artistic, architectural, landscape and interior spaces and artifacts that have long been acknowledged for their exceptional and enduring value to Western design culture. Other travel options may be available. Departmental approval is required for participation.

## Thesis Requirement

Graduate students in the landscape architecture department are required to undertake a Master's Project or a Master's Thesis as part of their course of study at the Department of Landscape Architecture. Selection of Master's Thesis requires departmental approval.

## Master of Landscape Architecture

## Professional Degree Tracks

(Accredited by LAAB)

## THREE-YEAR TRACK - 84 Credits

A professional degree for individuals with a Bachelor of Arts or a Bachelor of Science or equivalent, from an accredited institution. Leveling courses are required for students without a design background. These are in addition to degree requirements.

## Typical Curriculum

Leveling Courses (Summer B Semester) - 9 Credits
LAA 5605 Design Foundations
LAA $5346 \quad$ Visual Notation in Landscape
LAA $5371 \quad$ Computer Practices in Landscape Architecture I
First Year (Fall Semester)
LAA $5716 \quad$ History of Landscape Architecture
LAA $5374 \quad$ Computer Practices in Landscape Architecture 2
LAA 5653 Landscape Architecture Graduate Design 1
First Year (Spring Semester)
LAA 5541
South Florida Landscapes


## TWO-YEAR TRACK - 60 Credits

A professional degree for individuals with an undergraduate degree in planning design, urban design, or architecture from an accredited program, or with a preprofessional undergraduate degree in planning design, landscape architecture, urban design, architecture, or interior design. Advanced standing may be granted, not to exceed 24 credits for undergraduate courses with a grade of 3.0 or better on a 4.0 point scale.

## Typical Curriculum

Typical for holders of Bachelor of Arts in Architecture or Bachelor of Design in Architectural Studies, if 24 credits of advanced standing are granted.
First Year (Fall Semester)
LAA 5716 History of Landscape Architecture 3
LAA 5422 Landscape Development 3
$\begin{array}{ll}\text { LAA } 6655 & \begin{array}{l}\text { Landscape Architecture Graduate } \\ \text { Design } 3\end{array}\end{array}$
First Year (Spring Semester)
LAA 5235 Theory of Landscape Architecture 3
LAA 5541 South Florida Landscapes 3
$\begin{array}{lll}\text { LAA } 6656 & \text { Landscape Architecture Graduate } \\ & \text { Design } 4\end{array}$
First Year (Summer Semester)
LAA 6916 Research Methods 3
LAA $6382 \quad$ Analysis Methods 3

| LAA 5423 | Landscape Construction |
| :---: | :---: |
| Second Year (Fall Semester) |  |
| LAA 6521 | Tropical Landscapes |
| LAA 6910 | Graduate Seminar |
| LAA 6363 | Landscape Architecture Graduate Design 5 |
| Second Year (Spring Semester) |  |
| LAA 5425 | Landscape Documentation |
| LAA 6215 | Professional Practice in Landscape Architecture |
| LAA 6970 | Master's Project or |
| LAA 6971 <br> (Departme | Master's Thesis pproval Required) |

ONE-YEAR TRACK - 36 Credits
A professional degree for individuals with a graduate degree in planning design, urban design, or architecture from an accredited professional program. Advanced standing may be granted, not to exceed 48 credits for graduate courses with a grade of 3.0 or better on a 4.0 point scale. Satisfactory completion of 36 credits in the following course of study is required.
First Year (Summer Semester)
LAA 6916 Research Methods 3
LAA $6382 \quad$ Analysis Methods 3
Directed Elective
First Year (Fall Semester)
LAA 6363 Landscape Architecture Graduate Design 5
LAA $6910 \quad 3$
LAA 5422 Landscape Development 3
LAA 6521 Tropical Landscapes 3
First Year (Spring Semester)
LAA 5541 South Florida Landscapes 3
LAA 5425 Landscape Documentation 3
LAA 6970 Master's Project
or
LAA 6971 Master's Thesis
(Departmental Approval Required)

## Master of Arts in Landscape <br> Architecture - $\mathbf{3 6}$ credits

## Post-Professional Degree

(Not eligible for accreditation by LAAB)
A post-professional degree for individuals with a Bachelor of Landscape Architecture from a program accredited by LAAB. One year of full-time study in residency is normally required. A part-time study option is available subject to the review and approval of the Program.

Satisfactory completion of 36 credits in the following course of study is required.

## First Year (Summer Semester)

LAA 6916 Research Methods 3
LAA 6382 Analysis Methods 3
LAA 6247 Modern Landscape Architecture 3
Directed Elective
First Year (Fall Semester)
LAA 6363
Landscape Architecture Graduate Design 5

LAA $6910 \quad 3$
Directed Elective 6
First Year (Spring Semester)
LAA $5249 \quad$ Catalyst of the Urban Canvas 3
LAA 5235 Theory of Landscape Architecture 3
LAA 6970 Master's Project 1-6
LAA 6971 Master's Thesis
1-6
(Departmental Approval Required)

## Certificate in Landscape Architecture

The Certificate in Landscape Architecture offers students the ability to explore the design, planning, and management of regional landscapes. This program is developed to serve graduate students who would like to expand their academic experience with this area of specialized study. Focused on landscape design and development, the certificate seeks to extend students' skills, knowledge, and critical thinking about the design, making, and managing of existing and built landscape environments. Students who wish to earn the Certificate in Landscape Architecture should contact the Advising Center at the College of Architecture and The Arts in advance of pursuing this course of study. This certificate program is open to degree-seeking students only.

## Certificate Requirements

Students earning this certificate must accumulate 18 credit hours with a satisfactory grade from the following list of available courses.

## Program Requirements

LAA $5371 \quad$ Computer Practices in Landscape Architecture I
LAA $5331 \quad$ Site Analysis and Design
LAA 6247 Modern Landscape Architecture
LAA 5233 Theory of Planting Design
LAA $5716 \quad$ History of Landscape Architecture
LAA 5541 South Florida Landscapes
LAA 5422 Landscape Development
LAA 6521 Tropical Landscapes
LAA 5423 Landscape Construction
LAA 5235 Theory of Landscape Architecture
LAA 5425 Landscape Documentation
Courses on the list may require prerequisites and/or program approval.

## Awards and Scholarships

The following scholarships and awards are presented to students fully admitted to the Graduate Program in Landscape Architecture who have demonstrated outstanding achievements in their studies.
American Society of Landscape Architects Awards. On nomination by the Program faculty, the American Society of Landscape Architects awards a Certificate of Honor and a Certificate of Merit to the two students who have demonstrated a high degree of academic scholarship and of accomplishments in skills related to the art and technology of landscape architecture.
Sigma Lambda Alpha Honor Society. Each year, upon nomination by the Program faculty, the Alpha Chi Chapter of the Sigma Lambda Alpha Honor Society inducts the outstanding students in the Program. The Ernest and Virginia Makemson Memorial

Endowed Scholarship Fund. This fund provides support for students who have demonstrated interest and experience in restoring and preserving Florida's natural and cultural environment through the practice of landscape architecture.

## Course Descriptions

## Definition of Prefixes

LAA-Landscape Architecture
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering.

LAA 5233 Theory of Planting Design (3). Study of principles and methods related to the ecological, functional, and aesthetic use of vegetation in landscape architecture. Prerequisite: Program approval. (SS)
LAA 5235 Theory of Landscape Architecture (3). Critical review of the environmental parameters, morphological concepts and ideological principles that generate form and meaning in landscape architecture. Prerequisite: LAA 5716. (S)
LAA 5243 Regional Landscape Issues (3). Exploration of the landscape as cultural construct of social, economic, and scientific values relevant to regional issues of land use and management. Prerequisite: Program approval. (SS)
LAA 5249 Catalysts of the Urban Canvas (3). Seminarbased course exploring the relationship of focused landscape and architectural interventions in the evolution and development of the urban fabric and its physical context.
LAA 5331 Site Analysis and Design (3). Introduction to ecological, functional, and aesthetic considerations in site analysis, planning and design. Prerequisite: Program approval.
LAA 5346 Visual Notation in Landscape Architecture I (3). Course will develop drawing skills in multiple media, actively engaging in projects of drawing as a medium of investigation, documentation, memory, observation and presentation for landscape architecture. Prerequisite: Program approval.
LAA 5371 Computer Practices in Landscape Architecture 1 (3). Computer applications of graphics, modeling, and animation techniques used in landscape architecture. Prerequisite: Program approval. (S)
LAA 5374 Computer Practices in Landscape Architecture 2 (3). Computer application of drafting and design techniques used in landscape architecture. Prerequisites: LAA 5371, Program approval. (F)
LAA 5378 GIS Applications in Landscape Modeling (3). Introduction to modeling capabilities of GIS in the environmental planning process addressing the natural and cultural characteristics of the landscape. Prerequisite: Program Approval. (SS)
LAA 5381 Computer Practices in Landscape Architecture 3 (3). Contemporary methods of digital representation for landscape architecture. Intensive exploration if three dimensional modeling and rendering techniques. Prerequisites: LAA 5371, LAA 5374, program approval.

LAA 5422 Landscape Development (3). Technical aspects of the design and specification of earthwork, including materials, products, and methods of installation used in landscape development. Prerequisite: LAA 5371. (F)

LAA 5423 Landscape Construction (3). Technical aspects of the design and specification of sitework, including materials, products, and methods of installation used in landscape construction. Prerequisite: LAA 5422. (S)

LAA 5425 Landscape Documentation (3). Production of landscape documents including drawings and project manual, bidding documents, contract documents and technical specifications on the computer. Prerequisite: LAA 5423. (S)
LAA 5427 Landscape Structures (3). Production of landscape construction details for structures and systems used in landscape architecture. Prerequisite: LAA 5423. (F)

LAA 5540 Landscape Horticulture (3). Overview of horticultural management practices related to the growth, transport, installation, and maintenance of vegetative materials used in landscape architecture. Prerequisite: Program approval. (SS)
LAA 5541 South Florida Landscapes (3). Study of structure, function, and change in the natural and cultural landscapes of tropical and subtropical Florida. Prerequisite: Program approval. (S)
LAA 5605 Design Foundations (3). The course is a rigorous introduction to design fundamentals. It builds a design language through lectures, practical experiences, exploring techniques, materials, skills, making and critical thinking. Prerequisite: Program approval. Corequisites: LAA 5346 and LAA 5371.
LAA 5652 Formative Studio (6). Introduction to concept development, spatial expression, and representational techniques in landscape architecture. Prerequisite: LAA 5346 and LAA 5xxx Computer Applications in Landscape Architecture. (F)
LAA 5653 Landscape Architecture Graduate Design 1 (6). Application of landscape architecture principles and methods to site design in tropical and subtropical contexts. Prerequisite: LAA 5652. (S)
LAA 5715 History and Theory of Architecture (3). Overview of the history and theory of architecture and urban design from antiquity to the present. Prerequisite: Program approval. (SS)
LAA 5716 History of Landscape Architecture (3). Historical survey of the principal sites and traditions manifested in the evolution of landscape architecture and urban design from antiquity to the present. Prerequisite: Program approval. (F)
LAA 5905C Special Topics Design Studio (6). A landscape architectural design studio based on a particular aspect of landscape architectural design and relevant ideologies under the direction of appropriate faculty. Prerequisite: Program Approval.
LAA 5938 Cejas Eminent Scholar Seminar (1-3). This is a seminar/workshop course taught by distinguished educators, scholars, and designers. Lectures, critical
readings, and discussions of thematic topics make up the methodology of the course.
LAA 5940 Landscape Architecture Internship (3). Advanced issues in professional practice learned through work experience with a licensed professional.
LAA 5945 Internship Experience (0). Experience in landscape architecture practice learned through work with licensed professionals.
LAA 6215 Professional Practice in Landscape Architecture (3). Study of the ethical, legal, financial, and managerial aspects of professional practice in landscape architecture. Prerequisite: Program approval. (S)

LAA 6222 Communications in Landscape Architecture (3). Methods of verbal and graphic presentations, workshops, and publications used in landscape architecture. Prerequisite: Program approval. (SS)
LAA 6245 Theory of Urban Design (3). Critical review of the principal theories of urbanism that have influenced the fabric and image of the city in Western history. Prerequisites: LAA 5235 and LAA 5716. (SS)
LAA 6246 Typology of Landscape Architecture (3). Critical examination of the origin, development and transformation of form and meaning in modern and postmodern landscape architecture and urban design. Prerequisites: LAA 5235 and LAA 5716. (SS)
LAA 6247 Modern Landscape Architecture (3). Critical review of the origins and development of modern and post modern expressions in landscape architecture. Prerequisites: LAA 5235 and LAA 5716. (SS)
LAA 6342 Landscape Aesthetics (3). Critical review of the assessment models used to evaluate the aesthetic quality of the landscape. Prerequisites: LAA 5235 and LAA 5716. (SS)

LAA 6347 Italian Design and Culture (3). Course to develop practical facility with the Italian language for conducting everyday tasks, engaging socially and increasing the qualitative depth of the work to be accomplished in the course. Corequisites: LAA 6348, LAA 6910, LAA 6656.
LAA 6348 Landscape Architecture of the City (3). The study of urban landscape architecture in Genoa, Italy, with emphasis on analysis and representation using manual drawing, digital photography, and conceptual model. Corequisites: LAA 6347, LAA 6910, LAA 6656.
LAA 6363 Landscape Architecture Graduate Design 5
(6). Application of interdisciplinary principles and methods to contemporary landscape architecture issues through the design of projects varying in scale and complexity. Prerequisites: LAA 5653, LAA 6654, LAA 6655, LAA 6656.

LAA 6373 Sound in Landscape Architecture (3). An examination of the ecological, acoustic, aesthetic, and historical aspects of the sonic environment. Prerequisites: LAA 5235 and LAA 5716. (SS)
LAA 6382 Analysis Methods (3). Theories and methods of the organization, analysis, and interpretation of cartographic data using geographic information systems. Prerequisite: Program approval. (SS)
LAA 6390 Digital Landscapes: Techniques in Landscape Representation (3). Application of 3d
modeling methods, basic lighting, graphics postproduction and photomontage setup using Maya and other 3d software in order to produce high-quality renderings. Basic knowledge of Maya \& Photoshop required. Prerequisites: LAA 5381 or ARC XXX equivalent.
LAA 6521 Tropical Landscapes (3). Study of the structure, function, and change in the natural and cultural landscapes of tropical and subtropical regions. Prerequisite: Program approval. (F)
LAA 6551 Sustainable Landscapes (3). Study of the principles that sustain a balance between natural resources and human aspirations in the landscapes of tropical and subtropical regions. Prerequisite: LAA 6541. (SS)
LAA 6654 Landscape Architecture Graduate Design 2 (6). Application of landscape architecture principles and methods to community planning and design in tropical and subtropical contexts. Prerequisite: LAA 5653. (F)
LAA 6655 Landscape Architecture Graduate Design 3 (6). Application of landscape architecture principles and methods to regional management, planning, and design in tropical and subtropical contexts. Prerequisite: LAA 6654. (S)

LAA 6656 Landscape Architecture Graduate Design 4 (6). Application of interdisciplinary principles and methods to urban planning and design in tropical and subtropical contexts. Prerequisite: LAA 6655. (F)
LAA 6745 Preservation of Landscape Architecture (3). Critical examination of the formation and preservation of historic sites with emphasis on interpretation, analysis and evaluation of cultural landscapes and urban places. Prerequisites: LAA 5235 and LAA 5716. (SS)
LAA 6905 Independent Study (1-6). Coursework on a particular aspect of landscape architecture under the direction of faculty in an individual study format. Prerequisite: Program approval. (F,S)
LAA 6910 Graduate Seminar (3). Coursework under the direction of faculty in preparation for a master's thesis or master's project in landscape architecture. Prerequisites: LAA 6382, LAA 6916. (F)
LAA 6916 Research Methods (3). Methods of data acquisition, analysis, and interpretation used in landscape architecture research. Prerequisite: Program approval. (SS)
LAA 6936 Special Topics (1-3). Coursework on a particular aspect of landscape architecture under the direction of faculty in a classroom format. Prerequisite: Program approval. (F,S,SS)
LAA 6970 Master's Project (1-6). Coursework under the direction of faculty for the completion of project by candidate for the degree Master of Landscape Architecture. Prerequisite: LAA 6910.
LAA 6971 Master's Thesis (1-6). Coursework under the direction of faculty for the completion of a research or design thesis by candidate for the degree Master of Landscape Architecture. Prerequisites: Program approval and LAA 6910. (S)

## College of Communication, Architecture + The Arts

## Dean

Interim Executive Director,
Associate Dean, Cultural and Community Engagement

Brian Schriner Juliet Pinto

John Stuart
Associate Dean, Faculty Development Shahin Vassigh Associate Dean, Strategic Initiatives Marilys Nepomechie Associate Dean, Students David Rifkind Director, Finance and Personnel Lilia Silverio-Minaya Director, Facilities and Auxiliary Services Mark Marine

Principle Gift Officer
Chair, Architecture Department
Chair, Art and Art History Department
Chair, Communication Department
Chair, Interior Architecture Department
Janine King
Teresa Ponte Interim Chair, Landscape Architecture + Environmental and Urban Design Department Jason Chandler
Chair, School of Music
Chair, Theatre Department
Robert Dundas Joel Murray

## Faculty

Abbott, Phillip, MID (University of Florida), Instructor, Interior Architecture
Alston, Brenton, DMA, Artist Diploma (University of Miami), Assistant Professor, Wind Studies, Music
Andía, Alfredo, MDes, Ph.D. (University of CaliforniaBerkeley), Associate Professor, Architecture
Arpad, Tori, MFA (University of Arizona), Associate Professor, Ceramics, Art and Art History
Benjamin, Malik, MArch (University of Miami), Senior Instructor, Architecture
Berman, Margo, MM (University of Miami), Professor, Communication
Bernhardt, Barry, MA (Truman University), Senior Instructor and Director of Marching Band, Music
Bilge, Nurhayat, Ph.D. (Arizona State University), Assistant Professor, Communication
Blaeuer, Daniel, Ph.D. (University of South Florida), Assistant Professor, Communication
Blevens, Frederick R., Ph.D. (University of Missouri), Professor, Journalism and Media
Bonacossa, Federico, DMA (University of Miami), Instructor, Music Theory \& History, Music
Brant, Sharon, MFA (University of Wyoming), Associate Professor, Painting/Drawing, Art and Art History
Brown, Joann, MA (University of Miami), Senior Instructor and Chair, Communication
Bueno, Juan Antonio, MLA, ASLA, PE (Harvard University), Professor, Landscape Architecture + Environmental and Urban Design
Burke, William, MFA (State University of New York at New Paltz), Professor, Ceramics, Art and Art History
Busch, Claudia, MSAAD (Columbia University), Instructor, Architecture
Calloway, Jason, MM (The Julliard School), Instructor, String Studies \& Chamber Music, Amernet String Quartet, Music
Campbell, Gary, MM (University of Miami), Professor, Jazz Performance, Music

Canavés, Jaime, MArch, FAIA, IIDA (University of Florida), Professor, Architecture
Canavés, Marta, MLA, ASLA, IIDA (Florida International University), Instructor, Landscape Architecture + Environmental and Urban Design
Chambers, Robert, BFA, MA (New York University), Visiting Assistant Professor, Art and Art History
Chandler, Jason R., MArch, AIA (Harvard University), Associate Professor and Chair, Architecture and Interim Chair, Landscape Architecture + Environmental and Urban Design
Church, Phillip, MFA (University of California-Irvine), Associate Professor, Theatre
Covey, Rebecca, MFA (University of Wisconsin), Assistant Professor, Theatre
Damian, Carol, Ph.D. (University of Miami), Professor, Art and Art History
Davidovici, Robert, Postgraduate Diploma (The Juilliard School), Professor and Artist-inResidence, String/Orchestral Studies, Music
De Los Reyes, Grizelle, MA (University of Florida), Instructor, and Director, Global and Strategic Communication - Miami Ad, Communication
del Valle, Eduardo, MFA (Brooklyn College, City University of New York), Professor, Photography, Art and Art History
Desrayaud, Nathalie, Ph.D. (Purdue University), Visiting Assistant Professor, Communication
Diament, Mario, MA (Antioch College), Associate Professor, Journalism and Media
Dolata, David, Ph.D. (Case Western Reserve University), Professor, Music History \& Collegium, Music
Dundas, Robert B., MFA (University of lowa), Associate Professor and Director, Vocal/Choral Studies \& Opera Direction, Music
Evans, Daniel, MS (Columbia University), Visiting Associate Professor, Journalism and Media
Farber, Lynne, MA (University of Florida), Assistant Professor, Communication
Ferreira, Leonardo, J.D., Ph.D. (Michigan State University), Professor and Worlds Ahead Scholar in International Communication, Journalism and Media
Fuller, Karen, MFA (Florida International University), Senior Instructor, Music Business, Music
Galand, Joel, Ph.D. (Yale University), Associate Professor, Music Theory/History and Director, Graduate Studies, Music
Galaska, Anthony, MFA (Purdue University), Associate Professor, Theatre
García, Orlando, DMA (University of Miami), Professor and Coordinator, Composition, Music
Gekic, Kemal, MA (University of Novi Sad, Yugoslavia), Professor and Artist-in-Residence, Keyboard Studies, Music
Gelpi, Nicholas, MSAAD (Columbia University), Assistant Professor, Architecture
Goldemberg, Eric M., MSAAD (Columbia University), Associate Professor, Architecture
Gómez, Mirta, MFA (Brooklyn College, City University of New York), Professor, Photography, Art and Art History
Goslin, Christopher, MA (New York University), Instructor, Theatre

Guernsey, Daniel, Ph.D. (University of WisconsinMadison), Associate Professor, Art History, Art and Art History
Gutsche Jr., Robert, Ph.D. (The University of Iowa), Assistant Professor, Journalism and Media
Hacker, James, BA (University of Miami), Senior Instructor, Wind, Brass and Percussion Studies, Music
Hardin, William Dan, DMA (Rochester University), Music Librarian, Music
Izquierdo, Aileen, MS (Florida International University), Visiting Assistant Professor and GSC Graduate Coordinator, Communication
Jacobson, Susan, Ph.D. (New York University), Assistant Professor, Journalism and Media
Kaufman, Fredrick, MM (Manhattan School of Music), Professor Emeritus and Artist-in-Residence, Composition/Music Technology, Music
Kelley, James, Ph.D. (University of Washington), Assistant Professor, Music Education, Music
Khare, Vindhya, DMA (University of Miami), Visiting Instructor and Coordinator of Vocal Studies, Music
King, Clive, ATC, Ph.D. (University of London), Professor Emeritus, Art and Art History
King, Janine, MID (University of Oregon), Associate Professor and Chair, Interior Architecture
Klotz, Michael, MM (The Julliard School), Senior Instructor, String Studies \& Chamber Music, Amernet String Quartet, Music
Kolasinski, Jacek, MFA (Florida International University), Associate Professor and Chair, Digital Media, Art and Art History
Leach, Neil, MA, Dipl. Arch., Ph.D. (University of Nottingham), Associate Professor, Architecture
Littley, Marcia, Artist Diploma (University of Cincinnati), Instructor and Coordinator, String/Orchestral Studies, Music
Liu, Yu, Ph.D. (University of Miami), Assistant Professor, Communication
Longo, Kathryn K., DMA (University of Miami), Assistant Professor, Choral Studies, Music
López-Mata, Gisela, MS (Pratt Institute), Associate Professor, Interior Architecture
López, José, DMA (University of Miami), Associate Professor and Coordinator, Keyboard Studies, Music
MacMillin, Kate, MA (Simmons College), Assistant Professor, Journalism and Media
Maguire, William, MS (Illinois Institute of Technology), Professor, Photography, Art and Art History
Marino, Maria Ines, MS (Florida International University), Instructor, Communication Arts
Marsh, Elizabeth, MFA (University of Miami), Assistant Professor, Communication
Martínez, Juan A., Ph.D. (Florida State University), Professor Emeritus, Art and Art History
Martinez-Bustos, Lilliam, MA (University of Southern California), Assistant Professor, Journalism and Media
Mitan, Daniel, MFA (University of Florida), Instructor, Theatre
Murray, Joel, Ph.D. (Bowling Green State University), Professor and Chair, Theatre
Namkung, Michael, MFA (San Francisco State University), Assistant Professor, Art and Art History
Nedev, Nikolay, MAUD (Harvard University), Instructor, Architecture

Nepomechie, Marilys, MArch, FAIA (Massachusetts Institute of Technology), Professor and Associate Dean, Architecture
Orta, Michael, MM (University of Miami), Associate Professor, Jazz Performance, Music
Ousley, Jamie, DMA (University of Miami), Instructor, Jazz Performance, Music
Ozakaya, Elif, Ph.D. (Michigan State University), Assistant Professor, Journalism and Media
Ozer, Ebru, MLA (Louisiana State University), Assistant Professor, Landscape Architecture + Environmental and Urban Design
Ozgen, Mesut, MD, MM, DMA (Arizona State University), Instructor and Coordinator, Guitar Studies, Music
Pareja, Marina, MFA (Queen Margaret University College, Edinburgh), Instructor, Theatre
Park, David, Ph.D. (University of Wisconsin-Madison), Associate Professor, Journalism and Media
Patel, Alpesh Kantial, Ph.D. (University of Manchester), Assistant Professor and Director, Graduate Studies, Art and Art History
Pease, Silvia, BFA, MFA (University of Miami), Visiting Instructor, Art and Art History
Perez, Raquel, Ph.D. (Nova Southeastern University), Visiting Assistant Professor, Communication
Peterson, Eric, MArch (University of Florida), Senior Instructor, Architecture
Pinto, Juliet H., Ph.D. (University of Miami), Associate Professor and Interim Executive Director, Journalism and Media
Ponte, Teresa, J.D. (Rutgers University School of Law), Associate Professor and Chair for Journalism and Media, Journalism and Media
Read, Gray, MArch, Ph.D., RA (University of Pennsylvania), Associate Professor, Architecture
Reisner, Neil, M.A. (Columbia University), Associate Professor, Journalism and Media
Richards, Allan, M.A. (Florida International University), Associate Professor, Journalism and Media
Rifkind, David, MArch, Ph.D. (Columbia University), Associate Professor and Associate Dean, Architecture
Robinson, Wayne, MFA (National Theatre Conservatory), Associate Professor, Theatre
Rosales, Camilo, MArch, RA (Harvard University), Associate Professor, Architecture
Rothfield, Katie, MFA (Savannah College of Arts and Design), Instructor, Interior Architecture
Rovira, Roberto, MLA (Rhode Island School of Design), Associate Professor, Landscape Architecture + Environmental and Urban Design
Scharnagle, Gretchen, MFA (Florida International University), Senior Instructor, Art and Art History
Schriner, Brian, MA (University of Miami), Dean, College of Architecture + The Arts
Segev, Sigal, Ph.D. (University of Leicester), Assistant Professor, Communication
Sheerin, Michael, M.S. (Florida International University), Associate Professor, Journalism and Media
Shumow, Moses, Ph.D. (University of Miami), Assistant Professor, Journalism and Media
Spiegelhalter, Thomas, MDes (Berlin University of the Arts), Associate Professor, Architecture

Stuart, John A., MArch, AIA (Columbia University), Professor, Architecture and Associate Dean, College of Architecture + The Arts, Executive Director Miami Beach Urban Studios
Sudol, Jacob, Ph.D., ABD (University of California at San Diego), Assistant Professor, Music Technology, Music
Suris, Carlos, M.L.S. (University of South Florida), Senior Instructor, Journalism and Media
Tiffany, Carmen, MFA (University of South Florida), Visiting Instructor, Art and Art History
Timlick, Lesley-Ann, MFA (University of CaliforniaDavis), Associate Professor, Theatre
Torres, Constantino, Ph.D. (University of New Mexico), Professor Emeritus, Art and Art History
Vassigh, Shahin, MArch (University of Buffalo), Professor and Associate Dean, Architecture
Veraldi, Lorna, J.D. (New York School of Law), Associate Professor, Journalism and Media
Vigon, Mercedes, Ph.D. (University of Miami), Associate Professor, Journalism and Media
Villar, Maria Elena, Ph.D. (University of Miami), Associate Professor and Chair, Advertising and Public Relations, Communication
Vitenson, Michael, MM (The Julliard School), Instructor, String Studies \& Chamber Music, Amernet String Quartet, Music
Wang, Weirui, Ph.D. (Pennsylvania State University), Assistant Professor, Journalism and Media
Watts, Barbara, Ph.D. (University of Virginia), Associate Professor, Art History, Art and Art History
Webb, Lynne, Ph.D. (University of Oregon), Professor, Communication
Wilson, Kathleen, EdD (Columbia University), Professor, Vocal Studies, Music
Yawney, Michael, MFA (Columbia University), Associate Professor, Theatre
Yi, Hwang, March, Ph.D. (University of Pennsylvania), Assistant Professor, Architecture
Yi, Lidu, Ph.D. (University of Toronto, Canada), Assistant Professor, Art and Art History
Zellmer, Benjamin, MFA (Chicago Art Institute), Assistant Professor, Art and Art History

# College of Engineering and Computing 

Interim Dean<br>Director, School of Computing and Information Sciences<br>S. S. Iyengar<br>Director, OHL School of Construction Irtishad U. Ahmad Associate Dean for Academic Affairs<br>Associate Dean for Research<br>\section*{Anthony J. McGoron<br><br>Arvind Agarwal}

The College of Engineering and Computing is committed to educate professionals who can serve industry and the community at large in a wide variety of fields, as well as conduct innovative basic and applied research that meets the technical needs of industry and government, improves the quality of life, and contributes to the economic viability of Florida, the Nation, and the world.

The College of Engineering and Computing consists of two schools: School of Computing and Information Sciences and OHL School of Construction; and four academic departments: Biomedical Engineering, Civil and Environmental Engineering, Construction Management, Electrical and Computer Engineering, and Mechanical and Materials Engineering. These academic departments offer programs leading to the Bachelor of Science, Master of Science and Doctor of Philosophy degrees.

The College has two institutes and thirteen centers supporting its academic and research programs. The institutes are the Advanced Materials Engineering Research Institute (AMERI) and the Telecommunications and Information Technology Institute (IT2). The centers are the Bioinformatics Research Group (BioRG), Center for Advanced Distributed Systems Engineering, Center for Advanced Technology and Education (CATE), Center for Diversity in Engineering and Computing (CDEC), Center for Emerging Technology for Advanced Information Processing and High-Confidence Systems, Center for the Study of Matter at Extreme Conditions (CeSMEC), Engineering Information Center (EIC), Engineering Manufacturing Center (EMC), Eugenio Pino and Family Global Entrepreneurship Center, High Performance Database Research Center and the Lehman Center for Transportation Research (LCTR). Two major university centers, the Applied Research Center (ARC) and International Hurricane Research Center (IHRC), work very closely with the College of Engineering and Computing with many joint appointments at the faculty level.

The College has created an open-access Motorola Nanofabrication Research Facility to conduct research in nanoelectronics, bio/nanosensors and nanomaterials. In addition, the FIU College of Engineering and Computing has developed many collaborations with the industry and hospitals in Florida and across the nation.

The programs of the College are directed towards the practical use of scientific, engineering, and technical principles to meet the objectives of industry, business, government and the public.

The College provides each student with the opportunity to develop a high level of technical skills and to obtain an education, which will prepare him or her for a rewarding career and personal growth. Underlying the programs of the College is a recognition that the growing impact of technology upon the quality of life is increasing and that
the proper application of technology is critical to meeting current and emerging human needs. The College faculty is actively engaged with business, industry and government. Faculty members also participate in a variety of basic and applied research projects in areas such as energy, transportation, solid waste disposal, biotechnology, biomedical devices and instrumentation, computer engineering, artificial intelligence, manufacturing, robotics telecommunications, micro-electronics, nano-electronics, nanotechnology, neuro-sciences/engineering, modeling and simulation, construction engineering, materials, structural systems, virtual prototyping, systems modeling, information technology, environmental sciences and engineering, image processing, engineering education, etc.

## Doctor of Philosophy

The College offers Doctor of Philosophy degrees in Biomedical Engineering, Civil Engineering, Computer Science, Electrical and Computer Engineering, Mechanical Engineering, and Materials Science and Engineering.
Areas of study in Biomedical Engineering include:

- Biomechanics, Biomaterials, and Medical Devices
- Bioinstrumentation, and Biomedical Image/Signal Processing
- Drug Delivery and Tissue Engineering
- Medical Physics and Nuclear Medicine
- Bio-nanotechnology and Systems Biology

Areas of study in Civil Engineering include:

- Transportation Engineering
- Environmental Sciences and Engineering
- Structural Engineering
- Water Resources Engineering
- Geotechnical Engineering
- Construction Engineering and Management

Areas of study in Computer Science include:

- Networking and distributed systems, wireless networks, mobile and ubiquitous computing, routers, and switches, system modeling.
- Operating systems, distrusted computing, storage systems, virtualization, security, and realtime systems.
- Database systems, including distributed databases, information retrieval in heterogeneous databases, multimedia databases, data mining, and digital libraries.
- Software engineering, including formal methods, software testing techniques, software architecture, software security, software design, model-driven software development, and grid computing.
- Theory, including algorithms and data structures, programming languages, program verification, and logic.
- Bioinformatics and Computational Biology.
- Artificial Intelligence, including machine learning, expert systems, intelligent agents, affective computing, cognitive science, intelligent humancomputer interaction, social informatics.
Areas of study in Electrical and Computer Engineering include:
- Biomedical Sciences and Engineering
- Micro-Electronics, Nano-Electronics and Photonics
- Computer Engineering
- Systems and Controls
- Electromagnetics and Nanomagnetics
- Power Systems
- Telecommunications and Networking
- Digital Signal and Image Processing

Areas of study in Mechanical and Materials Engineering include:

- Thermo/Fluids Sciences
- Biomedical Engineering
- Mechanics of Materials
- Nanostructured Materials
- Ceramics and Electronic Materials
- CAD/CAM
- Manufacturing
- Modeling and Simulation
- Nano Devices
- Applied Mechanics


## Master of Science Degree Programs

The College offers Master of Science degrees in:

- Biomedical Engineering
- Civil Engineering
- Computer Engineering
- Computer Science
- Construction Management
- Cybersecurity
- Electrical Engineering
- Engineering Management
- Environmental Engineering
- Information Technology
- Logistics Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Telecommunications and Networking


## Corporate and Global Programs

In partnership with national and international corporations and universities, the College of Engineering and Computing offers several of its graduate programs offcampus. These programs are offered at the partner's site both in the USA and abroad, particularly Latin America, and the Caribbean.

Current Global Programs offered include MS in Engineering Management with specializations in Biomedical Technology, Information Systems, and Manufacturing, MS in Electrical Engineering, and BS in Computer Science. Negotiations are underway to offer MS in Construction Management, and MS in Telecommunications and Networking.

Students enrolled in these programs are considered regular FIU students; hence, they must meet university admission requirements and are given full access to the university's facilities.

## Distance Learning Education

Florida Engineering Education Delivery Systems (FEEDS) provides graduate engineering courses to place-bound professionals via CD, videotape, ITFS, and web-based asynchronous learning modules.

## Research Centers and Institutes

Research spans from single discipline to multidisciplinary research in the College of Engineering and Computing. Thus, the College, through its research centers and institutes, has established many collaborative and cooperative partnerships with other units in the university as well as with local industry.
The research units involved in these efforts include:

- Advanced Materials Engineering Research Institute (AMERI)
- Applied Research Center (ARC)
- Bioinformatics Research Center (BioRG)
- Center for Advanced Distributed Systems Engineering
- Center for Advanced Technology and Education (CATE)
- Center for Diversity in Engineering and Computing
- Center for Emerging Technology for Advanced Information Processing and High-Confidence Systems (CREST)
- Center for the Study of Matters at Extreme Conditions (CeSMEC)
- Distributed Multimedia Information Systems Laboratory
- Engineering Manufacturing Center (EMC)
- Engineering Information Center (EIC)
- Eugenio Pino and Family Global Entrepreeurship Center
- High Performance Database Research Center
- International Hurricane Research Center (IHRC)
- Lehman Center for Transportation Research (LCTR)
- Motorola NanoFabrication Research Facility
- Telecommunications and Information Technology Institute (IT2).


## Academic Support Services

The area of academic support services is responsible for the coordination of academic advising and student services the College of Engineering and Computing. Students are informed of educational opportunities such as scholarships, tuition waivers, and campus resources. It serves as a liaison between the academic departments and the student support services university wide and facilitates the registration process in order to make sure that the students adhere to the College guidelines.

## Admission Requirements

Prospective students seeking a graduate degree in the College must satisfy all university admission requirements as well as the specific program requirements. Each department evaluates candidates for admission to its programs. Prospective students should refer to the appropriate section of the catalog for specific admission requirements and for contact information of the Graduate Programs Directors.
Biomedical Engineering:
(305) 348-3019

Dr. Malek Adjouadi
Civil and Environmental Engineering: (305) 348-3837
Dr. L. David Shen
OHL School of Construction:
(305) 348-3172

Dr. Syed Ahmed
Electrical and Computer
Engineering:
$\quad$ Dr. Jean Andrian
Engineering Management:
$\quad$ Dr. Chin-Sheng Chen
Mechanical and Materials

| Engineering: |
| :--- |
| Dr. Yiding Cao |
| $\frac{\text { School of Computing and }}{}$ |
| Information Sciences |
| Dr. Tao Li |

## Admitted Student Procedures

A student who has been accepted to a degree program in the College must meet with the Department's Graduate Program Director prior to the enrollment in the first class.

Enrolled students must choose an advisor during their first semester in the program.

Continued contact (at least once per semester) with the advisor is required to review progress and select courses for each succeeding semester.

Courses taken without the required prerequisites and co-requisites, or without the consent of the advisor, will be dropped automatically before the end of the term, resulting in a grade of "DR" or "DF".

Scientific Laboratory Fees are assessed for certain courses where laboratory classes are part of the curriculum. Specific information on scientific laboratory fees may be obtained from the University Financial Services.

## Fellowships, Assistantships, and Scholarships

The College of Engineering and Computing offers a variety of fellowships, assistantships, and scholarships to qualified students. These awards are highly competitive; hence, prospective students are urged to apply and submit all required records and scores as early as possible so they can be considered for these awards.

The amounts of these awards vary depending on the type of the award, but they may provide full tuition and a monthly stipend. Visit: www.eng.fiu.edu for additional information.

## Policies, Requirements, and Regulations

The University, the University Graduate School, and the College of Engineering and Computing have a set of guidelines to protect the student's rights and to ensure a timely graduation. Students must become familiar with all University, the University Graduate School, and College's graduate procedures. These procedures are described in the University's Student Handbook, this catalog and at http://gradschool.fiu.edu.

The programs, policies, requirements and regulations listed in the catalog are continually subject to review to serve the needs of the University's various publics, and to respond to the mandates of the FIU Board of Trustees and the Florida Legislature. Changes may be made without advance notice.

Florida International University and the College adhere to opportunity practices, which conform to all laws against discrimination and are committed to non-discrimination with respect to race, color, creed, age, handicap, sex, marital status, or nationality. Additionally, the University is committed to the principle of taking positive steps
necessary to achieve the equalization of educational and employment opportunities.

## College of Engineering and Computing Dismissal Policy

A student who has been dismissed from the University for the first time may see the Graduate Program Director to begin the appeal procedure. The Director will determine if the student is eligible to appeal the dismissal or if there is a way to lift the dismissal. If the student is eligible, he or she must make an appointment to see the chairperson or associate chairperson. The student must bring a letter stating when he or she was dismissed the first time and what he or she is going to do to ensure that he or she is not dismissed a second time. If the chairperson determines that the student is worthy of reinstatement, he or she will prepare and sign a memo for the College Dean's consideration stating the conditions for the student to be reinstated. The student may be readmitted on academic probation upon the approval of the Dean of the University Graduate School. If the student does not meet these conditions, he or she will be dismissed a second and final time from the program. The student must also sign an agreement stating that he or she understands that the department will not allow a second reinstatement if the student is dismissed again.

Any student who is dismissed a second time from FIU will not be readmitted under any circumstances. Only a first dismissal appeal is considered in the College of Engineering and Computing, a second dismissal appeal will not be accepted.

## Department-Specific Information

For additional information refer to your selected department in this catalog, or call the graduate program director of each department. As listed above.

## Other Important Contact Information

Website: http://www.eng.fiu.edu
Admissions:
http://gradschool.fiu.edu
(305) 348-7442

College of Engineering and Computing-
Graduate Admissions
(305) 348-3526

Campus Resources (305) 348-2973
Career Services (305) 348-1281
Financial Aid
(305) 348-2489

University Graduate School
(305) 348-2455

International Students and Scholars
Services
(305) 348-2421

Registrar's Office
(305) 348-2320

Scholarships
(305) 348-3526

Tuition Waivers

## Engineering Management

Chin-Sheng Chen, Professor and Program Director<br>Shih-Ming Lee, Professor of Practice<br>Karen E. Schmahl, Professor of Practice<br>Affiliated and Research Faculty<br>Cecilia Alvarez-Ortiz, Affiliated Professor<br>Paul Bianco, Affiliated Professor<br>Seema Pissaris, Affiliated Professor<br>Jesus Sanchelima, Affiliated Professor

## Master of Science in Engineering Management

The Master of Science in Engineering Management (MSEM) program develops future leaders of business and industry in an engineering and technological environment. The program blends a carefully chosen mix of graduate courses offered by the College of Engineering and Computing, the College of Business Administration, and the College of Law. The MSEM program is designed to offer a tailored degree for those engineers who would like to advance to managerial positions and wish to acquire the necessary knowledge and skills for success. The MSEM program includes coursework that simulates a business environment where students learn and apply engineering tools, managerial theories, and best practices to design and operate industrial systems. Students in the program are expected to acquire contemporary engineering management theories and techniques, and simultaneously build a solid technical foundation in a chosen engineering track.

## Admission Policies

The applicant to the MSEM program must have a bachelor's degree in engineering or a closely related field from a regionally accredited institution with a minimum of " B " average in upper-level undergraduate work, or a graduate degree from an accredited institution. In addition, international graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. The applicant whose GPA does not meet the minimum GPA requirement may be considered for conditional admission. For such consideration, the applicant must submit (1) three letters of recommendation; (2) a resume including education, training, and employment history, practical and research experience (such as projects and publications), skills and other pertinent information; and (3) a statement of objective in which the applicant must clearly state his/her intended engineering track, in addition to other information.

## Degree Requirements

The MSEM program requires 30 credit hours of course work including 9 credit hours of engineering management core courses, 9 credit hours of business electives and 12 credit hours of approved graduate-level electives from an engineering track.

## Engineering Management Core Courses

Students in the Engineering Management program are required to take three courses ( 9 credit hours) to build an engineering management foundation that includes topics in engineering quality management, systems improvement, engineering project management, intellectual property issues, and business laws. The three core courses are:
EIN 5226 Total Quality Management For
ESI 6455 Advanced Engineering Project
LAW $5072 \quad$ Management $\quad$ Business Law and Intellectual Property for Engineers and Entrepreneurs

## Business Electives

Students in the program are required to take three courses (9 credit hours) to gain fundamental knowledge about management functions that includes topics in accounting, finance, organizational behavior, leadership, marketing, and operations management. Additional business electives may be considered subject to the Director's approval. A suggested list of business elective courses is given below:
ACG 6026 Accounting for Managers 3
FIN $6406 \quad$ Corporate Finance 3
MAN $6209 \quad$ Organization Design and Behavior 3
MAR 6805 Marketing Management 3
MAN $6830 \quad$ Organization Information Systems 3
MAN $6501 \quad 3$
EIN 5359 Industrial Financial Decisions 3
MAN 6167 Leadership in a Global Environment 3

## Engineering Tracks

Students in the Engineering Management program must choose an engineering track from any academic unit in the College of Engineering and Computing. Within a chosen track, students are required to take four courses (12 credit hours) that meet the program's technical requirement. These engineering electives are designed to broaden and deepen the students' understanding of engineering and technology development in a chosen track. Students should have a proper educational background in order to take elective courses. Additional tracks and elective courses may be available, subject to the approval of the Engineering Management program director.

## Biomedical Engineering Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
BME 5005 Applied Biomedical Engineering Principles
BME $5036 \quad$ Biotransport Processes 3
BME 5105 Intermediate Biomaterials Science 3
BME 5316 Molecular Bioprocess Engineering 3
BME 5340 Introduction to Cardiovascular 3
BME 5560 Biomedical Engineering Optics 3
BME 5573 Nanomedicine 3
BME 5505C Engineering Foundations of Medical Imaging Instrument

## Computer Engineering Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
EEL 5718 Computer Communication Network Engineering
EEL $5725 \quad$ Hardware Description Languages (VHDL or Verilog)
EEL 5757 Real-Time DSP Implementations 3
EEL 6167
VLSI Design
EEL 6253
EEL 6505
Computer Analysis of Power Systems Digital Signal Processing3 Data Communications Engineering 3
EEL 6575
Fuzzy System Design

## Computer Science Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
CEN 5011 Advanced Software Engineering
COP $5725 \quad$ Principles of Database Management Systems
COP 5614 Operating Systems
COT 5310 Theory of Computation I
COT 5407 Introduction to Algorithms 3

## Construction Management Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.

| BCN 5716 | Productivity in Construction | 3 |
| :--- | :--- | ---: |
| BCN 5626 | Construction Cost Analysis \& Control | 3 |
| BCN 5645 | Construction Economic Analysis | 3 |
| BCN 5728 | Principles of Construction Scheduling | 3 |
| BCN 5774 | Topics in International Construction | 3 |
| BCN 6775 | Decision \& Risk Analysis in Construction3 |  |
| BCN 6916 | Development in Construction |  |
| CCE 5505 | Technology | 3 |
|  | Computer Integrated Construction | 3 |

## Electrical Engineering Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
EEE 5425 Introduction to Nanotechnology 3
EEL 5171 Advanced Systems Theory 3
EEL $5500 \quad$ Digital Communication Systems I 3
EEL 5501 Digital Communication Systems II 3
EEL 6219 Electric Power Quality 3
EEL $6261 \quad$ Power Systems Engineering 3
EEL 6443 Electro-Optical Devices and Systems
EEL $6505 \quad$ Digital Signal Processing

## Enterprise Systems Track

This track is designed for students who have a career interest in management of operations at the entire enterprise level. Systems engineering tools and information technology are applied to planning, modeling, analysis, design, and implementation of contemporary enterprise systems in any business sector. Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
EGS 5620 Enterprise Systems Configuration 3
EGS 5621 Enterprise Systems Collaboration

EGS 5622 Enterprise Systems Integration 3
EGS 5623 Enterprise Systems Optimization 3
EIN 5346
Logistics Engineering
EIN 6133 Enterprise Engineering 3

## Engineering Entrepreneurship Track

This track is designed for students who have a career interest in becoming an engineering entrepreneur who creates jobs in new business ventures or becoming and engineering manager who manages innovation working within a company. Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
EGN 6436 Manufacturing Process Design 3
EIN 5367 Design of Production Systems 3
EIN 6105 Technology Policies and Strategies 3
EIN $6160 \quad$ Management of Innovation and Technology
EIN 6324 Technology Entrepreneurship 3
EIN 6325 Business Plan Development 3
EIN 6327 Entrepreneurship and New Venture Initiation
EIN 6329 Advanced Engineering Business Plan Development
EIN $6392 \quad$ Product Design for Manufacturability and Automation

## Environmental Engineering Track

Students in this track are required to take four courses from the following list with the approval of the Graduate Program Director and after meeting prerequisite requirements. Additional courses may be selected with approval of the program director.
ENV $5406 \quad$ Water Treatment Systems and Design 3
ENV 5517 Design of Wastewater Treatment Plants 3
ENV 5666 Water Quality Management 3
CWR 5235 Open Channel Hydraulics 3
CWR $6125 \quad 3$
ENV 5104 Indoor Air Quality 3
ENV 5105 Air Quality Management 3
ENV 5347 Waste Incineration 3
ENV $5126 \quad$ Particulate Air Pollution Control 3
ENV 5127 Gaseous Air Pollution Control 3
ENV 5356 Solid and Hazardous Waste 3
ENV 5027 Biomediation Processes 3
ENV 5335 Advanced Hazardous Waste Treatment Processes
ENV $5008 \quad \begin{aligned} & \text { Appropriate Technologies for } \\ & \text { Developing Countries }\end{aligned}$
ENV5007 Environmental Planning 3
ENV $5519 \quad$ Chemistry for Environmental Engineers 3
ENV 6045 Environmental Modeling 3
ENV $6070 \quad$ Green Engineering 3
ENV 6614 Environmental Impact Assessment 3

## Information Technology Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
CIS 5027 Computer Systems Fundamentals 3
CIS $5372 \quad$ Fundamentals of Computer Security 3
CEN 5087 Software and Data Modeling 3
COP 5725 Principles of Database Management Systems

| TCN 5030 | Computer Communications and <br>  <br> Networking Technology | 3 |
| :--- | :--- | :--- |
| EGS 5620 | Enterprise Systems Configuration | 3 |
| EGS 5621 | Enterprise Systems Collaboration | 3 |
| EGS 5622 | Enterprise Systems Integration | 3 |
| EGS 5623 | Enterprise Systems Optimization | 3 |
| EIN 6117 | Advanced Industrial Information |  |
| ESI 5602 | Systems | 3 |
|  | Engineering Data Representation and |  |
| ESI 6601 | Modeling | 3 |
| Data Warehousing and Mining | 3 |  |

## Logistics Engineering Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.

| EIN 5346 | Logistics Engineering | 3 |
| :--- | :--- | :--- |
| EIN 6133 | Enterprise Engineering | 3 |
| EIN 6336 | Advanced Production Planning and |  |
|  | Control | 3 |
| EIN 6345 | Inventory Control Systems | 3 |
| ESI 5522 | Simulation Models of Engineering |  |
|  | Systems | 3 |
| ESI 6316 | Applications of OR in Manufacturing | 3 |
| ESI 6470 | Stochastic Optimization | 3 |

## Mechanical Engineering Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
EGM 5346 Computational Engineering Analysis 3
EGM $5354 \quad$ Finite Element Methods Applications in ME

3
EGM 5615 Synthesis of Engineering Mechanics 3
EGM 6422 Advanced Computational Engineering
EML 5103
Analysis

Intermediate Heat Transfer
EML 5505 $\begin{aligned} & \text { Smart Machine Design and } \\ & \text { Development }\end{aligned}$
EML 5509 Optimization Algorithms 3
EML 5530 Intermediate CAD/CAE 3
EML 5606C Advanced Refrigeration and AC Systems
EML 5709 Intermediate Fluid Mechanics 3
EML 6725 Computational Fluid Dynamics 3

## Operations Management of Orthotics and Prosthetics Track

Students in this track must take six credit hours of EGN 6940 Graduate Internship - Orthotics and Prosthetics Clinical Rotation or I\&SE Internship (EIN 6940), and additionally are required to take at least six credit hours of courses from the following list. Additional courses may be selected with approval of the program director.

| EGN 5435 | Product Modeling | 3 |
| :--- | :--- | :--- |
| EGS 5620 | Enterprise Systems Configuration | 3 |
| EGN 6436 | Manufacturing Process Design | 3 |
| EGN 6438 | Manufacturing Engineering | 3 |
| EGN 6940 | Graduate Internship - Orthotics and |  |
|  | Prosthetics Clinical Rotation | $1-6$ |
| EIN 6133 | Enterprise Engineering | 3 |
| EIN 6160 | Management of Innovation and |  |
| EIN 6324 | Technology | 3 |
|  | Technology Entrepreneurship | 3 |

EIN 6336
EIN 6392
EIN 6940

## Production and Manufacturing Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
EGN 6436 Manufacturing Process Design 3
EGN 6437 Manufacturing Systems Design 3
EIN $5332 \quad$ Quality Engineering 3
EIN 5367 Design of Production Systems 3
EIN 6336 Advanced Production Planning and Control

3
EIN 6345 Inventory Control Systems 3
EIN 6392 Product Design for Manufacturability and Automation

## Risk and Disaster Management Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
BCN $5588 \quad$ Vulnerability Analysis 3
BCN $5589 \quad 3$
ENV 6614 Environmental Risk Assessment 3
PHC 6251 Disaster and Emergency Epidemiology
MAN 6706 Crisis Management 3
MAP $6630 \quad$ Numerical Analysis in Risk Analysis and Management 3
MAP 6635 Risk Analysis and Management I 3
MAP 6636 Risk Analysis and Management II 3

## Structural/Wind/Construction Track

Students in this track are required to take four courses from the following four groups (one per group) with the approval of the Graduate Program Director and after meeting prerequisite requirements. Additional courses may be selected with approval of the program director.
Group 1
CCE 5035 Construction Engineering Management 3
CCE 5036 Advanced Project Planning for Civil Engineers

Group 2
CES 5106 Advanced Structural Analysis 3
EGM 5421 Structural Dynamics 3
Group 3
CES 5715 Prestressed Concrete Design 3
CES 5606 Advanced Structural Steel Design 3
CES 6706 Advanced Reinforced Concrete Design 3
EGN 5439 Design of Tall Buildings 3
Group 4
CEG 5065 Geotechnical Dynamics 3
CEG 6105 Advanced Foundations Engineering 3

## Systems Engineering Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
EIN $5332 \quad$ Quality Engineering 3

EIN 5346 Logistics Engineering 3
EIN 6133 Enterprise Engineering 3

EIN 6357
EIN 6940
ESI 5522
ESI 5602
ESI 5603
ESI 6316
ESI 6440
ESI 6470
ESI 6524
ESI 6546

Advanced Production Planning and Control
Advanced Engineering Economy Internship

Systems
Engineering Data Representation and Modeling

## Telecommunications Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
TCN $5010 \quad$ Telecommunications Technology and Applications
TCN 5030 Computer Communications and
TCN $5060 \quad$ Telecommunications Software and Methodologies
TCN $5640 \quad$ Telecommunications Enterprise Planning and Strategy
Telecommunications Network Analysis and Design
TCN $6430 \quad$ Network Management and Control Standards


TCN 6450
Wireless Information Systems
TCN 6880 Telecommunications Public Policy Development and Standards

## Transportation Engineering Track

Students in this track are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
TTE $5205 \quad$ Advanced Highway Capacity Analysis 3
TTE $5215 \quad$ Fundamentals of Traffic Engineering 3
TTE 5607 Transportation Demand Analysis 3
TTE $5805 \quad$ Advanced Geometric Design of Highways
TTE 6257 Traffic Control Systems Design 3
TTE 6506 Mass Transit Planning 3
CGN $5320 \quad$ GIS Applications in Civil and
Environmental Engineering

## Water Resources Engineering Track

Students in this track are required to take four courses from the following list with the approval of the Graduate Program Director and after meeting prerequisite requirements. Additional courses may be selected with approval of the program director.
CWR 5140C Ecohydrology
CWR 5235 Open Channel Hydraulics 3
CWR $5251 \quad$ Environmental Hydraulics 3
$\begin{array}{ll}\text { CWR 5535C } & \begin{array}{l}\text { Advanced Modeling Applications in } \\ \text { Water Resources Engineering }\end{array}\end{array}$
CWR 6117
Stochastic Hydrology
CWR 6125 Groundwater Hydrology
CWR 6126
CWR 6236
ENV 5666

Advanced Groundwater Hydrology 3
Engineering Sediment Transport 3

## Master's Project Option

Students in the Engineering Management graduate program may receive permission to conduct a master's project of three credit hours within their chosen track to complete the degree program. The master's project (EIN 6950) will replace one graduate elective course.

## Grades and Credits

Students are required to maintain a GPA of 3.0. Courses with a grade below ' C ' will not be counted toward the Master of Science degree in Engineering Management.

## Transfer Credit

Students may receive permission to transfer up to a maximum of six semester credits provided that: (1) the courses were taken at the graduate level at an accredited college or university; (2) with a grade of 'B' or better; (3) the courses were judged relevant by the program director;
(4) the credits were not used toward another degree; and
(5) the credits will be no older than six years at the time of graduation. Students who already have earned (or are earning) a Master's degree that is closely related to his/her technical track (i.e., MSEM sub-plan) may transfer up to 12 semester hours to meet the track requirement, subject to the Program Director's approval. No more than 12 semester hours taken at FIU as a non-degree seeking student may be counted toward the Engineering Management graduate program.

## Time Limit

All works applicable to the Master of Science degree in Engineering Management, including transfer credits, must be completed within six years of conferral of the degree.

## Combined BS in Biomedical Engineering/MS in Engineering Management (BSBME/MSEM)

Students who pursue a BS degree and have completed $75 \sim 90$ credits in the undergraduate program of Biomedical Engineering with an overall GPA of 3.2 or higher may, upon recommendation from three faculty members, apply to the department to enroll in the combined BSBME/MSEM program. Students must also submit an online application to the University Graduate School for admission to the MSEM program. In addition to the admission requirements of the MSEM program, students must meet all the admission requirements of the University Graduate School.

Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships.

Students enrolled in the combined degree program could count up to three BME graduate courses for both the BSBME electives and the MSEM electives, for a total saving of 9 credit hours. The following is a list of eligible BME graduate courses:

BME 5005
Applied Biomedical Engineering Principles
BME 5036
BME 5105
BME 5316
BME 5340
BME 5560
BME 5573
The combined BSBME/MSEM program has been designed to be a continuous program. During this combined BSBME/MSEM program, upon completion of all the requirements of the BSBME program, students will receive their BSBME degree. Students may elect to permanently leave the combined program and earn only the BSBME degree. Students who elect to leave the combined program and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the 9 credit hours in both the BSBME and MSEM degrees.

For each of the graduate courses counted as credits for both BSBME and MSEM degrees, a minimum grade of " $B$ " is required. Only graduate courses with formal lecture can be counted for both degrees. The students are responsible for confirming the eligibility of each course with their undergraduate advisors.

Students interested in the combined program should consult with their undergraduate advisor on their eligibility to the program. The student should also meet the MSEM Program Director to learn about the graduate program and available tracks/courses before completing the application form and submitting it to their undergraduate advisor. Final decision for admission to the MSEM program will be made by the University Graduate School upon recommendation by the Engineering Management program director. Applicants will be notified by the Engineering Management Program and the University Graduate School of the decision on their applications.

## Combined BS in Computer Engineering/MS in Engineering Management (BSCpE/MSEM)

Students, who are pursuing a Bachelor of Science degree in Computer Engineering and have completed at least 7590 credits with a minimum of a 3.3 overall GPA may, upon recommendation from three ECE faculty members, apply to enroll in the combined BSCpE/MSEM program. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. In addition to the admission requirements of the MSEM program, students must meet all the admission requirements of the University Graduate School.

Students enrolled in the combined degree program could count up to two Electrical Engineering graduate courses for both the BSCpE electives and the MSEM electives, for a total saving of 6 credit hours. A minimum grade of " $B$ " is required graduate courses counted as credits for both BSCpE and MSEM degrees. Only 5000level or higher courses may be applied toward both degrees. Only graduate courses with formal lecture can be counted for both degrees.

The combined BSCpE/MSEM program has been designed to be a continuous program. Students will receive their BSCpE degree upon completion of all the requirements of the BSCpE program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from his/her bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships.

Students may elect to permanently leave the combined program and earn only the BSCpE degree. Students who elect to leave the combined program and earn only the BS degree will have the same access requirements to regular graduate programs as any other student but will not be able to use the 6 credit hours in both the BSCpE and MSEM degrees.

Students interested in the combined program should consult with their undergraduate advisor on their eligibility to the program. The student should also meet the MSEM Program Director to learn about the graduate program and available tracks/courses before completing the application form and submitting it to their undergraduate advisor. Final decision for admission to the MSEM program will be made by the University Graduate School upon recommendation by the Engineering Management program director. Applicants will be notified by the Engineering Management Program and the University Graduate School of the decision on their applications.

## Combined BS in Computer Science/MS in Engineering Management (BSCS/MSEM)

Students who pursue a BS degree and are in their first semester of the senior year in Computer Science and have earned at least a 3.2 overall GPA may, upon recommendation from three faculty members, apply to the department to enroll in the combined BSCS/MSEM program. Students must also submit an online application to the University Graduate School for admission to the MSEM program. In addition to the admission requirements of the MSEM program, students must meet all the admission requirements of the University Graduate School.

Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships.

Students enrolled in the combined degree program could count up to three Computer Science graduate courses toward satisfying both the BSCS and the MSEM requirements, for a total saving of 9 credit hours. Students are required to take four courses from the following list. Additional courses may be selected with approval of the program director.
CEN 5011 Advanced Software Engineering COP $5725 \quad$ Principles of Database Management Systems

The combined BSCS/MSEM program has been designed to be a continuous program. During this combined BSCS/MSEM program, upon completion of all the requirements of the BSCS program, students will receive their BSCS degree. Students may elect to permanently leave the combined program and earn only the BSCS degree. Students who elect to leave the combined program and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the 9 credit hours in both the BSCS and MSEM degrees.

For each of the graduate courses counted as credits for both BSCS and MSEM degrees, a minimum grade of " $B$ " is required. Only graduate courses with formal lecture can be counted for both degrees. The students are responsible for confirming the eligibility of each course with their undergraduate advisors.

Students interested in the combined program should consult with their undergraduate advisor on their eligibility to the program, preferably during their junior year, since appropriate planning of coursework is required in order to achieve the full nine-credit benefit. The student should also meet the MSEM Program Director to learn about the graduate program and available tracks/courses before completing the application form and submitting it to their undergraduate advisor. Final decision for admission to the MSEM program will be made by the University Graduate School upon recommendation by the Engineering Management program director. Applicants will be notified by the Engineering Management Program and the University Graduate School of the decision on their applications.

## Combined BS in Electrical Engineering/ MS in Engineering Management (BSEE/MSEM)

Students, who are pursuing a Bachelor of Science degree in Electrical Engineering and have completed at least 7590 credits with a minimum of a 3.3 overall GPA may, upon recommendation from three ECE faculty members, apply to enroll in the combined BSEE/MSEM program. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. In addition to the admission requirements of the MSEM program, students must meet all the admission requirements of the University Graduate School.

Students enrolled in the combined degree program could count up to two Electrical Engineering graduate courses for both the BSEE electives and the MSEM electives, for a total saving of 6 credit hours. A minimum grade of " B " is required graduate courses counted as credits for both BSEE and MSEM degrees. Only 5000level or higher courses may be applied toward both degrees. Only graduate courses with formal lecture can be counted for both degrees.

The combined BSEE/MSEM program has been designed to be a continuous program. Students will receive their BSEE degree upon completion of all the requirements of the BSEE program. A student admitted to
the combined degree program will be considered to have undergraduate status until the student applies for graduation from his/her bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships.

Students may elect to permanently leave the combined program and earn only the BSEE degree. Students who elect to leave the combined program and earn only the BS degree will have the same access requirements to regular graduate programs as any other student but will not be able to use the 6 credit hours in both the BSEE and MSEM degrees.

Students interested in the combined program should consult with their undergraduate advisor on their eligibility to the program. The student should also meet the MSEM Program Director to learn about the graduate program and available tracks/courses before completing the application form and submitting it to their undergraduate advisor. Final decision for admission to the MSEM program will be made by the University Graduate School upon recommendation by the Engineering Management program director. Applicants will be notified by the Engineering Management Program and the University Graduate School of the decision on their applications.

## Combined BS in Information Technology/MS in Engineering Management (BSIT/MSEM)

Students who pursue a BS degree and are in their first semester of the senior year in Information Technology and have earned at least a 3.2 overall GPA may, upon recommendation from three faculty members, apply to the department to enroll in the combined BSIT/MSEM program. Students must also submit an online application to the University Graduate School for admission to the MSEM program. In addition to the admission requirements of the MSEM program, students must meet all the admission requirements of the University Graduate School.

Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships.

Students enrolled in the combined degree program could count up to three Management Electives toward their nine "interdisciplinary credits" in the BSIT degree program, for a total saving of 9 credit hours.
ACG 6026 Accounting for Managers
EIN $5359 \quad$ Industrial Financial Decisions
FIN $6406 \quad$ Corporate Finance
MAN 6167 Leadership in a Global Environment
MAN 6209 Organization Design and Behavior
MAN 6501 Operations Management
MAN 6830 Organization Information Systems
MAR 6805 Marketing Management
The combined BSIT/MSEM program has been designed to be a continuous program. During this
combined BSIT/MSEM program, upon completion of all the requirements of the BSIT program, students will receive their BSIT degree. Students may elect to permanently leave the combined program and earn only the BSIT degree. Students who elect to leave the combined program and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the 9 credit hours in both the BSIT and MSEM degrees.

For each of the graduate courses counted as credits for both BSIT and MSEM degrees, a minimum grade of " $B$ " is required. Only graduate courses with formal lecture can be counted for both degrees. The students are responsible for confirming the eligibility of each course with their undergraduate advisors.

Students interested in the combined program should consult with their undergraduate advisor on their eligibility to the program, preferably during their junior year, since appropriate planning of coursework is required in order to achieve the full nine-credit benefit. The student should also meet the MSEM Program Director to learn about the graduate program and available tracks/courses before completing the application form and submitting it to their undergraduate advisor. Final decision for admission to the MSEM program will be made by the University Graduate School upon recommendation by the Engineering Management program director. Applicants will be notified by the Engineering Management Program and the University Graduate School of the decision on their applications.

## Combined BS in Mechanical Engineering/MS in Engineering Management (BSME/MSEM)

Students who pursue a BS degree and have completed 75~90 credits in the undergraduate program of Mechanical Engineering with an overall GPA of 3.2 or higher may, upon recommendation from three faculty members, apply to the department to enroll in the combined BSME/MSEM program. Students must also submit an online application to the University Graduate School for admission to the MSEM program. In addition to the admission requirements of the MSEM program, students must meet all the admission requirements of the University Graduate School.

Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships.

Students enrolled in the combined degree program could count up to three Mechanical Engineering graduate courses for both the BSME electives and the MSEM electives, for a total saving of 9 credit hours. The following is a list of eligible Mechanical Engineering graduate courses:
EGM 5346 Computational Engineering Analysis
EGM 5354 Finite Element Method Applications in ME

EGM 5615
EML 5103
EML 5152
EML 5505
EML 5509
EML 5530
EML 5606C
EML 5709

Synthesis of Engineering Mechanics
Intermediate Thermodynamics
Intermediate Heat Transfer
Smart Machine Design and Development
Optimization Algorithms Intermediate CAD/CAE Advanced Refrigeration and AC Systems

The combined BSME/MSEM program has been designed to be a continuous program. During this combined BSME/MSEM program, upon completion of all the requirements of the BSME program, students will receive their BSME degree. Students may elect to permanently leave the combined program and earn only the BSME degree. Students who elect to leave the combined program and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the 9 credit hours in both the BSME and MSEM degrees.

For each of the graduate courses counted as credits for both BSME and MSEM degrees, a minimum grade of " B " is required. Only graduate courses with formal lecture can be counted for both degrees. The students are responsible for confirming the eligibility of each course with their undergraduate advisors.

Students interested in the combined program should consult with their undergraduate advisor on their eligibility to the program. The student should also meet the MSEM Program Director to learn about the graduate program and available tracks/courses before completing the application form and submitting it to their undergraduate advisor. Final decision for admission to the MSEM program will be made by the University Graduate School upon recommendation by the Engineering Management program director. Applicants will be notified by the Engineering Management Program and the University Graduate School of the decision on their applications.

## Master of Science in Logistics Engineering

The MS-Logistics Engineering program will include student learning outcomes that address logistics from several complementary perspectives: (1) Students will gain structural technical training dedicated to logistics engineering by teaching contemporary logistics systems, technology, and operations; (2) students will gain the systems engineering tools and techniques that apply to addressing emerging challenges in the industry with respect to design and development of logistics systems and technology; and (3) students will gain deeper knowledge of specific areas in logistics such as warehouse or inventory systems design through selection of elective courses.

## Admission Policies

The applicant to the MS program in Logistics Engineering must have a bachelor's degree in industrial engineering, systems engineering, operations research, or a closely related area such as business administration, MIS, or other engineering disciplines, from a regionally accredited institution with a minimum of " $B$ " average in upper-level undergraduate work, or a graduate degree from an
accredited institution. In addition, international graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Degree Requirements

The MS program in Logistics Engineering requires 30 credit hours of 10 coursework from three clusters of graduate courses. The first consists of 4 core courses in logistics operations, the second consists of 3 elective courses in systems engineering, and the third consists of 3 elective courses in logistics systems and technology.

## Logistics Engineering Core Courses: (4 courses, 12 credit hours)

ESI 5010C Forecasting and Demand Management 3
EIN 5346 Logistics Engineering 3
EIN 6133 Enterprise Engineering 3
EIN 6345 Inventory Control System 3
Elective Systems Engineering Courses: (3 courses, 9 credit hours)
EIN 5226 Total Quality Management for Engineers3
EIN 5332 Quality Engineering 3
EIN 5359 Industrial Financial Decisions 3
EIN 5367 Design of Production Systems 3
ESI $5522 \quad \begin{aligned} & \text { Simulation Models of Engineering } \\ & \text { Systems }\end{aligned}$
ESI 6316 Applications of OR in Manufacturing 3
ESI 6440 Integer Programming 3
ESI $6455 \quad$ Advanced Engineering Project Management
ESI 6470 Stochastic Optimization 3
ESI 6524 Advanced Industrial Systems Simulation 3
ESI 6546 Network Flow Analysis 3
Elective Logistics Systems and Technology Courses: ( 3 courses, 9 credit hours)
EGS 5620 Enterprise Systems Configuration
EGS 5621 Enterprise Systems Collaboration
EGS 5622 Enterprise Systems Integration
EGS 5623 Enterprise Systems Optimization
EIN 6336 Advanced Production Planning and Control

## Graduate Certificate in Engineering Management (GCEM)

This certificate program is designed for practicing engineers and graduate students in all engineering majors, who are interested in acquiring skills for managerial careers in the engineering and technology industries. The GCEM program is especially helpful for those engineers who seeking to transition into management and wish to acquire the necessary perquisite knowledge and skills. More than a sequence of coursework, the certificate program also simulates a business environment where students learn and apply engineering tools, managerial theories, and best practices to design and operate industrial and engineering systems. Students in the program are expected to acquire contemporary engineering management theories and techniques. This certificate program is open to both degree- and non-degree seeking students.

## Admission Requirements

A minimum undergraduate GPA of 2.75 is required for admission. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the IBT TOEFL or 6.5 overall on the IELTS is required.

## Certificate Requirements

All the credits earned in this Certificate program may be used in the Master of Science in Engineering Management (MSEM) degree program provided the student is admitted to the MSEM degree program prior to the completion of no more than 12 Graduate Certificate credits.
EIN 5226 Total Quality Management for Engineers3
EIN 5359 Industrial Financial Decisions 3
EIN 6133 Enterprise Engineering 3
ESI 6455 Advanced Engineering Project
LAW 5072 Management
Business Law and Intellectual Property
for Engineers and Entrepreneurs

## Graduate Certificate in Enterprise Systems (GCES)

This certificate program is designed for those who are interested in acquiring expertise and skills in the growing discipline of Enterprise Systems (ES). ES software utilizes the computational power with massive data storage and transmission capabilities to support enterprise processes, information flows, reporting, and data analytics within and among complex organizations. Typical Enterprise Systems include Enterprise Resource Planning (ERP), Supply Chain Management (SCM), and Customer Relationship Management (CRM). The software architecture aiming at facilitating the flow of information among all business functions inside the boundaries of the organization and to outside stakeholders. Built on a centralized database and business intelligence, ES aims to consolidate all business operations into a uniform, realtime, and enterprise-wide system environment. This certificate program is open to both degree- and nondegree seeking students.

The Graduate Certificate in Enterprise Systems (GCES) program combines the optimal design of enterprise structures and operations with SAP implementation. The Certificate program consists of five required graduate courses.

## Admission Requirements

A minimum undergraduate GPA of 2.75 is required for admission. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Certificate Requirements

Students must take at least 5 required courses and receive an average grade of " B " or higher. In addition, students who attain " B " or better in at least three courses will also earn a SAP certificate. All the credits earned in
this Certificate program may be used in the Master of Science in Engineering Management (MSEM) degree program provided the student is admitted to the MSEM degree program prior to the completion of no more than 12 Graduate Certificate credits.

EIN 6133
EGS 5620
EGS 5621
EGS 5622
EGS 5623

Enterprise Engineering
Enterprise Systems Configuration
Enterprise Systems Collaboration
Enterprise Systems Integration
Enterprise Systems Optimization

Course Descriptions

## Description of Prefixes

EGN-Engineering, General EGS-Engineering Support; EIN-Engineering, Industrial; ESI-Engineering Systems Industrial
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering.

EGN 5435 Product Modeling (3). Life cycle product data, geometry and form features, product information models and modeling techniques, product modeling systems, and product data standards. Prerequisites: EGN 3124 or equivalent.
EGN 5540 Quality and EH\&S Management Systems (3). Design of management control systems for quality, environmental, and occupational health and safety requirements. Principles and process of auditing. Review of related standards. Prerequisite: EIN 5226.
EGN 5550 Risk Analysis in Business Concept Development for Engineers and Entrepreneurs (3). It integrates assumptions, risk/forecasting with engineering approach to new business development. The course uses exercises, cases and projects to develop practical experience with course theories.
EGN 5644 Commercializing Innovation (3). Product development/process, innovation, commercialization; needs analysis; market segmentation; value proposition; prototyping, packaging and branding; modeling costs and margins; hands-on practice. Prerequisite: Permission of the instructor.

EGN 6436 Manufacturing Process Design (3). Resources modeling, process plan modeling, and planning methodologies for process selection, operations selection, machining parameters selection, setup planning, and inspection planning. Prerequisite: EGN 5842.
EGN 6437 Manufacturing Systems Design (3). System design for production and process planning, resource management, material handling, process control, and quality control. Prerequisite: Permission of the instructor.
EGN 6438 Manufacturing Engineering (3). Manufacturing functions, product and process design, material processing and control, systems design and operations, resource and technology management, and analytical tools for manufacturing. Prerequisites: EIN 3390 or equivalent. (F)
EGN 6940 Graduate Internship - Orthotics and Prosthetics Clinical Rotation (1-6). To provide graduate students with real world clinical experience in Orthotics and Prosthetics, under approved professional supervision. Prerequisite: Permission of the program director.

EGN 6971 Master's Project (1-3). Individual work culminating in a professional practice-oriented report suitable for the requirements of the Master of Science in Manufacturing Engineering program.
EGS 5620 Enterprise Systems Configuration (3). Enterprise systems overview; major enterprise functions; standard operation procedures; system configuration and parameters; master data; user interfaces and reports; and hands-on experience. Prerequisite: Permission of the instructor.

EGS 5621 Enterprise Systems Collaboration (3). Collaborative engineering and environment; decision processes; changes management; virtual enterprise operation systems; and hands-on experience with a commercial enterprise operation system. Prerequisite: EGS 5622.
EGS 5622 Enterprise Systems Integration (3). Enterprise architectures; work flow modeling and design; systems integration methodology; vertical and horizontal integration; master data analysis and integration; and hands-on experience. Prerequisite: EGS 5620.
EGS 5623 Enterprise Systems Optimization (3). Supply networks overview; interactive supply network planning; optimal systems and process design; optimization techniques and heuristics; master and transaction data transfer; and hands-on experience. Prerequisite: EGS 5622.

EIN 5106 Regulatory Aspects of Engineering (3). A survey of the legal and regulatory requirements encountered by engineers. Included will be OSH Act, NIOSH, ADA, EEOC, Worker's Compensation and Product Liability.
EIN 5226 Total Quality Management for Engineers (3). Fundamentals of TQM and its historical development. Integration of QC and management tools, QFD, benchmarking, experimental design for scientific management. ( $\mathrm{F}, \mathrm{S}$ )
EIN 5244 Cognitive Engineering (3). Advanced topics in human factors and cognitive engineering. Theoretical aspects of applied situation awareness and decision making, and applications in a variety of engineering domains. Prerequisite: EIN 4243.
EIN 5249 Occupational Biomechanics (3). Study of the theoretical fundamentals for the mechanics of the body. The link system of the body and kinematic aspects of body movement including applications of biomechanics to work systems. Prerequisites: EIN 4314 Work Design and Industrial Ergonomics or equivalent. (S)
EIN 5256 Usability Engineering (3). The usability aspects of software systems design and testing. The theory of interface design for usability and the methods and techniques for designing and testing technology interfaces. Prerequisite: Permission of Instructor.
EIN 5322 Engineering Management (3). Organization of engineering systems including production and service organizations. Inputs of human skills, capital, technology, and managerial activities to produce useful products and services. ( $\mathrm{F}, \mathrm{S}$ )
EIN 5332 Quality Engineering (3). This course examines quality control from an engineering standpoint. It covers
ways to meet the challenge of designing high-quality products and processes at low cost. Prerequisites: EIN 3331 or equivalent. (S)
EIN 5346 Logistics Engineering (3). Concepts and tools for effective design and management of supply chain systems. Includes logistics strategies, inventory management, customer service, supply chain integration and logistics network design. Prerequisite: Permission of the instructor.
EIN 5359 Industrial Financial Decisions (3). The use of financial techniques and data in planning, controlling and coordinating industrial activities. This course will familiarize the student with accounting concepts and analytical methods. Prerequisite: EGN 3613. (SS)
EIN 5367 Design of Production Systems (3). The design of an industrial enterprise including feasibility, plant layout, equipment specifications, auxiliary services, economics and scheduling. Prerequisite: EIN 3365.
EIN 5605 Robotic Assembly Cell (3). Concepts of robot manipulation and sensing, part design for robotic assembly, planning manipulator trajectories, machine vision, robot programming language, cell control, and material transfer. Prerequisite: EIN 3600. (S)
EIN 6105 Technology Policies and Strategies (3). Strategies and policies for managing all aspects of technology. Includes value chain integration, intellectual property, and internal processes and systems.
EIN 6117 Advanced Industrial Information Systems (3). Review of the fundamental and theoretical foundation of industrial information systems. Application of the system design process and information system concepts to develop integrated engineering systems. (F,S)
EIN 6131 e-Systems Design (3). The study and application of engineering analysis and design methods for Internet-based systems. The integration of Internet technologies and applications into engineering information systems. Prerequisites: ESI 5602, EIN 6117.
EIN 6132 Collaborative Engineering (3). Product data management, visualization, collaboration, collaborative product commerce, document management, component supplier management, configuration management, enterprise application integration. Prerequisite: Permission of the instructor.
EIN 6133 Enterprise Engineering (3). Enterprise processes and functions, enterprise engineering methodology and techniques, enterprise scalability, systems and vertical integration, systems design and implementation. Prerequisite: Permission of Instructor.
EIN 6160 Management of Innovation and Technology (3). The course provides an integrated view of management of technology. The combination of theory and practice addresses the challenges of globalization, time compression, and technology integration. Prerequisite: Permission of instructor.
EIN 6246 Advanced Human-Machine Interaction Design (3). The application of human factors analysis and design methods to complex system interaction. Interface design for technological systems in workplace and consumer domains. Prerequisites: EIN 4243 or equivalent.

EIN 6248 Advance Ergonomics (3). Analysis of human factors in the design of engineering systems, with emphasis on the interphase of man-machine-media and human limitations in relation to equipment design and work environments. Prerequisites: EIN 4314, EIN 4243, and PCB 3702 or equivalent. (F)
EIN 6258 Ergonomic Design of Aerospace Systems (3). Application of ergonomic criteria in design of civil and military aircraft cockpits and control systems. Ergonomic consideration in design of outer space vehicles, stations, and systems. Prerequisite: EIN 6248.
EIN 6259 Usability Engineering in E-commerce (3). This advanced course applies usability engineering theories and methods to models of e-commerce. Usability models are presented and evaluated using case studies. Prerequisite: EIN 5256.
EIN 6319 Advanced Work Design (3). Study of the various human physiologic systems and their responses as it relates to occupational work including endurance, fatigue, recovery, and energy cost of work. Prerequisite: EIN 6248. (S)
EIN 6324 Technology Entrepreneurship (3). Entrepreneurial process, evaluation of technology, startup operations and strategy, business plans and venture capital, intellectual property and rights, growth and technology management.
EIN 6325 Business Plan Development (3). This course deals with the critical decisions and action steps that entrepreneurs must make in both planning and executing a new venture. It also covers how to develop an effective written plan. Prerequisite: Permission of advisor.
EIN 6327 Entrepreneurship and New Venture Initiation (3). It covers critical factors of initiating new ventures: entrepreneurial networks, venture creation, strategies, evaluation, financing, legal considerations, market strategies, and feasibility analysis.
EIN 6329 Advanced Engineering Business Plan Development (3). This course takes students through the process of writing a plan for a new business venture through to implementation. Heavy emphasis placed on research and case analysis. Prerequisites: EIN 6324 or MAN 6805.
EIN 6336 Advanced Production Planning and Control (3). Analytical and algorithmic planning methodologies, planning and scheduling technologies, sequencing rules, control strategies, and line balancing methods. Prerequisite: EIN 4334.
EIN 6345 Inventory Control Systems (3). Design of nontraditional inventory control systems. Development of several inventory system models. Exploration of methods of collecting appropriate demand and cost data for effective systems analysis. Prerequisite: ESI 3314.
EIN 6357 Advanced Engineering Economy (3). Review of engineering economy and the evaluation of advanced manufacturing systems. Evaluation of alternative capital investments considering income taxes, depreciation, inflation, risk and uncertainty. Prerequisite: EGN 3613. (SS)
EIN 6392 Product Design for Manufacturability and Automation (3). Overview and integration of the design-
material-manufacture process. Design considerations for manufacturability, assembly, and economical production. Concurrent engineering systems. Prerequisite: EIN 4395. (S)

EIN 6393 Design and Implementation of Discrete Manufacturing Systems (3). Methodology and techniques for design, planning and implementation of discrete production systems including process/machine selections, material handling and inspection technologies, cell control, etc. Prerequisites: Graduate or seniors with EIN 3365, EIN 3390, and ESI 3523 or equivalent.
EIN 6397 Advanced Topics in Manufacturing Automation (3). Overview of manufacturing systems; evolution of controls and AI, material handling, automation clamps, jigs, and fixtures, cutting sensors, machine vision and autonomous manufacturing. Prerequisites: EIN 6392 and EIN 6398.
EIN 6398 Advanced Manufacturing Process Engineering (3). Non-traditional manufacturing processes. Tool selection, jig and fixture design, material handling, tolerance and dimensioning. Product assembly engineering economics, and manufacturing process planning. Prerequisite: EIN 3390. (F)
EIN 6603 Applied AI/Expert Systems in Industrial Engineering (3). Application of artificial intelligence and expert systems as engineering tools. Exploring the use of PCs and symbolic machine with various Al/Expert Systems software. Several projects are required. Prerequisite: CAP 5680.

EIN 6606 Robotic Systems (3). Basic robotic system principles, functional requirements of robotic systems, simulation of system preliminary design, and physical experimentation of robotic systems.
EIN 6908 Independent Study (1-3). Individual supervised study by a faculty. A study plan and a final report are work required. Prerequisite: Departmental approval.
EIN 6910 Supervised Research (1-9). Advanced research credits under the supervision of the dissertation advisor.
EIN 6916 Master's Project (1-3). Individual work culminating in a professional practice-oriented report suitable for the requirements of the MSEM degree project option. Only three credits are applicable towards the degree. Prerequisite: Departmental approval.
EIN 6932 Graduate Seminar (0). An examination of recent technical findings in selected areas of concern. Emphasis is placed on presentations (oral and written), research activities, readings and discussions among participants. (F,S)
EIN 6936 Design of Industrial Engineering Systems (3). Overview of systems theories. Systems design process including: Problem definition, analysis, generation of alternatives, systems evaluation, selection of preferred system, and implementation. Prerequisites: EIN 6345, ESI 6316, and ESI 6524.

EIN 6940 Industrial and Systems Engineering Internship (1-3). To provide graduate students with work experience under approved industrial supervision. Prerequisite: Departmental approval.

EIN 6950 Engineering Management Masters Project (13). Individual work culminating in a professional practiceoriented report suitable for the requirements of the Master of Science in Engineering Management program. Prerequisite: Departmental approval.

EIN 6971 Master's Thesis (1-3). The students following the thesis option should work on his/her thesis through this course. (F,S,SS)
EIN 7980 Ph.D. Dissertation (1-12). Doctoral research leading to Ph.D. dissertation in Industrial and Systems Engineering. Prerequisites: Doctoral Candidacy and permission of Graduate Director.
ESI 5010C Forecasting and Demand Management (3). Forecasting overview. Times series methods. Regression methods. Advanced forecasting models. Demand planning. Pricing and revenue optimization with capacity constraints. Case studies. Prerequisite: Permission of the instructor.
ESI 5456 Productivity Management in the Global Organization (3). Analysis of productivity management strategies. Major issues in performance and productivity management, domestic and global outsourcing, international labor standards and trade policies. Prerequisites: EIN 4214 or equivalent.
ESI 5522 Simulation Models of Engineering Systems (3). Simulation Methodology; design and implementation of models of engineering systems using computer software; case studies. Prerequisite: STA 3033 or EIN 3235 or equivalent and COP 3175 or equivalent.
ESI 5602 Engineering Data Representation and Modeling (3). The course will cover the life cycle of designing, developing, and implementing engineering database systems by applying the IDEFx methodology. Prerequisite: Permission of Instructor.

ESI 5603 Advanced Software Tools for ISE (3). Algorithms and principles to integrate heterogeneous tools. Principles of XML, ASP, and other tools. Development of programming projects.
ESI 6316 Applications of OR in Manufacturing (3). Overview of OR techniques. Manufacturing system and product selection. Shop loading, resource allocation, production scheduling, job sequencing, and plant layout problems. System performance evaluation. Prerequisite: ESI 3314. (F)
ESI 6319 Operations Research and Information Technology (3). Principles and paradigms for the design and implementation of OR models, which may be integrated into an organization's existing information system and technologies. Prerequisite: ESI 6316.
ESI 6440 Integer Programming (3). Formulating and solving decision-making problems with discrete decision variables. Methods to solve large-scale integer/mixedinteger models. Prerequisite: ESI 6316.
ESI 6455 Advanced Engineering Project Management (3). This course covers entire phases of project management including selection, planning, budgeting, scheduling, monitoring, and control. It focuses on the management of engineering projects through case studies and independent research assignment. Prerequisite: Permission of the instructor. (S,SS)

ESI 6460 Methods for Algorithm Development for Industrial Engineering Applications (3). Methods for algorithm development for Industrial Engineering applications, with emphasis on powerful optimization techniques and analysis tools. Prerequisites: ESI 3314 or permission of instructor.
ESI 6470 Stochastic Optimization (3). Formulating and solving decision-making models with uncertain data. Exact and approximation techniques for large-scale stochastic models. Prerequisite: ESI 6316.
ESI 6524 Advanced Industrial Systems Simulation (3). Advanced simulation techniques with a focus on practical systems modeling using several user-oriented simulation languages. Projects involving design of high-performance simulation programs are required. Prerequisite: ESI 5522 or equivalent. (S)
ESI 6528 Advanced Topics in Simulation Modeling (3). An examination of the role of artificial intelligence, object oriented programming, and databases as enabling technologies in the simulation modeling process. Review of the literature and case studies. Prerequisites: ESI 6524 or equivalent.
ESI 6546 Network Flow Analysis (3). Deterministic and stochastic network flow analysis; minimal cost flow, shortest route, max-flow, and out-of-kilter algorithms; constrained network analysis; and stochastic queuing networks. Prerequisite: ESI 3314.
ESI 6547 Stochastic Models of Industrial Systems (3). Applications of models from gaming, decisions analysis, queueing, inventory and scheduling to assess the performance level of industrial systems operating under random conditions. Prerequisite: ESI 6316.
ESI 6601 Data Warehousing and Mining (3). Knowledge discovery for effective design of data storage. Discussion of the difficulties associated with data warehousing and mining. Literature review and case studies.

## Research, Development and Training Centers

## Advanced Materials Engineering Research Institute (AMERI)

Chunlei (Peggy) Wang, Interim Director and Associate Professor, Mechanical and Materials Engineering

The Advanced Materials Engineering Research Institute provides an open access equipment infrastructure to support materials research and engineering over a broad range of technology and capabilities. The Institute provides analytical instrumentation, materials characterization, and process development laboratories to support faculty and industry in the development and characterization of new materials over the continuum from the nanoscale to bulk materials.

The Analytical Instrumentation Laboratory contains two field emission scanning electron microscope (FESEM), a 200 kev Transmission Electron Microscope (TEM), Atomic Force Microscope (AFM), X-ray diffraction, thermal (DSC, TGA, DMA, dilatometer flush diffusion, and mechanical testing (uniaxial/biaxial Instron). Process Development laboratories for ceramic processing (sol-gel, tape casting,
milling), and thermal processing (air, vacuum, hydrogen, controlled atmosphere furnaces) are available to support faculty and student researchers.

The Institute consists of the Motorola Nanofabrication Facility which is supported by a class 100 clean room and nanofabrication capabilities including e-beam lithography and optical photolithography. Fabrication of nano/micro electromechanical systems (N/MENS) can be accomplished by a combination of nanolithography, focused ion beam (FIB) micro machining, nano imprinting, reactive ion etching, and thin film deposition by a variety of techniques (e-beam, sputtering, filament evaporation, cvd).

In addition to supporting research within the graduate program in materials science within the Department of Mechanical and Materials Engineering, the Institute supports faculty across all departments (physics, chemistry, geology, biology, electrical and computer engineering and biomedical engineering) in materials based research.

## Research and Support Staff

Chunlei (Peggy) Wang, Interim Director and Associate Professor, Mechanical and Materials Engineering
Arvind Agarwal, Professor, Mechanical and Materials Engineering
Jiuhua Chen, Professor, Mechanical and Materials Engineering
W. Kinzy Jones, Professor, Mechanical and Materials Engineering
Chenzhong Li, Associate Professor, Biomedical Engineering
Wenzhi Li, Associate Professor, Physics
Norman Munroe, Associate Professor, Mechanical and Materials Engineering
Surendra Saxena, Professor, Mechanical and Materials Engineering
Yuriy Vlasov, Research Engineer
Yesim Darici, Associate Professor, Physics
Watson Lees, Associate Professor, Chemistry
Kevin O'Shea, Professor, Chemistry
Neal Ricks, AMERI Manager

## Applied Research Center (ARC)

John R. Proni, Ph.D. Executive Director
David Roelant, Ph.D. Associate Director of Research for Environment \& Water
George Philippidis, Ph.D. Associate Director of Research for Energy
Jerry Miller, Associate Director of Security, Policy and Technologies
Richard Burton, PMP Associate Director of Business Programs
Gloria Dingeldein, Associate Director of Grants
Leonel Lagos, Ph.D., PMP Director of Diversity and Workforce Development \& Training

ARC's mission is to solve complex issues in environmental stewardship, energy, and defense through innovative, cooperative research and entrepreneurship. In carrying out this mission, the Applied Research Center is committed to providing training opportunities to the University's uniquely diverse student body under the mentorship of the Center's experienced engineers and scientists.

ARC's vision is to be a leading university-based, applied research institution that provides real-world solutions throughout the Americas and globally that will enable Florida International University to become a leading research institution with well funded programs.
Environment \& Water - ARC provides a full spectrum applied environmental and water research. With over 260 projects and $\$ 90 \mathrm{M}$ of funding in this area since the Center's founding in 1995, ARC is a nationally recognized leader. Examples of science research include: development and testing of remediation technologies to stabilize toxic metal contaminants in soils; new analytical methods for perchlorate measurements in fish tissue; and the modeling of the energy-dependent, absorption and transmission of infrared light through human tissues for safety standards and for new medical imaging technologies. In technology development ARC has developed patents and other intellectual property such as: automated monitoring systems for sampling ground and surface water as well as abandoned buildings contaminated with radioactivity; novel new sensors for contaminants in soils and groundwater (e.g., Hg and U ); improved scabbling systems for removing surface contamination from floors, walls and large bore piping; sensor systems for UGVs and UAVs; and much more. $A R C$ is the one of only three major environmental technology test and evaluation centers in the U.S. ARC has tested over 250 new, commercial technologies in order to assess and improve their effectiveness prior to deployment across the country. Several States including Texas have implemented ARC's rigorous environmental technology testing methodology. ARC is a leading university research program in waste management and pollution prevention, with \$1-2M per year of funding and has certification in hazardous waste management. ARC currently assists DOE in the cleanup of the Nuclear Weapons Complex by developing technologies to remediate contaminated soil and groundwater plumes; technologies to clean and dismantle contaminated nuclear facilities; and those to characterize, retrieve and treat radioactive and mixed wastes. Water research focuses on advanced groundwater and surface water modeling for clients worldwide including contaminated sites across the U.S. such as the Everglades. 1000 students to date have had "hands on" research mentoring and training at ARC in the water and environmental area. In collaboration with ARC's Security, Policy and Technologies scientists ARC has supported the U.S. Army by developing, fabricating and demonstrating several environmental technologies across Latin America (e.g., wetlands design and construction, mobile water purification systems). More on ARC's Environmental and Water research can be found at www.arc.fiu.edu/environment\&water.
Renewable Energy and Biofuels - The country's overdependence on imported oil and increasing concern about global warming necessitate the development of domestic renewable energy and fuel sources and the adoption of energy efficiency and conservation steps. In light of the country's urgent need for enhanced energy security and reduced greenhouse gas emissions, ARC is developing technologies covering the full spectrum of sustainable energy resources from solar and wind to biomass, biofuels, and fuel cell systems. Capitalizing on the national emphasis on clean and renewable energy, ARC has enhanced its research and technology development activities in various energy fields and has created an
affiliate center, the Center for Energy and Technology of the Americas (CETA) to promote energy integration and technology transfer within the Western Hemisphere. ARC is developing technologies for production of sustainable biofuels: (1) Ethanol from cellulosic biomass, such as sugarcane bagasse and wood waste, using biochemical and thermochemical processes, and (2) Biodiesel from non-edible oils (jatropha) and from native algae. In the areas of hydrogen and fuels cells, ARC investigates the production of hydrogen from biomass via gasification and biologically by microorganisms, while looking for ways to manufacture cost-competitive high temperature PEM fuel cells. ARC possesses pilot-scale facilities for biomass gasification and biodiesel production, which serve the needs of the public and private sectors for testing and demonstrating new technologies. Moreover, in collaboration with FIU's Business School, the ARC has formed the Energy Business Forum (EBF), which promotes the development on new energy markets and their integration into the existing fossil energy infrastructure. The EBF has been organizing stakeholder conferences to facilitate dialogue, exchange of ideas and partnerships.
Security, Policy and Technologies - ARC conducts advanced research in security policy; renewable energy technologies and other security/defense technologies. ARC's scientist and engineers conduct a variety of research work applicable for the DOD, DHS and other private entities involved in security and defense issues. ARC's researchers have linguistic and cultural skills needed to implement solutions in the field. Our mission is to solve international problems in the field through integration of technology and policy development in three areas-Applied Technologies, Security and Stability Studies, and Security Technologies.
Applied Technologies focuses on researching, demonstrating, validating and implementing renewable energy and environmental technologies in the field in order to develop sustainable solutions in the following areas: 1) Rural electrification, 2) Biomass gasification for thermal and electrical energy production, 3) Constructed wetlands as a treatment for waste water, 4) Solar-power and solarpowered water purification systems, 5) Micro-hydro electric generation, 6) Bio-fuels production and use ("field to fuel") and 7) International Waste-to-Energy solutions. Security and Stability Studies addresses security and policy research throughout Latin America and the Caribbean. Using a "network of experts approach", a multidisciplinary group of collaborative experts from more than 30 universities throughout the hemisphere, focus on emerging security threats throughout the world. ARC sponsors colloquia, conferences and research on stability and security issues, and delivers analytical reports that combine economic, geopolitical, social and scientific analysis, as well as recommendations to our clients.
Security Technologies (formerly Defense Technologies) is an expanding area of research that includes research in development and implementation of security technologies in the fields of acoustic systems, sensor systems, mobile platform robotics, artificial intelligence and information technology, detection systems, advanced power systems for remote sensors and development/applications of UAVs. During the past three years, the Center has conducted research on twelve projects with an overall value of more than $\$ 4 \mathrm{M}$. Clients such as AFOSR, AFRL, ARO, MDA, DARPA, and NRO have partnered with ARC
on research, which includes: integration of sensors and imaging systems into autonomous monitoring technologies, such as remote ground stations and unmanned aerial vehicles (UAVs) and unmanned ground vehicles (UGVs); Computational Fluid Dynamics analyses and experimental research for micro-channel nozzle flow for space vehicle thrusters, hypersonic flow for Scramjets, model verification of ice formation on wings, and microchannel cooling of electronic components; and numerical simulation of micro-bubble drag reduction for applications in naval ships and submarines.
Workforce Development and Training - The DOE-FIU Science and Technology Workforce Development program is an innovative program to create a "pipeline" of FIU STEM (science, technology, engineering, and math) underrepresented students specifically trained and mentored to enter the DOE workforce in technical areas of need. The main objective of the program is to provide a unique integration of FIU course work, DOE field work, and "hands on" training and mentoring at ARC. It is envisioned that once our DOE Fellows graduate from this program they will enter DOE-EM's Professional Development Corps Program and/or work for DOE's contractor firms. To date, a total of 33 FIU underrepresented students have joined the program. The students are officially inducted into the program and vested the name of DOE Fellows in a special Induction Ceremony celebrated during the Fall semester. DOE Fellows also have internship opportunities at DOE National Laboratories and DOE sites around the country. Since the program's initiation in 2007, a total of 14 DOE Fellows have participated in research internships at Oak Ridge National Laboratory, Idaho National Laboratory, Pacific Northwest National Laboratory, and DOE-HQ in Washington DC. In addition, our DOE Fellows directly support DOE contractors performing environmental remediation around the DOE Complex. Furthermore, this program enables undergraduate students to pursue the M.S. and Ph.D. degrees by providing Research Assistantships. So far, a total of 10 DOE Fellows have obtained B.S. degrees and have transitioned to M.S. programs at FIU.

ARC is committed to the education and development of FIU students and has developed a Student Steering Committee (SSC) that oversees the academic and research progress of each student. This committee also conducts interviews and evaluates applicants for the program. ARC is working closely with federal, state agencies, community colleges and other universities to provide training in alternative energy areas such as: solar, biomass, nuclear and weathering. This Energy Systems Training Network under the Florida Energy Systems Consortium (FESC) will help to develop a 21st century "green workforce".
Doing Business with the Applied Research Center ARC's employees are drawn from a wide segment of the commercial, government, and academic arenas to collectively utilize their experience and expertise to support the needs of FIU's clients. Our operating philosophy recognizes and accommodates the critical performance characteristics of government and commercial activities, while exercising the benefit of its cost structure in a way that serves both client interests and those of the University and its students. Our staff is fully engaged in the project and program activities assigned. The critical difference in the ARC's structure is the project
management and administrative processes and structures that have been put in place to serve its clients. The Center has executed work for federal agencies, state and local governments, and commercial entities, in large part through task-based contracts. For instance, in working with the U.S. Department of Defense, the Center has acted as both the prime contractor and as a subcontractor/consultant for commercial partners, serving to streamline the process. For more information on FIU's ARC, please visit www.arc.fiu.edu or email us at arc@arc.fiu.edu or call (305) 348-4238.

## Bioinformatics Research Center (BioRG)

## Giri Narasimhan, Director and Professor, School of Computing and Information Sciences

The mission of this research group is to work on problems from the fields of Bioinformatics and Biotechnology. The group's research projects includes Pattern Discovery in sequences and structures, micro-array data analysis, primer design, probe design, phylogenetic analysis, image processing, image analysis, and more. The group builds on tools and techniques from Algorithms, Data Mining, Computational Statistics, Neural Networks, and Image Processing.

## Center for Advanced Distributed Systems Engineering

## Xudong He, Director and Professor, School of Computing and Information Sciences

Another of our research efforts is the Center for Advanced Distributed System Engineering (CADSE). Its mission is to establish a streamlined research, technology exploration and advanced training program in the field of distributed and Internet-based computing. The Center's R\&D cover both theoretical and practical aspects of distributed software engineering, i.e. using engineering methods and technologies to tackle development problems of complex, reliable, and/or real-time distributed systems.

## Center for Advanced Technology and Education (CATE)

Malek Adjouadi, Director and Associate Professor, Joint Appointment with Biomedical Engineering and Electrical and Computer Engineering

The vision of the NSF-CATE center at FIU is to foster a cross-disciplinary research and educational program as a catalyst for our undergraduates and graduates alike to develop their creative thinking by bringing in synergy the fields of applied information (signal and image) processing, neuroscience and assitive technology research. The CATE center focuses on new methodologies that (1) will enhance analysis and interpretation of signals and images in real-world applications; (2) will meet the impending needs in neuroscience as we elicit both the functional mapping of the brain, and the causality of key brain disorders; and (3) will result in new Human-Computer Interface ( HCl ) prototypes that address effectively the issue of Universal Accessibility, focusing on visual impairment and motor
disability. Experimental results, as observed through clinical means or through system design evaluations and feasibility studies serve as means to redefine or reevaluate our theoretical premises. The strong collaboration we have secured with our industry partners generates joint programs, student internships, clinical rotations, joint faculty appointments, shared use of modern equipment and infrastructure, The overall mission of the CATE Center is thus to create a unified infrastructure to synergize imaging/signal processing research, while fostering an environment that supports cross-disciplinary initiatives in order to produce new scientific specialties relying on combinations of specific technologies, medicine, and computation. This environment as set is apt to ensure the anticipated success in meeting our students' educational needs and research goals all the way to the Ph.D. level.

## Research Areas

- Image and Signal Processing and Computer Vision
- Real-Time Assistive Systems and HumanComputer Interfaces
- Neuroscience: - EEG Brain Research and Functional Brain Mapping
- Biomedical Applications in Flow Cytometry and Confocal Microscopy
- Robotics for Motion Planning and Automated Guidance
- Parallel and Distributed Processing


## Sponsors

- National Science Foundation (NSF)
- Office of Naval Research (ONR)
- Miami Children's Hospital
- Beckman-Coulter Inc.

Faculty
Malek Adjouadi, Director and Professor, Joint Appointment with Biomedical Engineering and Electrical and Computer Engineering
Armando Barreto, Director of the Digital Signal Processing Laboratory and Associate Professor, Joint Appointment with Biomedical Engineering and Electrical and Computer Engineering
Gustavo Roig, Director, Center for Diversity in Engineering

## Research Partners

Prasanna Jayakar, Director, Neuroscience Center, Miami Children's Hospital
Arthur Karshmer, Professor and Chair, Information Technology, University of South Florida
Rafael Delgado, Executive Vice President and Director of Software Systems, Intelligent Hearing Systems, Miami
Gustavo Rey, Neuropsychologist, Miami Children's Hospital
Coordinator, Student Recruitment
Stephanie Strange, College of Engineering and Computing, Assistant Director of Recruitment and Retention

## Research and Support Staff

Mercedes Cabrerizo, Ph.D. Ware Foundation
Research Fellow
Melvin Ayala, Manager, CATE Center

Magno Guillen, Postdoctoral Fellow, MRI Research for Pediatric Epilepsy
Maria Tito, Postdoctoral Fellow, Subural EEG Research in Epilepsy
Lu Wang, Postdoctoral Fellow, Automated Book Reader for the Blind
Mouncef Lahlou, Webmaster

## Doctoral Students:

Melvin Ayala, Javier Delgado, Yu Chen, Mohamed Gorawala, Ana Guzman, Mouncef Lahlou, Jin Wang, You Xiaozhen, Mildred Zabawa, Mark Rossman, Feng Gui

## Master's Students:

Anas Salah Eddin, Gabriel Lizarraga

## Industry Partners

- The Brain Institute Miami Children's Hospital
- The Ware Foundation
- Beckman-Coulter Inc.
- Intelligent Hearing Systems
- American Epilepsy Society
- Children's National Medical Center


## Related Laboratories and Facilities of the CATE Infrastructure

With major funding from the National Science Foundation and the Office of Naval Research, the CATE center has helped establish the following laboratories:

1. EEG Brain Research Laboratory. Funded by NSFMRI - Housed within the Neuroscience Center at Miami Children's Hospital.
2. Web-Design Laboratory. Funded jointly by ONR and NSF-MII - Housed within the Engineering Information Center Facility.
3. The Computer Training Laboratory - Housed in Graham Center with the Office of Multicultural Services.

## Center for Diversity in Engineering and Computing

Masoud Milani, Director and Professor, School of Computing and Information Sciences
Francisco Fins, Program Coordinator
Jorge Nosti, Program Coordinator
Beatriz Oria, Program Specialist
Rebecca Ramos, Program Coordinator
Katina Vallina, Program Specialist
South Florida's distinction as a multi-cultured, multi-lingual region has long been a diverse source of talent for FIU, particularly in the College of Engineering and Computing. In response to the challenge of attracting this diverse community to science and engineering, the College of Engineering and Computing has created a special center for Diversity in Engineering and Computing.

By building sound foundations in sciences and mathematics, the Center helps to prepare young students to deal with the rigors of higher-level education, and Engineering and Computing in particular. Currently the Center has several on-going programs as a service to the community and the University:

## Florida Action for Minorities in Engineering (FLAME)

This is a cooperative program between Miami Coral Park Senior High School and Florida International University aimed at introducing the profession of engineering to high
school students, and to identify, select, enroll and retain minority students in the engineering field. Senior High School students also registered for dual enrollment classes at FIU.

## Florida/Georgia Louis Stokes Alliance for Minority Participation (FGLSAMP)

This is a National Science Foundation funded program in association with Florida Agricultural and Mechanical University (FAMU), the leading institution. This program focuses on engineering, math chemistry, biology, physics, and computer science undergraduate students. Participants receive scholarships, during the entire academic year based on high GPA and being a full time student. Opportunities for summer internships are available.
Junior Engineering Technical Society (JETS) (TEAMS) The JETS Test of Engineering Aptitude, Mathematics and Science (TEAMS) is an academic problem-solving competition, that serves all public and private high schools within our geographical area with focus on a one day activity at Florida International University.

## (UNITE)

A collaborative effort between Florida International University, the U.S. Army, and the Junior Engineering Technical Society. The JETS UNITE Program's goal is to increase the number of underrepresented students in the field of engineering, to improve the performance of the students in their SAT/ACT exams, develop resourceful, self-motivated well rounded graduates who will be responsible and well adjusted citizens.
ENLACE/MIAMI The Children Trust, this program is funded by The Children Trust and provide after school and summer programs for 650 children (ages 7-17) residing in the Sweetwater, Doral and West Kendall areas. The after school program will offer literacy support through individualized software-based reading intervention, social skills development, and health fitness education. The summer program will offer students the unique opportunity to attend classes on a university campus.

## GEAR UP Homestead

The GEAR UP Homestead project assists a maximum number of students living within the Homestead area achieve a college career, while implementing a selfsustaining system to continuously duplicate the process. Homestead Florida is faced with serious issues that require assistance from other communities, such as poverty, lack of jobs, and problems related to disadvantaged societies. Fortunately, with the development of the GEAR UP Homestead Partnership Plan as well as the aide to public, private and governmental institutions, the targeted cohort students of the Homestead area will be able to reach their maximum potential through a college education. Partners such as the US Department of Education will supply a vast portion of the resources needed to perform this project. Aspira, a non-profit organization, is dedicated to creating leadership through education for those who are disenfranchised, or socially and economically disadvantaged. Another important team player is the Non-Violence Program of Miami, contributing the idea that knowledge is the best weapon against violence, and motivating young people to engage in positive action to make our communities safer.

The GEAR UP project is made of several components that contribute to a wider reach into insuring that a maximum result is gained by everyone involved. Among
these components are in-school tutoring and assistance programs. The Summer Enrichment Program offers an alternative way of spending those long summer days. The teacher training Development Program, as well as PRISM (Program of Industry Supported Mentorship's) enrich teachers with the right preparation to confront all kinds of situations. Perhaps the most important aspect that will contribute to the outcome of the child is the parental influence and family involvement into their success. In a fast-paced and demanding society, this is often a difficult threshold to cross. Parent Involvement Program (PIP) encourages parents to have a positive active role in their child's every day awareness of the future. Education begins in the home and ends in the child's decision to instill a safe and productive future. The powerful drive needed to assist the process of growth and awareness is the very reason for the existence of programs such as GEAR UP.

The mission of the partnership addresses the needs of the student by bringing the necessary awareness and readiness for a successful college education. To succeed such advancement, GEAR UP has established a mission, goals, objectives and outcomes that will serve as the foundation for a successful program. The dedication of the partnership as well as a Vision Statement that clearly unifies the community to serve its future provides an inspiration: that the education of today paves the road towards tomorrow's success.

## Center of Emerging Technology for Advanced Information Processing and High-Confidence Systems (CREST)

Naphtali Rishe, Director and Professor, School of Computing and Information Sciences

The CREST center focuses on the following research areas: High-confidence reactive software systems, multidimensional-multimodal data modeling and query research, assistive technology research based on the design and development of real-time assistive systems, and advanced information processing with neuroscience applications. This multidisciplinary research and educational center serves as a resource for the education of underrepresented minority students as well as a driving force to increase diversity in graduate education, especially at the Ph.D. level in computer science and engineering.

## Center for the Study of Matters at Extreme Conditions (CeSMEC)

Surendra Saxena, Director and Professor, Mechanical and Materials Engineering
Jiuhua Chen, Deputy Director and Professor, Mechanical and Materials Engineering
Yu Zhong, Assistant Professor, Mechanical and Materials Engineering
Andriy Durygin, Research Coordinator
Vadym Drozd, Research Assistant Professor
Selva Venilla Raju, Research Assistant Professor
CeSMEC's mission is to study the behavior of materials at high pressures and temperatures. The range of research activities includes the study of planetary interiors and of
matter at extreme industrial conditions. CeSMEC is one of few facilities in the country where pressures are created to many million atmospheres and temperatures to several thousand degrees; the material is studied under such condition with x-ray and electroscopic techniques.

All materials are subject to three fundamental variables - the variables of temperatures, chemical composition, and pressure. Modern science has vigorously used only the first two variables in exploring nature and creating several amenities of modern civilization. Pressure, the third fundamental variable altering all states of matter, has been for years a relatively minor esoteric subfield. The creation of this center is providing FIU's graduate students and faculty the opportunity to perform fundamental and applied research in high-pressure physics, high-pressure chemistry, and materials science. The center is raising the infrastructure at FIU to the level required to initiate world-class research in an emerging area of science and engineering.
With recent additions of a Hydrogen-Storage Materials Research Facility and a large volume high pressure-high temperature equipment, researchers can perform synthesis of novel materials for a variety of industrial applications.

## Distributed Multimedia Information Systems Laboratory

Shu-Ching Chen, Director and Professor, School of
Computing and Information Sciences
The mission of the Distributed Multimedia Information System Laboratory (DMIS) is to conduct leading edge research in multimedia database systems, data mining, networking and wireless, GIS and Intelligent Transportation Systems. Other research areas of this effort include Multimedia Communications and Networking, Digital Library, 3D Animation, and Distributed Computing.

## Division of Corporate and External Programs

Caesar Abi Shdid, Director and Senior Instructor, Civil and Environmental Engineering

The Division of External Programs (DEP) develops, promotes and manages academic programs offered under the rubric of Executive Engineering Education, Continuing Education, and Distance Learning in the College of Engineering and Computing.

The DEP is managed by a director reporting to the Dean of Engineering \& Computing. The director and staff of the DEP work with department chairs, center directors and faculty members to identify corporate and global partners; develop, promote and manage Executive Engineering Programs; weekend graduate programs for professional, Distance Learning Programs, and Continuing Education Programs; and identify new opportunities and new markets for all programs that are offered by the College of Engineering and Computing. Various categories of programs in which the DEP is involved include the following:

## Overseas Programs

The overseas programs focus on the demonstrated education and training needs of selected industrial sector(s) in the host country. These programs are offered in collaboration with a sponsor which is a reputed university or institution that can support the delivery of the program by providing appropriate infrastructure facilities like classrooms, library and computer laboratories. The programs are designed in consultation with the faculty of the sponsor and the industry representatives in the host country. The goal of the overseas programs is to complement the existing academic programs offered by the sponsoring institution.

## Overseas Programs

- Corporate Programs
- Certificate Programs
- Weekend Graduate Programs
- International Student Transfer Programs

The international student transfer program (Dual Degree and Articulation Programs) allows undergraduate students from foreign universities to complete approximately $75 \%$ of their curriculum at home institution and the remaining $25 \%$ at FIU, and receive their undergraduate degree from both institutions. An articulation agreement ascertains the student's ability to transfer courses taken at home institution to FIU such that FIU's core curriculum and other undergraduate program requirements are met.

All participants in the program proceed as a cohort through a lock-step curriculum of the selected courses. The local faculty from the host country is also involved in teaching to enrich the program by integrating the economic, cultural, social, political and legal issues of the host country in the curriculum.

The international student transfer program (Faculty Development Program) allows the foreign universities, mostly in Latin America, to send their MS degree recipient faculty member to complete their PhD education at FIU. These students complete their coursework and dissertations proposals at FIU and then return to their home institutions where they complete their dissertation work. Agreements between the two universities allow for a lot of assistance to the student's while they are working on their dissertation.

## Corporate and Executive Programs

The Corporate Programs are designed for an individual corporation leading to an academic degree, certificate or short-term executive development program. The programs are delivered on site and the program delivery is supported by providing infrastructure facilities. Corporate programs are designed to meet the specific educational and training needs of the corporate clients. Currently, we offer the following engineering certificate programs: "Lean Six Sigma", "Six Sigma Green Belt", "Six Sigma Black Belt", "ISO 9001", and "Supply Chain Management" certification program every semester.

## Continuing Education Programs

The Continuing Education Programs are designed to meet the licensing and certification needs of individual professionals in the engineering and construction fields. The programs are delivered at various locations around Florida and online. The Continuing Education Programs can be conducted on site for companies. Currently, we
offer the following continuing education programs: "FDOT Construction Training and Qualification Program (CTQP)", "FDOT Maintenance of Traffic in Construction Zones (MOT)", "Professional Engineering (PE) Licensing Exam Review Courses for the NCEES PE Civil, PE Mechanical, PE Electrical (Power), and PE Structural exams", "Fundamentals of Engineering Exam (FE) Review Course", "Florida General Contractor's Exam (GC) Review Course", "OSHA Training Certification Courses", "LEED Exam Prep Course", "Florida Laws and Rules Seminars", and "Continuing Education Seminars (for PEs and GCs)".

## Weekend Graduate Programs for Professionals

DEP offers professionals in South Florida the ability to complete their master degrees in an accelerated one-year program that is conveniently offered on Saturdays in Broward County and the Miami downtown area. These programs are specifically designed for working professionals who aspire to a graduate degree without interrupting their careers. DEP currently offers a Professional MS Engineering Management and a Professional MS Construction Management degree programs in this lock-step format.

## Distance Learning Programs

The Florida Engineering Education Delivery System (FEEDS) is a statewide distance learning system providing access to graduate and undergraduate level engineering courses and programs to individual students anywhere and anytime, whether it is at home or the workplace. Courses are delivered through streaming video over the Internet; and fully on-line.

FEEDS offers engineering students and professionals with work and family responsibilities the flexibility to take courses around their busy schedules. It also provides convenience to those who are not within driving distance of an academic institution. It allows them to continue their professional development, which plays an important role in the growth of high technology industries.

Currently, students can select the necessary courses from FIU via distance learning to obtain a Master's degree in Civil Engineering, Environmental Engineering, and Construction Management. Selected undergraduate courses are also available for the following undergraduate degree programs: Civil Engineering, Construction Management, Environmental Engineering, Mechanical Engineering, Electrical Engineering, and Computer Science.

A student taking a course through FEEDS must meet the same requirements as the student on campus and will earn the same credit as if he/she were to attend classes on campus. A student need not be enrolled in a graduate or undergraduate degree program in order to take a course. However, a non-degree seeking student who intends to seek admission to a program should be aware that no more than twelve (12) graduate or fifteen (15) undergraduate credits are allowed to be transferred into a program.

## Engineering Information Center (EIC)

Hernan Bormey, Director
Create a technology that will help save lives or create your own website, simulate an electronic circuit, design a
bridge, or just browse the Internet. The possibilities are endless at Engineering Information Center.

EIC helps faculty, scientists, researchers, and students to conduct cutting edge research and work on system designs, networking, scientific visualization, 3D Modeling, simulations, virtual reality, computer animation, and other computer and software applications.

The Center manages an array of Novell, Windows, and UNIX network servers that provide faculty, staff and students with the capacity to share valuable resources; therefore, fostering an atmosphere where collaboration and instruction grow with a synergy that is unique. Beyond the college community, EIC participates in sponsoring special outreach programs for the Miami-Dade County Public Schools by exposing young minds to latest technologies.

EIC is also home to The Graphic Simulation Laboratory with focus on Scientific Visualization, 3D Computer Modeling, and Virtual Reality, which have helped researchers to develop a wide array of technologies, strategies, and information designs. GSL has collaborated with NASA, The Center for Super Computing Applications, National Science Foundation, Computational Science Institute, Shodor Organization, Macromedia, and Kellogg Foundation, just to mention a few. From hardware to software support to 3D modeling of a heart valve, EIC delivers exceptional services with a personal touch.

## Engineering Manufacturing Center (EMC)

Ibrahim Tansel, Interim Chairperson, Director and
Professor, Mechanical and Materials Engineering
Mario Sanchez, Senior Engineer and Manager
Richard Zicarelli, Coordinator
The Engineering Manufacturing Center provides technical expertise in manufacturing to anyone in need of assistance. Typically the Center supports researchers, graduate and undergraduate students with projects requiring high-precision quality fabrication and requiring expert technical guidance. Undergraduate engineering students represent the largest group served. Students of all academic departments benefit directly through help with class projects, such as Senior Design (capstone) courses, critical components of all ABET accredited Engineering programs in the College. Other major undergraduate projects supported include the Mini-Baja, Mini-Submarine and Robot Competitions. Graduate students regularly request fabrication assistance with experimental devices, tools and fixtures. The Center's main facility supports the College's academic departments' general fabrication needs, including equipment repair, assembly, fixturing, installation, etc. An auxiliary EMC-supervised machine shop is available for student hands-on project work.

The Center also provides technical services to the outside community such as entrepreneurial consulting in product design and development and sub-contract fabrication work. Companies served by the EMC range from entrepreneurial to the well-established, some of which include aerospace, automotive, marine, medical and consumer product manufacturers. The Center runs state-of-the-art CAD/CAM software and operates a diverse array of rapid prototyping equipment combined with CNC
capabilities providing a wide variety of fabrication processes. In addition, the Center can perform inspection, measurement and reverse engineering capabilities through its automated measurement equipment.

For more information, contact the EMC by calling Mr. Richard Zicarelli (305) 348-6557 or Mr. Mario Sanchez (sanchem@fiu.edu), or refer to the center's website at http://www.eng.fiu.edu/emc/.

## Eugenio Pino and Family Global Entrepreneurship Center

Jerry Haar, Executive Director

The Eugenio Pino and Family Global Entrepreneurship Center, founded in 2003 in the College of Business at Florida International University, fosters entrepreneurship throughout South Florida and internationally. The Pino Center provides the FIU and local communities with the knowledge and networks that enable them to reach their entrepreneurial objectives of designing, launching and nurturing successful new ventures and assisting established innovative enterprises in moving to the next level. Activities include: workshops and webinars, a business plan competition, a yearly conference on venture capital in the Americas, a venture mentor service, and a publication series, including working papers. Student and faculty in the Department of Management and International Business, as well as other departments and other schools and colleges within the University, are invited to participate in the programs and activities of the Pino Entrepreneurship Center. For more information, visit www.entrepreneurship.fiu.edu.

## High Performance Database Research Center

Naphtali Rishe, Director and Professor, School of Computing and Information Sciences
One of our research efforts is the High-Performance Database Research Center (HPDRC). HPDRC conducts research on such theoretical and applied issues as Internet-distributed heterogeneous databases, database design methodologies, database design tools, information analysis, multi-media databases, database languages, data compression, spatial databases, and data visualization. The Center also designs specific database systems for highly complex applications.

## International Hurricane Research Center (IHRC)

Stephen P. Leatherman, Director
Kegi Zhang, Laboratory for Coastal Research, CoDirector
Shahid Hamid, Laboratory for Insurance, Financial and Economic Research, Director
Arindam Chowdhury, Laboratory for Wind Engineering Research, Director, and Associate Professor, Civil and Environmental Engineering
Dario Moreno, Laboratory for Social Science Research, Director

Florida International University's International Hurricane Center has officially changed its name to the International

Hurricane Research Center (IHRC). The change was made to better reflect the Center's research initiatives.
Serving the state of Florida, the IHRC is a Type I interdisciplinary research center focused on the mitigation of hurricane damage to people, the economy, and the built and natural environments. This designation makes the IHRC Florida's official hurricane research center for 11 universities comprising the state university system.

The citizens of the U.S. East and Gulf Coasts and Caribbean Islands are severely impacted by hurricanes, and IHRC promotes an interdisciplinary, large-scale disaster research agenda to address this vulnerability. Disciplines such as architecture, business, economics, engineering, finance, geosciences, insurance, political science, sociology, and urban planning are involved in a long-term, integrated research program that helps Florida, the nation, and its regional neighbors to mitigate hurricane exposure.

The Center developed as a result of a public-private partnership between the We Will Rebuild Foundation, an organization formed to spearhead the rebuilding of Dade County in 1992 after Hurricane Andrew, and FIU. The IHRC works in conjunction with the National Hurricane Center, which is also located at the FIU Modesto A. Maidique Campus in West Miami-Dade.

## Lehman Center for Transportation Research (LCTR)

L. David Shen, P.E., T.E. Director and Professor, Civil and Environmental Engineering
Sylvan C. Jolibois, Jr., Deputy Director and Associate Professor, Civil and Environmental Engineering
Albert Gan, Deputy Director and Associate Professor, Civil and Environmental Engineering

## Favian Cevallos, Transit Program Director

The Lehman Center for Transportation Research (LCTR) at Florida International University was established in 1993 in honor of Congressman Bill Lehman and his tireless efforts to make South Florida a better place for all of us. The center's vision is to become a 'state-of-the-art' transportation research and training facility. LCTR is committed to serve and benefit our society by conducting research to improve mobility, hence the quality of life issues, develop partnerships in the transportation industry, and educate a multidisciplinary workforce to plan, manage and implement transportation systems.

Faculty, staff and students at LCTR are involved in research related to the planning, design, operation and maintenance of transportation systems, including intelligent transportation systems, public transportation, highway transportation, aviation, and freight; as well as public policy, air pollution, and the application of geographic information systems and other advanced technologies such as artificial neural networks and scientific visualization in transportation. Future plans include networking with the public and private industry to collaborate on transportation related research. In addition, applied research will be conducted on, but not limited to intelligent vehicle and highway systems.

# Motorola Nanofabrication Research Facility 

Chunlei (Peggy) Wang, Interim Director and Associate
Professor, Mechanical and Materials Engineering Neal Ricks, Lab Manager

The first centralized facility of its kind in Florida, the Motorola Nanofabrication Research Facility is an openaccess initiative in support of nano-scale devices, systems and materials research that encompasses a broad range of technologies and capabilities. The facility provides nanofabrication, analytical instrumentation, materials characterization and process-development laboratories for students, faculty and industrial researchers. This \$15 million Research Facility is an integral part of the Advanced Materials Engineering Research Institute (AMERI), FIU's broader materials research program.

Harnessing the synergy inherent in the study and development of nanoscale technologies, the facility boasts:

- Specialized equipment required to develop new and novel fabrication techniques unique to the creation of functional materials and devices that are no greater than 100 nanometers ( 1,000 times smaller than the diameter of a human hair);
- A full complement of standard semiconductor processing equipment to leverage the capabilities of robust and proven techniques; and
- State-of-the-art analytical tools to study, and characterize these nano-sized devices, as well as the materials and processes used to make them.
The Nanotechnology Faculty Team
Chunlei (Peggy) Wang, Interim Director and Associate
Professor, Mechanical and Materials Engineering
Arvind Agarwal, Professor, Mechanical and Materials Engineering
George Dulikravich, Professor, Mechanical and Materials Engineering
W. Kinzy Jones, Professor, Mechanical and Materials Engineering
Grover Larkins, Professor, Electrical and Computer Engineering
Watson Lees, Associate Professor, Chemistry
Chenzhong Li, Associate Professor, Biomedical Engineering
Wenzhi Li, Associate Professor, Physics
Anthony McGoron, Associate Professor, Biomedical Engineering
Surendra Saxena, Professor, Mechanical and Materials Engineering
Frank Urban, Associate Professor, Electrical and Computer Engineering
Yuriy Vlasov, Research Engineer


## Structures and Construction Laboratory

Amir Mirmiran, Director<br>Nakin Suksawang, Deputy Director<br>Edgar Polo, Lab Manager

Structures and Construction Laboratory (SCL) is established to provide hands-on educational experience for students; to research and development of innovative hurricane-resistant and durable construction materials,
structural systems and components; to serve the construction industry; to contribute to the engineering community in South Florida, and to advance the safety, durability, and economy of our civil infrastructure.

The Structures and Construction Laboratory was built through the help of a consortium of 21 industry partners who donated materials, services, and cash in excess of $\$ 250,000$. It is one of the largest facilities in the State of Florida and is equipped with a full-scale structural testing system (FSST). The FSST consists of a 15 ft tall testing frame that stands above a $35 \mathrm{ft} \times 65 \mathrm{ft}$ strong concrete floor with 4 ft thickness and 100,000 lbs capacity tiedowns on a $3 \mathrm{ft} \times 6 \mathrm{ft}$ pattern. The steel frame is capable of testing full-scale structural members, such as a 65 ft bridge girder. The applied load is replicated using a fatigue rated tension/compression actuator that is capable of performing cyclic loading. In addition to the FSST, the SCL is also equipped with other material testing systems, including a universal testing machine, compression machine, and small-scale load frames.

## Telecommunications and Information Technology Institute

Niki Pissinou, Director and Professor, School of Computing and Information Sciences

Florida International University (FIU) recognizes the need to nurture highly trained personnel for the nation's industry and business, develop research to support the rapidly expanding high-tech industry and become proactive in technology transfer. Thus, ensuring continued economic growth and prosperity in the region. In order to fully meet today's technological demands, FIU has established the Telecommunications and Information Technology Institute $\left(I T^{2}\right)$. $\mathrm{T}^{2}$ promotes advanced multidisciplinary education and research focused on telecommunications and information technologies. $1 T^{2}$ 's mission is to:

1. Deliver high quality telecommunications and information technology education and training.
2. Conduct and promote research to enhance Florida's role as a leader in telecommunications and information technology.
3. Offer training that is needed to foster business development and workforce preparedness.
4. Promote technology transfer to enhance the enabling technologies of the telecommunication and information technology industries.
In fulfilling its mission, IT $^{2}$ promotes multidisciplinary collaboration and serves as the catalyst to promote intellectual cross-fertilization among disciplines. This effort results in the synergistic enhancement of teaching and research, so critical in the telecommunications and information technology fields, where disciplinary barriers are falling and lines are blurred. An objective of the Institute is to infuse telecommunications and information technology content into the curriculum at all appropriate levels. To fill the urgent demand of industry, the institute is developing interdisciplinary telecommunication programs that provide certificate programs, Bachelors, Masters and Ph.D. degrees.

IT ${ }^{2}$ constitutes an infrastructure that is viable for cutting edge research activities. Researchers at the institute conduct funded research and development targeted at solving complex problems conducive to the early
identification of high impact opportunities. Of particular importance to the institute's research efforts is the emerging global wireless, optical and personal communications infrastructure and the ability to represent, store and access information to perform a variety of information related tasks. To provide an effective forum for original research results and to foster communication among researchers, industry leaders can collaborate on education, training, and re-engineering the telecommunications workforce of the future. The alliance provides effective ways to educate the workforce of the 21st century. In accordance, the institute provides technical assistance and applied research services to transfer acquired knowledge and technologies to the commercial sector. The IT ${ }^{2}$ team can work with industrial organizations to tap into some technological innovations that drive the industry to its strategic advantage.

For more information, contact Dr. Niki Pissinou, the director of the Telecommunications and Information Technology Institute, at (305) 348-3987 or visit our Website at www.it2.fiu.edu.

## Core Faculty

Niki Pissinou, Director and Professor
Deng Pan, Associate Professor

## Affiliated and Research Faculty

Kang Yen, Professor, Electrical and Computer Engineering

Jean Andrian, Associate Professor, Electrical and Computer Engineering
Shih-Ming Lee, Associate Professor, Engineering Management Program
Osama Mohammed, Professor, Electrical and
Computer Engineering

## School of Computing and Information Sciences

S. S. Iyengar, Ryder Professor and Director

Antonio Bajuelos, Instructor
Toby S. Berk, Professor Emeritus
Rick Blazek, Instructor
J. Leonardo Bobadilla, Assistant Professor

Bogdan Carbunar, Assistant Professor
Maria C. Charters, Instructor
Shu-Ching Chen, Eminent Scholar Chaired Professor
Trevor Cickovski, Visiting Instructor
Peter Clarke, Associate Professor
Debra Davis, Instructor
Timothy Downey, Senior Instructor
Ruogo Fang, Assistant Professor
William Feild, Visiting Instructor
Mark Finlayson, Assistant Professor
Xudong He, Professor
Kip Irvine, Senior Instructor
Radu Jianu, Assistant Professor
Abraham Kandel, Visiting Professor
Bill Kraynek, Professor Emeritus
Tao Li, Professor and Graduate Program Director
Christine Lisetti, Associate Professor
Jason Liu, Associate Professor
Patricia McDermott-Wells, Instructor
Masoud Milani, Associate Professor
Giri Narasimhan, Professor
Jainendra K. Navlakha, Professor
Deng Pan, Associate Professor
Alex Pelin, Associate Professor
Norman Pestaina, Senior Instructor
Niki Pissinou, Eminent Scholar Chaired Professor
Nagarajan Prabakar, Associate Professor
Caryl Rahn, Visiting Instructor
Raju Rangaswami, Associate Professor
Naphtali Rishe, Eminent Scholar Chaired Professor
Michael Robinson, Instructor
S. Masoud Sadjadi, Associate Professor

Gregory Shaw, Senior Instructor
Geoffrey Smith, Professor
Joslyn Smith, Senior Instructor
Xin Sun, Assistant Professor
Jinpeng Wei, Assistant Professor
Jill Weiss, Senior Instructor
Mark A. Weiss, Eminent Scholar Chaired Professor,
Associate Director and Undergraduate Program Director
Ning Xie, Assistant Professor
Wei Zeng, Assistant Professor
The School of Computing and Information Sciences offers four Master of Science degrees and a Doctor of Philosophy degree. The Master of Science in Computer Science degree provides study in state-of-the-art computer applications as well as an introduction to the theoretical foundations of computer science. The Master of Science in Information Technology is intended to educate students in the area of technical aspects of information. The Master of Science degree in Telecommunications and Networking is intended to provide study in state-of-the-art telecommunications and networking technologies and management. The Master of Science degree in Cybersecurity will include student learning outcomes that address cybersecurity from several
complementary perspectives. The Doctor of Philosophy in Computer Science is designed to provide study in all major areas of computer science while leading to the frontiers of knowledge in a chosen field of concentration.

## Master of Science in Computer Science

## Admission

The following are in addition to the University's graduate admission requirements.

1. A Bachelor's Degree or equivalent in Computer Science from a regionally accredited institution. A degree in a related field is acceptable if the applicant shows evidence of computer science background suitable for entry into the master's program as judged by the Graduate Committee.
2. ' $B$ ' average or better in all course work attempted while registered as an upper-division student in the Bachelor's program and GRE (general test), with a minimum quantitative score of 148.
3. Three letters of recommendation from persons in a position to judge the applicant's potential success in graduate study.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
5. Approval of the Graduate Committee.

## Required Courses

## 1. Required coursework: $\mathbf{1 5}$ credits

CEN 5011 Advanced Software Engineering 3
COP $5725 \quad$ Principles of Database Management Systems
COP 5614 Operating Systems 3
COT 5310 Theory of Computation I 3
COT 5407 Introduction to Algorithms 3
Required courses must be completed with an average of " B " or higher, and only one course may receive a grade less than "B-".

## 2. Elective coursework

a. non-thesis option: 15 credits of elective courses
b. thesis option: 9 credits of elective courses and 6 credits of master's thesis
Elective courses can be selected from SCIS Graduate Course Offerings.
No grade below " $C$ " will be accepted in any course taken to satisfy graduate program requirements.

## Thesis Option

CIS 6970
Thesis
After completion of the other required courses, the student must conduct a research thesis. The topic must first be approved by the faculty member who will supervise the research and then by the Thesis Committee. The thesis will be accepted only after being read and approved by a Thesis Committee. An oral defense is required before the Thesis Committee.

## Combined BSIMS in Computer Science

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000 -level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor's Degree program in Computer Science at FIU.
2. Completed at least $75-90$ credits of coursework.
3. Current GPA must be 3.3 or higher.
4. GRE (general test) with a minimum quantitative score of 148 .
5. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
6. Three letters of recommendation.
7. Approval of the Graduate Committee.

## General Requirements

The FIU Bachelor's degree in Computer Science must be awarded before the Master's degree.

## Coursework

## Required Courses

Required courses must be completed with an average of " B " or higher, and only one course may receive a grade less than "B-".
CEN 5011 Advanced Software Engineering 3
COP 5725 Principles of Database Management Systems
COP 5614 Operating Systems 3
COT 5310 Theory of Computation I 3
COT 5407 Introduction to Algorithms 3

## Elective

5 courses selected from the SCIS Graduate Course Offerings.
No grade below "C" will be accepted in any course taken to satisfy graduate program requirements.

## Overlap

Up to 4 courses ( 12 credits) may be used in satisfying both the Bachelor's and Master's degree requirements. All overlapping courses must be approved by both graduate and undergraduate program directors before students are enrolled in such courses.

The courses must be regular 5000-level computer science graduate courses intended for graduate majors.

## Master of Science in Cybersecurity

The MS-Cybersecurity program will include student learning outcomes that address cybersecurity from several complementary perspectives:

1. Students will gain practical, hands-on skills in current "best practices" in cybersecurity, such as configuring firewalls and writing secure web applications, while also understanding their limitations.
2. Students will gain deep knowledge of the principles of the emerging science of cybersecurity, enabling them to understand and even design solutions with rigorously-provable security guarantees.
3. Students will gain understanding of the broader human context of cybersecurity, enabling them to consider and address its social, economic, political, and psychological implications.
4. Students will gain deeper knowledge of specific areas in cybersecurity through their selection of elective courses.

## Admission Requirements

The following are in addition to the University's graduate admission requirements.

1. Bachelor's degree from regionally accredited institution in Computer Science, Computer Engineering, Information Technology, or a similar discipline.
2. Foreign students whose native language is not English must score at least 550 on the paper-based (or 80 on iBT ) in the Test of English as a Foreign Language (TOEFL).

## Required Courses

The students are required to earn 30 credit hours from 10 courses, including 5 core courses and 5 elective courses chosen from an approved set of electives.

## Core Courses ( $\mathbf{1 5}$ credits)

CEN 5079 Secure Application Programming 3
CIS 5208 Social, Economic, and Policy Aspects of
CIS 5370 Cybersecurity 3
CIS $5370 \quad$ Principles of Cybersecurity 3
CNT $5415 \quad$ Practical Applied Security 3
COT 5428 Formal Foundations for Cybersecurity 3

## Elective Courses ( 15 credits)

School of Computing and Information Sciences
CAP $6778 \quad$ Advanced Topics in Data Mining 3
CIS 5373 Systems Security 3
CIS 5374 Information Security and Privacy 3
$\begin{array}{lll}\text { TCN } 5080 & \text { Secure Telecommunications } \\ & \text { Transactions } & \end{array}$
TCN 5455 Information Theory 3
$\begin{array}{lll}\text { TCN } 6880 & \begin{array}{l}\text { Telecommunications Public Policy } \\ \text { Development and Standards }\end{array} & 3\end{array}$
Electrical and Computer Engineering
EEL 5278 Smart Grid Cyber Security and Intelligent Electronic Devices
EEL 5807 Advanced Ethical Hacking 3
EEL 6787 Network Security 3
EEL 6803 Advanced Digital Forensics 3

## Master of Science in Information Technology

The Master of Science in Information Technology is intended to educate students in the area of technical aspects of Information. It provides an emphasis on software technology, database technology, and security technology. The program is ideally suited for those who wish to obtain a higher level degree in Information Technology, and seek employment in the IT industry.

## Admissions Requirements

The following are in addition to the University's graduate admissions requirements.

1. Bachelor's degree from regionally accredited institution with GPA of 3.0 in Information Technology, Computer Science, Computer Engineering, or a similar field or a Bachelor's degree in any field plus 3 years of Information Technology work experience.
2. Three letters of recommendation.
3. Approval of the Graduate Committee.
4. Foreign students whose native language is not English must score at least 550 on the paper-based (or 80 on iBT) in the Test of English as a Foreign Language (TOEFL).

A student's GPA and required test scores will be considered as minimum requirements for admission. The academic background of each student shall be analyzed to determine if there is need for remedial courses in addition to the required curriculum. Students are also required to comply with all course prerequisites.

## Required Courses

Students in the Master of Science in Information Technology program will be required to take 30 credits of graduate level courses. Included in the program are 9 credits of Information Technology core courses, 9 credits that form a track, and 12 credits of Information Technology elective courses.

## Core Coursework (9 credits)

Students must complete all three courses with grade of 'B' or better.

CEN 5087 Software and Data Modeling
CIS $5372 \quad$ Fundamentals of Computer Security
CIS 5027 Computer Systems Fundamentals
Track Courses ( 9 credits)
Student must choose one track

## Software Track

The software track prepares students with fundamental methods and cutting-edge technologies for developing and maintaining software systems. Students graduating from the software engineering specialization will have a thorough knowledge of the process and major techniques for modeling, designing, and analyzing software systems. The graduates of this track will be well-prepared to undertake major software systems development projects from major software corporations such as Motorola, Siemens, and IBM.

Students must choose three courses from the following list:
CEN $5011 \quad$ Advanced Software Engineering
CEN 5064 Software Design
CEN 6075 Software Specification
CEN 6070 Software Verification
CEN 5076 Software Testing
CIS 6612 Advanced Topics in Software Engineering
COP $5725 \quad$ Principles of Database Management Systems

## System Administration Track

The System Administration track prepares the student to be able to install, support, and maintain servers or other computer systems, and planning for and responding to service outages and other problems. Other duties may include scripting and basic programming, setting up custom operating system environments, project management for systems-related projects, supervising or training computer operators, and being the consultant for computer problems beyond the knowledge of technical support staff.
Students must choose three courses from the following list:

CIS 5346
CIS 5432
CEN 5011 Advanced Software Engineering
COP $5614 \quad$ Operating Systems
COP 6611 Advanced Operating Systems
TCN $5030 \quad$ Computer Communications and
Networking Technology
TCN 6260 Internetworking
TCN 6270 Mobile and Wireless Networks
TCN $6430 \quad$ Network Management and Control
Standards

## Security Track

The security track will equip our MSIT students with fundamental knowledge and skills in information security and privacy, system security, and network security to they become highly qualified workforce in information technology fields.

Students must choose three courses from the following list:
CIS 5373 Systems Security
CIS 5374 Information Security and Privacy
EEL 6787 Network Security
TCN 5080 Secure Telecommunications
Transactions

## Electives (12 credits)

Students must choose any four graduate level courses offered by the School of Computing and Information Sciences, with the exception of CGS 6834 and COP 6007. Three credits can be earned in either CIS 5900 or CIS 5910, but not both. With the approval of the Graduate Program Director, one course not appearing on this list can be substituted for an elective.

## Master of Science in Telecommunications and Networking

The Master of Science in Telecommunications and Networking is intended to educate individuals seeking
employment with hardware and/or software companies, service providers, large user organizations, or telecommunications regulatory agencies as well as for those who are employed by these companies/organizations and wish to obtain formal, higher-level, specialized degree in Telecommunications and Networking. Telecommunication and Networking students learn how to lead in the ever changing environment of real-time global information networking, telecommunications, wireless and optical strategies and how to amplify business value through communications, technologies and systems. All courses in the program are categorized under the five following areas. SCIS offers thesis and non-thesis options for the Master's Degree.

## Admissions Requirements

1. In addition to the FIU graduate requirements, a student admitted to the program must have a bachelor's degree in a related field from an accredited institution, in the case of foreign students, from an institution recognized in its own country as preparing students to continue studies at the graduate level.
2. An applicant must have a GPA score of 3.0 or higher in upper level work.
3. International students whose native language is not English, must take the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System Test (IELTS). Minimum required score is: 550 on the paper-based test (PBT TOEFL), or 80 on the iBT TOEFL, or 6.5 overall on the IELTS test.
4. The University's required GPA and TOEFL scores are to be considered minimum requirements for admissions.

## Graduate Requirements

The degree will be granted when the following criteria have been met:

1. Recommendation of Advisor and faculty of the Department.
2. Certification by the Dean of the School that all requirements have been met.
3. Maintain an overall GPA of at least 3.0. No grade below " $C$ " will be accepted in any course taken to satisfy graduate program requirements.
4. Completion of 30 semester hours of graduate level in three categories:

- 15 credits of required courses
- 6 credits of either thesis or courses from any one focus area
- 9 credits of electives


## Required Courses (breadth)

All students must complete the following five courses:
TCN 5030 Computer Communications and Networking Technologies
TCN $6430 \quad$ Networks Management and Control Standards
TCN 6275 Mobile Computing
TCN 5080 Secure Telecommunications
Transactions (or CIS 5372)
TCN $5640 \quad$ Telecommunications Enterprise
Planning and Strategy

## One Focus Area (depth)

Students in the non-thesis option must select two courses from one focus area that aligns with their backgrounds and interests. Areas include but are not limited to software, communications, policy/legal issues, wireless and security. These areas are designed to serve a wide constituency of students.

## Business Focus:

| TCN 5010 | Telecommunications Technology <br> Applications |
| :--- | :--- |
| TCN 6880 | Telecommunications Public Policy <br> Development and Standards |
| TCN 6820 | Telecommunications Industry <br> Development |

## Communications Focus:

$\begin{array}{ll}\text { EEL } 5500 & \text { Digital Communication Systems I } \\ \text { EEL } 5501 & \text { Digital Communication Systems II }\end{array}$

## Software Focus:

| TCN 5440 | Software Development for <br> Telecommunications Networks |
| :--- | :--- |
| COP 5725 | Principles of Database Management <br>  <br> SCN 5445Selecommunication Network <br>  <br>  <br> Terogramming |

## Security Focus:

| CIS 5373 | Systems Security |
| :--- | :--- |
| CIS 5374 | Information Security and Privacy |
| TCN 5455 | Information Theory |

## Wireless and Sensor Network Focus:

TCN $6270 \quad$ Mobile and Wireless Networks
TCN $6450 \quad$ Wireless Information Systems
TCN $5155 \quad$ Wireless Communications with
Multimedia Applications

## Electives

Three additional courses offered by the School of Computing and Information Sciences (to bring to 30 credits), including any above course or TCN-prefix course not otherwise used to satisfy focus. The list of acceptable courses is maintained by the School.

## Combined BS in Electrical Engineering/MS in Telecommunications and Networking Program

Students who pursue a BS degree and are in their junior year, with at least a 3.3 GPA on both overall and upper division courses may apply to enroll in the combined BS/MS program. To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least $75-90$ credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000 -level or higher
courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees. In addition to the admission requirements of the combined BS/MS program, students must meet all the admission requirements of the University Graduate School.

Students enrolled in the program may count up to six credit hours of Telecommunications and Networking graduate courses as credits for both the BS and MS degrees. The combined BS/MS program has been designed to be a continuous program. During this combined BS/MS program, upon completion of all the requirements of the undergraduate program, students will receive their BS degrees. Students in this program have one year to complete the master's degree after receipt of the bachelor's degree. Students who fail to meet this one year post B.S. requirement or who elect to leave the combined program at any time and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the six credits in both the bachelor's and master's degrees.

For each of the graduate courses counted as credits for both BS and MS degree, a minimum grade of " $B$ " is required. Students enrolled in the program may count up to six credit hours of Telecommunications and Networking graduate courses toward the elective BSEE requirements as well as toward the MS in Telecommunications and Networking degree. Only graduate courses with formal lectures can be counted for both degrees. The students are responsible for confirming the eligibility of each course with the undergraduate advisor.

Students interested in the program should consult with the undergraduate advisor on their eligibility to the program. The students should also meet the graduate advisor to learn about the graduate program and available courses before completing the application form and submitting it to the undergraduate advisor. Applicants will be notified by the department and the University Graduate School of the decision on their applications.

## Doctor of Philosophy in Computer Science

The following are in addition to the University's graduate admission requirements:

1. A baccalaureate or master's degree in Computer Science, or equivalent degree in a related field as judged by the School's Graduate Committee.
2. For students without a Master's degree in a related field: A minimum of a 3.2 average on all upper division work and acceptable courses in Calculus and Statistics.
For students with a Master's degree in a related field: A minimum of a 3.0 average on all upper division work and acceptable courses in Calculus and Statistics, and a minimum of a 3.3 average in related graduate work.
3. GRE (general test), with a minimum quantitative score of 155. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is
required. GRE must have been taken within the past five years and TOEFL within the past two years.
4. Three letters of recommendation from persons in a position to judge the applicant's potential for advanced graduate study in computer science.
5. Approval of the School of Computing and Information Sciences Graduate Committee.

## Required Courses

All students must complete the following three courses and receive a grade of ' $B$ ' or higher in each.
COP 5614 Operating Systems
or
TCN $5445 \quad$ Telecommunication Network Programming
COT $5310 \quad$ Theory of Computation I 3
TCN $5421 \quad$ Theory of Network Computation 3
COT 6405 Analysis of Algorithms 3
No grade below "C" will be accepted in any course taken to satisfy graduate program requirements.

## Other Requirements

1. The student must pass at least seven elective courses, for a total of 30 semester credit hours of course work. At least four of the seven elective courses must be distinguished and specially marked Ph.D. level courses. The acceptable elective courses and distinguished Ph.D. level courses can be found in a list maintained and published by the School. In addition, the student must also earn at least 24 dissertation credit hours, and satisfy the School's seminar attendance requirement. In total, 75 credits beyond the bachelor's degree are required.
2. The student must pass the Candidacy Examination, which is a written examination designed to ensure that the student has competency in core computer science topics.
3. The student must pass the Preliminary Examination, which is an oral examination of his or her dissertation proposal.
4. The student must write a dissertation on his or her research and successfully defend it orally in the Dissertation Defense.
5. The student must spend at least one academic year in full-time residence. Normally, this will be after passing the Candidacy Examination.

For additional information and for specific rules and regulations relating to the graduate program, please refer to the web site, (http://www.cis.fiu.edu/programs/grad/) or write to:

Graduate Program Director
School of Computing and Information Sciences
Florida International University
Modesto A. Maidique Campus
Miami, Florida 33199

## Course Descriptions

## Definition of Prefixes

CAP-Computer Applications; CDA-Computer Design/Architecture; CEN-Computer Software Engineering; CGS-Computer General Studies; CISComputer Science and Information Systems; CNTComputer Networks; COP-Computer Programming; COTComputing Theory; TCN-Telecommunications

CAP 5011 Multimedia Systems and Applications (3). Course covers organization of multimedia systems, data representation, quality of service, scheduling algorithms, synchronization and tele-communication of multimedia streams. Prerequisite: COP 4610.
CAP 5510C Introduction to Bioinformatics (3). Introduction to bioinformatics; algorithmic, analytical and predictive tools and techniques; programming and visualization tools; machine learning; pattern discovery; analysis of sequence alignments, phylogeny data, gene expression data, and protein structure. Prerequisites: COP 3530, or equivalent and STA 3033 or equivalent.
CAP 5602 Introduction to Artificial Intelligence (3). Presents the basic concepts of AI and their applications to game playing, problem solving, automated reasoning, natural language processing and expert systems. Prerequisite: COP 3530.
CAP 5610 Introduction to Machine Learning (3). Decision trees, Bayesian learning reinforcement learning as well as theoretical concepts such as inductive bias, the PAC learning, minimum description length principle. Prerequisite: Graduate standing.
CAP 5627 Affective Intelligent Agents (3). Design and implementation methods using artificial intelligence (AI) techniques, human-computer interaction ( HCl ) principles, emotion theories; applications, e.g. health informatics, education, games. Prerequisites: Graduate standing or permission of the instructor.
CAP 5640 Graduate Introduction to Natural Language Processing (3). The concepts and principles of computer processing of natural language, including linguistic phenomena, formal methods, and applications. Students will conduct an independent research project. Prerequisites: M.S. or Ph.D. standing or permission of the instructor.
CAP 5701 Advanced Computer Graphics (3). Advanced topics in computer graphics: system architecture, interactive techniques, image synthesis, current research areas. Prerequisites: COP 3530 and CAP 3710 or equivalent, or by permission. This course will have additional fees.

CAP 5738 Data Visualization (3). Advanced class on data visualization principles and techniques. Students propose, implement, and present a project with strong collaborative and visual components.
CAP 5771 Principles of Data Mining (3). Introduction to data mining concepts, knowledge representation, inferring rules, statistical modeling, decision trees, association rules, classification rules, clustering, predictive models, and instance-based learning. Prerequisites: COP 4710 and STA 3033.

CAP 6736 Geometric Modeling and Shape Analysis (3). Techniques for 2D/3D geometric modeling and analysis, including representation, reconstruction, processing, modeling and shape analysis, and applications in science and engineering. Prerequisites: SCIS graduate standing or by permission of the instructor.
CAP 6776 Advanced Topics in Information Retrieval (3). Information Retrieval (IR) principles including indexing and searching document collections, as well as advanced IR topics such as Web search and IR-style search in databases. Prerequisite: COP 5725.
CAP 6778 Advanced Topics in Data Mining (3). Web, stream data, and relational data mining, graph mining, spatiotemporal data mining, privacy-preserving data mining, high-dimensional data clustering, social network, and linkage analysis. Prerequisite: CAP 5771 or permission of the instructor.
CDA 5655 Virtualized Systems (3). Topics include the concepts and principles of virtualization and the mechanisms and techniques of building virtualized systems, from individual virtual machines to virtualized networked infrastructure. Prerequisites: COP 4610 or permission of the instructor.
CDA 6939 Special Topics: Advanced Topics in Computer Architecture (3). This course deals with selected special topics in computer architecture. Prerequisite: Permission of the instructor.
CEN 5011 Advanced Software Engineering (3). This course deals with the design of large scale computer programs. Included are topics dealing with planning design, implementation, validation, metrics, and the management of such software projects. Prerequisite: CEN 4010.

CEN 5064 Software Design (3). Study of object-oriented analysis and design of software systems based on the standard design language UML; case studies. Prerequisite: CEN 5011.
CEN 5076 Software Testing (3). Tools and techniques to validate software process artifacts: model validation, software metrics, implementation-based testing, specification-based testing, integration and systems testing. Prerequisites: CEN 4010 or CEN 5011.
CEN 5079 Secure Application Programming (3). Development of applications that are free from common security vulnerabilities, such as buffer overflow, SQL injection, and cross-site scripting attacks. Emphasis is on distributed web applications. Prerequisite: Graduate standing.
CEN 5082 Grid Enablement of Scientific Applications (3). Fundamental principles and applications of highperformance computing and parallel programming using OpenMP, MPI, Globus Toolkit, Web Services, and Grid Services. Prerequisites: Graduate standing or permission of the instructor.
CEN 5087 Software and Data Modeling (3). Essential software and data modeling methods and techniques such as UML, XML, and ER. Prerequisite: Graduate standing.
CEN 5120 Expert Systems (3). Introduction to expert systems, knowledge representation techniques and construction of expert systems. A project such as the
implementation of an expert system in a high level Allanguage is required. Prerequisites: COP 3530 or permission of the instructor.
CEN 6070 Software Verification (3). Study of formal verification of software systems; verification methods; verification of sequential and concurrent software systems. Prerequisite: CEN 5011.

CEN 6075 Software Specification (3). Study of formal specification in the software development process; specification methods; specification of sequential and concurrent systems. Prerequisite: CEN 5011.
CGS 5166 Introduction to Bioinformatics Tools (2). Introduction to bioinformatics; analytical and predictive tools; practical use of tools for sequence alignments, phylogeny, visualizations, pattern discovery, gene expression analysis, and protein structure. Prerequisites: PCB 6025 or equivalent.
CGS 6834 Programming for the Web (3). Installation and maintenance of servers. Techniques for building secure multimedia interactive web pages. A hands-on project to develop an educational interactive multimedia web site is required. This course is not an elective for Computer Science programs.

CIS 5027 Computer Systems Fundamentals (3). Fundamentals concepts of IT Systems: operating systems, networking, distributed systems, platform technologies, web services and human-computer interaction. Covers design principles, algorithms and implementation techniques. Prerequisite: Graduate standing.
CIS 5208 Social, Economic, and Policy Aspects of Cybersecurity (3). The broader human context of cybersecurity, from the perspective of society, economics, and policy. Prerequisite: Graduate standing.
CIS 5346 Storage Systems (3). Introduction to storage systems, storage system components, storage architecture, devices, trends and applications, performance, RAID, MEMS and portable storage, filesystems, OS storage management. Prerequisite: Graduate standing.

CIS 5370 Principles of Cybersecurity (3). Cybersecurity algorithms, techniques. Mathematical foundations. Symmetric and public key encryption. Authentication, key infrastructure, certificates. Covert channels. Access control. Vulnerabilities. Prerequisite: Graduate standing.
CIS 5372 Fundamentals of Computer Security (3). Information assurance algorithms and techniques. Security vulnerabilities. Symmetric and public key encryption. Authentication and Kerberos. Key infrastructure and certificate. Mathematical foundations. Prerequisite: Graduate standing.

CIS 5373 Systems Security (3). Risk, Trust, and Threat models; Types of Attacks; Safe Programming Techniques; Operating System Mechanisms, Virtual Machine Systems; Hardware Security Enforces; Application Security; Personal Security. Prerequisite: CIS 5372.
CIS 5374 Information Security and Privacy (3). Information Security Planning, Planning for Contingencies, Policy, Security Program, Security Management Models, Database Security, Privacy, Information Security Analysis, Protection Mechanism. Prerequisite: CIS 5372.

CIS 5432 Advanced IT Automation (3). Advanced topics in system/network management including monitoring, help desk, antivirus, anti-malware, backup, disaster recovery, discovery, audit, remote control, automated response, policies, and reports. Prerequisites: CIS 4431 or permission of the instructor.
CIS 5900 Independent Study (1-10). Individual conferences, assigned readings, and reports on independent investigations. Prerequisite: Permission of the department.

CIS 5910 Project Research (1-6). Advanced undergraduate or master's level research for particular projects. Repeatable. Prerequisite: Permission of the department.
CIS 5915 Research Experience for Graduate Students (0-9). Participation in ongoing research in the research centers of the school.

CIS 5931 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CIS 6612 Special Topics: Advanced Topics in Software Engineering (3). This course deals with selected topics in software engineering. Prerequisite: Permission of the instructor.

CIS 6900 Independent Study (1-10). Individual conferences, assigned readings, and reports on independent investigations. Prerequisite: Permission of the department.

CIS 6930 Advanced Special Topics (3). A course designed to give groups of students an opportunity to pursue special advanced studies not otherwise offered.

CIS 6931 Special Topics: Advanced Topics in Information Processing (3). This course deals with selected special topics in information processing. Prerequisite: Permission of the instructor.

CIS 6933 Computer Science Seminar (1). Regularly scheduled seminar series featuring speakers on computer science related topics. Prerequisite: Graduate standing.

CIS 6970 Thesis (1-10). Prerequisite: Completion of all other requirements for the M.S. Degree in Computer Science.

CIS 7910 Graduate Research (1-25). Doctoral research prior to candidacy. Repeatable. Prerequisite: Permission of the department.
CIS 7980 Ph.D. Dissertation (1-10). Prerequisite: Permission of the Major Professor and Doctoral Candidacy.
CNT 6207 Distributed Processing (3). Study of distributed processing using networking and distributed computing techniques. Investigation of distributed algorithms and models of distributed computing. Prerequisite: Graduate Standing.
CNT 6208 Advanced Topics in Concurrent and Distributed Systems (3). Study of the major aspects of concurrent and distributed systems. Topics include foundations of concurrent computation, languages and tools for concurrent systems, distributed real-time systems, distributed multimedia systems, and concurrent object-oriented systems.

COP 5614 Operating Systems (3). Operating systems design principles, algorithms and implementation techniques: process and memory management, disk and I/O systems, communications and security.
COP 5621 Compiler Construction (3). Basic techniques of compilation; scanning; grammars and LL and LR parsing, code generation; symbol table management; optimization. Prerequisites: MAD 3512 and CEN 4010.
COP 5725 Principles of Database Management Systems (3). Overview of Database Systems, Relational Model, Relational Algebra and Relational Calculus; SQL; Database Applications; Storage and Indexing; Query Evaluation; Transaction Management. Selected database topics will also be discussed.
COP 5949 Cooperative Education in Computer Science (1-3). One semester of full-time work, or equivalent, in an outside organization, limited to students admitted to the CO-OP program. A written report and supervision evaluation is required of each student.
COP 6007 Computer Programming Concepts (3). For non-computer science graduate students. Concepts of object oriented programming, introduction to an object oriented programming language; internet programming; applications of programming to learning technologies. Prerequisite: Permission of the instructor.
COP 6556 Semantics of Programming Languages (3). This course provides an overview of systematic and effective approaches to programming. Abstraction; formal specification techniques; program verification and; semantics of programming languages. Prerequisite: COT 5310.

COP 6611 Advanced Operating Systems (3). Advanced topics in operating system design; microkernel; memory architecture; multi-processor issues; multimedia operating systems; case studies. Prerequisite: Graduate standing.
COP 6727 Advanced Database Systems (3). Design, architecture and implementation aspects of DBMS, distributed databases, and advanced aspects of databases selected by the instructor. Prerequisite: Graduate standing.
COP 6795 Special Topics on Databases (3). Study of selected advanced topics in databases and related areas. Prerequisite: Permission of the instructor.
COT 5310 Theory of Computation I (3). Abstract models of computation; including finite automata, regular expressions, context-free grammars, pushdown automata, Turing machines. Decidability and undecidability of computational problems. Prerequisite: MAD 3512.
COT 5407 Introduction to Algorithms (3). Design of efficient data structures and algorithms; analysis of algorithms and asymptotic time complexity; graph, string, and geometric algorithms; NP-completeness.
COT 5428 Formal Foundations for Cybersecurity (3). Formal models and methods for achieving rigorous security guarantees. Cryptographic indistinguishability properties, reduction proofs. Formal analyses of security APIs. Secure information flow. Prerequisite: CIS 5370.
COT 5520 Computational Geometry (3). Design and analysis of efficient algorithms to solve geometric problems: geometric searching, convex hull, proximity
problem, Voronoi diagram, spanning tree, triangulation, graph drawing applications. Prerequisite: COP 3530 (or equivalents).
COT 6405 Analysis of Algorithms (3). Design of advanced data structures and algorithms; advanced analysis techniques; lower bound proofs; advanced algorithms for graph, string, geometric, and numerical problems; approximation algorithms; randomized and online algorithms. Prerequisite: Graduate standing.
COT 6421 Theory of Computation II (3). Verification of program correctness; program schemes; fixed-point theory of programs; resolution and theorem proving. Prerequisite: COT 5310.
COT 6446 Randomized Algorithms (3). Topics include moments and deviations, tail inequalities, random walk and Markov chains, stochastic processes, the probabilistic method, and applications of these tools and techniques in data structure, geometric algorithms, graph algorithms, secure systems and property testing, etc. Prerequisite: COT 5407.
COT 6930 Special Topics: Advanced Topics in Theory (3). This course deals with selected special topics in computing theory. Prerequisite: Permission of the instructor.
COT 6931 Topics in Cognitive Science (3). A "top-down" view of Computer Science, in particular artificial intelligence, by studying the computational aspects of human cognition. Prerequisite: Permission of the instructor.
COT 6936 Topics in Algorithms (3). Advanced data structures, pattern matching algorithms, file compression, cryptography, computational geometry, numerical algorithms, combinational optimization algorithms and additional topics. Prerequisite: COP 3530.
TCN 5010 Telecommunications Technology and Applications (3). An in-depth introduction to voice and data networks, signaling and modulation, multiplexing, frequency band and propagation characteristics, special analysis of signals, and traffic analysis. Prerequisite: Permission of the instructor.
TCN 5030 Computer Communications and Networking Technologies (3). Teaches the dynamics related to computer communications, how computers are grouped together to form networks, various networking implementation strategies, and current technologies. Prerequisite: Permission of the instructor.
TCN 5060 Telecommunications Software and Methodologies (3). A high-level look into network architectures and distributed applications, client-server models, network software platforms and advanced techniques for programs specifications through implementation. Prerequisites: TCN 5030 or permission of the instructor.
TCN 5080 Secure Telecommunications Transactions (3). Telecom and information security issues such as: digital signatures, cryptography as applied to telecom transactions, network policing, nested authentication, and improving system trust. Prerequisites: TCN 5030 or permission of the instructor.

TCN 5150 Multimedia Computer Communications (3). Covers multimedia computer communications technologies including, multimedia over networks, videoconferencing, telephone, compression algorithms and techniques for transmitting data efficiently. Prerequisites: TCN 6210 or permission of the instructor.
TCN 5421 Theory of Network Computation (3). Fundamental mathematical models of general and network computation: finite state automata, regular languages, decidability; scholastic processes, Markov chains, queuing theory.
TCN 5440 Software Development for Telecommunication Networks (3). Focuses on the aspects, tools, and techniques of developing software applications for telecommunications networks. Prerequisites: TCN 5030 or equivalent.
TCN 5445 Telecommunications Networking Programming (3). Advanced telecommunications network programming skills including Router and Bridge Software, socket programming and protocol handler. Prerequisite: Permission from instructor.

TCN 5455 Information Theory (3). Entropy and measure of information. Proof and interpretation of Shannon's fundamental theorem for various channels, including noiseless, discrete, time-discrete and time-continuous channels. Prerequisite: Permission of the instructor.

TCN 5640 Telecommunications Enterprise Planning and Strategy (3). Methodologies for re-engineering, project management, strategic planning, change management, RFPs, and life-cycle management within the telecommunications and IT arena. Prerequisite: Permission of the instructor.
TCN 5710 Cyber Sustainability (3). In-depth introduction to sustainable development and optimization of cyber systems, such as mobile networks and data centers, with an emphasis on cost, energy, water and life-cycle assessment.
TCN 6210 Telecommunications Network Analysis and Design (3). A systematic, analytic and descriptive approach to the evaluation of telecommunications networks, networking principles, and control and quality of service. Prerequisite: Permission of the instructor.

TCN 6215 Advanced Network Algorithms (3). This course will cover algorithms that are used in network research and implementation. Prerequisites: TCN 6210 or consent of the instructor.
TCN 6230 Optical Networks (3). Enabling technologies, multiplexing techniques, WDM, broadcast networks, wavelength-routed networks, network architectures, protocols, network algorithms, and device-network interfaces. Prerequisites: TCN 5030 or equivalent.
TCN 6260 Internetworking (3). The course will discuss advanced topics, current trends and control of internetworking. An analytical and descriptive approach will be used to cover the subject of internetworking.

TCN 6270 Mobile and Wireless Networks (3). Techniques in the design and operation of wireless networks; LANs, MANs, and WANs; analytical models; application of traffic and mobility models; mobility control,
and wireless ATM. Prerequisites: TCN 5030 or equivalent.

TCN 6275 Mobile Computing (3). Enabling technologies and impediments of mobile computing. It includes mobile architectural design, mobile-aware and transparent adaptation, mobile data access and file systems, and adhoc networks. Prerequisite: Permission of the instructor.

TCN 6420 Modeling and Performance Evaluation of Telecommunications Networks (3). Covers methods and research issues in the models and performance evaluation of high-speed and cellular networks. Focuses on the tools from Markov queues, queuing networks theory and applications. Prerequisites: TCN 5030 or equivalent.
TCN 6430 Networks Management and Control Standards (3). Protocols for management of telecom networks, including Simple Network Management Protocol and Common Management Information Protocol. Extension of protocols to optimize network performance. Prerequisites: TCN 5030 or equivalent.
TCN 6450 Wireless Information Systems (3). Enabling technologies and impediments of wireless information systems. Focuses on software architectures, and information and location management in the wireless environment. Prerequisite: Permission of the instructor.
TCN 6820 Industrial Development of Telecommunications (3). This course, from a management perspective, addresses the evolution of the telecom industry, the impact it has on reshaping our world, and the importance of management decisions in telecom.
TCN 6880 Telecommunications Public Policy Development and Standards (3). A concept-oriented examination of the domestic and international telecommunications policy processes and standards setting environment. Prerequisite: Permission of the instructor.

TCN 6935 Graduate Seminar (0). Investigation and report by graduate students on topics of current interest in telecommunication and networking. Prerequisites: Ph.D. classification and approval of instructor.

# OHL School of Construction 

Irtishad U. Ahmad, Ph.D., P.E., Professor and Founding<br>Director, Graduate Program Director<br>Ronald A. Baier, P.E., Senior Instructor<br>Mehmet Emre Bayraktar, Ph.D., Associate Professor<br>José Faria, Ph.D., PMP, Instructor<br>Eugene D. Farmer, A.I.A., NCARB, LEED-AP BD+C, Associate Professor and Undergraduate Program Director<br>Youngjib Ham, Ph.D., Assistant Professor<br>Ayman A. Morad, Ph.D., Instructor<br>Ali Mostafavi, Ph.D., Assistant Professor<br>Wallied Orabi, Ph.D., Assistant Professor<br>Nipesh Pradhananga, Ph.D., Assistant Professor<br>José D. Mitrani, P.E., CPC, CGC, Professor Emeritus

## Master of Science in Construction Management

The master's degree is rapidly becoming the entry level requirement for middle and upper level managerial positions in the construction industry. The primary goal of this program is to provide the knowledge and advanced skills essential for success in these positions. The program is flexible enough to accommodate graduates from other disciplines who may lack an undergraduate background in construction management.

Students who hold four year undergraduate degrees in construction management may complete the masters degree in one academic year as full-time students. Equivalent degree related fields would include studies in construction drawings, construction materials and methods, construction accounting and finance, economic planning, structures, site work, legal aspects of construction, cost estimating, construction scheduling and business management/finance. Students with deficiencies in these fields may need longer residence for the master's degree, as they will be required to take specified basic undergraduate courses.

## Admission Application

Students desiring to enter the Construction Management graduate program must formally apply to the University for acceptance at http://gradschool.fiu.edu. Students can also send their application material to:

Florida International University
College of Engineering
Dean's Office
Admissions Coordinator
10555 West Flagler Street
Miami, FL 33174
Email: grad eng@fiu.edu
Fax: (305) 348-6142
See the graduate admission section in this catalog for graduate application instructions.

## Admission Requirements

In order to be admitted, applicants should hold a Bachelor's Degree in Construction, Construction Management, Architecture, Engineering, Business or equivalent related fields. Students with baccalaureate degrees other than Construction Science, Construction Management, or Construction Engineering may be accepted with the understanding that they will be required
to take specified basic undergraduate courses as determined by the Graduate Program Director, to provide an adequate background for more advanced courses. In addition, applicants must have earned a minimum grade point average (GPA) of 3.0 in the upper division course work related to their undergraduate degree.

Eligibility for admission for those students whose upper division undergraduate GPA is less than 3.0 (on a 4.0 scale) may be evaluated on the basis of one or more of the following:

- GRE or GMAT scores
- Letters of reference
- Work experience
- Other relevant factors, including but not limited to, awards, recognitions, published journal articles, conference presentations, etc.
Applicants who do not satisfy the GPA requirement will be evaluated by the School's Graduate Program Director based on the factors identified earlier, and may be recommended for admission on a provisional/conditional status.


## TOEFL

In addition to the above criteria, international graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Curriculum

Students seeking to obtain a Master of Science in Construction Management have a choice of either a thesis or a non-thesis option. Students have to complete 30-36 semester hours including thesis. Students with a Bachelor of Science (BS) degree in Construction Management, Construction Science, or Construction Engineering must complete at least 30 semester hours to graduate. Students with a BS degree in Engineering or a BA degree in Architecture must complete at least 33 semester hours to graduate. All other students with undergraduate degrees in disciplines such as business, accounting, finance, etc. must complete at least 36 semester hours to graduate. The thesis option consists of a minimum of 24-30 semester hours of course work and 6 semester hours of thesis. The non-thesis option consists of 30-36 semester hours of course work and may include up to 6 semester hours of independent studies. A student shall not register for masters thesis without first having received the approval from his/her thesis supervisor and the Director of the School. A student may not register for independent studies without the approval of his/her advisor, and the Director of the School.

## Course Requirements

Graduate credit is awarded for courses numbered 5000 and above. The work in the major field must be in courses numbered 5000 or above. For work outside the major, up to two courses numbered 4000-4999 may be taken provided they are part of a plan of study approved by the student's supervisory committee or the School Graduate Committee, whichever is applicable, and prior approval is obtained from the Director of the School. Approval must be obtained in writing prior to the student registering for such a course.

Students with deficiencies in the areas designated as equivalent related fields will be required to take and successfully complete (with a grade of "C" or above or with " $P$ " grade, if applicable) 3000 and 4000 level courses in Construction Management in order to provide the proper foundation for advanced courses.

The program of course work for a masters degree must be approved by the student's advisor, supervisory committee (if thesis option), and School Director. No more than six credits from a previous masters degree program may be applied toward a second masters degree. These credits are applied only with the written approval of the School Director, the Dean of the College of Engineering and Computing, and the University Graduate School.

## Transfer of Credit

Only graduate (5000-7999) level work to the extent of two courses, totaling not more than six semester hours, earned with a grade of ' $B$ ' or better may be transferred from another institution, or from post-baccalaureate work at the University except as noted otherwise in this catalog. Credits transferred from other universities may be applied toward meeting the degree requirements but the grades earned will not be computed in the student's grade point average. Acceptance of transfer of credit requires approval of the School Program Director, College Dean, and the University Graduate School. Petitions for transfer of credit for a masters degree should be made during the student's first term of enrollment in the masters program.

## Supervisory Committee

Students who choose the thesis option should request the appointment of a supervisory committee as soon as possible after admission into the program, but in no case later than the second semester of graduate study. Supervisory committees for graduate degree programs are nominated by the student's graduate advisor and approved by the School Director, College Dean, and the Dean of the University Graduate School. The student's proposed plan of study must be approved, in writing, by the student's graduate advisor, the supervisory committee and the School Director.

## Masters Thesis

A student choosing the thesis option must, as part of his/her plan of study, prepare a written proposal of the thesis work planned. This proposal must adhere to all University and School regulations concerning format and content. Once this proposal is approved, in writing, by the student's graduate advisor, his/her supervisory committee, the School Director, and the College Dean, the student will be permitted to register for masters thesis. The student must be enrolled in at least one thesis credit hour the semester the proposal is submitted to the University Graduate School.

## Examination

A final oral examination, which is primarily a defense of the thesis research, is required for thesis masters candidates. A passing grade must be obtained in order to qualify for graduation. The examination will be administered by his/her supervisory committee.

## Special Student

In exceptional cases, students wishing to enroll in courses during the application process may do so as a special student (non degree seeking). No more than 12 semester credits of work taken as a special student can be applied towards graduation. No courses with a grade lower than a " B ", earned as a special student, will be included in the Masters program upon admission. Students taking courses under the special student designation should consult other sections of this catalog for pertinent regulations covering the special student status.

## General Regulations

## Grades

The OHL School of Construction requires a minimum cumulative grade point average of 3.0 in all courses taken towards a masters degree. The minimum acceptable grade for any work attempted as a graduate student is a "C."

## Grade of Incomplete

A grade of "I" (Incomplete) may be granted, at the option of the Instructor, upon approval by the School Director, to a student who, due to serious, documented, and verifiable extenuating circumstances beyond his/her control is unable to complete the work required to obtain a grade for a course.

A student wishing to receive an incomplete ("l" grade) must meet with his/her professor and sign an agreement outlining what work must be completed to receive the final grade and when this work is due. Failure of the student to either complete the work required by the agreement or not meet the deadline prescribed in the agreement will result in the grade reverting to a grade of " $F$ " (failing grade).

## Graduation

In order to be eligible to graduate the student must have successfully completed his/her plan of study as established with the student's graduate advisor, his/her supervisory committee (if applicable), and the School Director. This includes completion of all applicable graduate course work with an overall minimum grade point average of 3.0. A student choosing the thesis option must also have submitted a complete masters thesis, whose format, content, and presentation must be acceptable to and approved by his/her graduate advisor, supervisory committee, School Director, College Dean, and the Dean of the University Graduate School.

Students should contact an advisor at least one semester prior to their projected graduation and request a review of their file. At the start of the final semester the student is required to complete an Application for Graduation (online application). If for any reason a student fails to graduate in the semester after applying for graduation, the student must reapply for graduation and enroll for at least one graduate credit.

It is the student's responsibility to ascertain that all requirements for graduation, as stated in the University Catalog and in the School Program sheets, have been met.

## Foundation Courses

Students (CM majors) requiring 30 credit hours to graduate are not allowed to take any of the foundation
courses to count towards their MSCM degree. Students requiring 33 credit hours to graduate must take at least three courses ( 9 credits) from the foundation courses listed below - unless exempted by the Graduate Program Director. Students requiring 36 credits to graduate must take at least four courses (12 credits) from the list of foundation courses given below - unless exempted by the Graduate Program Director. The foundation courses, whether three or four, must be taken with the approval of the Graduate Program Director.
BCN 5618 Fundamentals of Construction
Estimating 3
BCN 5645 Construction Economic Analysis 3
BCN $5728 \quad$ Principles of Construction Scheduling
BCN 5766
Codes and Regulations
BCN 5746 Construction Legal Environment 3

## Construction Management Electives

Depending on the academic background of the student, the balance of $30-36$ credits is to be taken from the list below. Thesis students may take up to 6 credits of BCN 6971, and all students may take up to 6 credits of BCN 5905 (see note below).
BCN $5585 \quad$ Sustainable Construction 3
BCN 5589 Hazard Mitigation 3
BCN 5622 Advance Planning and Simulation for Construction
BCN 5626 Construction Cost Analysis \& Control 3
BCN 5716 Productivity in Construction 3
BCN $5735 \quad \begin{aligned} & \text { Hazardous Materials \& Waste in } \\ & \\ & \text { Construction }\end{aligned}$
BCN 5738 Construction Safety Management 3
BCN $5741 \quad 3$
BCN 5747 Construction Law Case Studies 3
BCN 5749 Advanced Construction Documentation 3
BCN 5755 Construction Financial Management 3
BCN $5771 \quad$ Management \& Marketing of Const. 3
BCN 5772 Management of Construction 3
BCN $5784 \quad$ Organizations Construction Information
BCN 5792 Total Quality Management and Planning

BCN 5906 Special Topics 3
BCN $5949 \quad$ Graduate Construction Management Internship 1
BCN 6473 Systems Approach for Housing Planning3
BCN 6642 Value Engineering in Construction 3
BCN 6775 Decision \& Risk Analysis in Construction3
BCN 6785

BCN 6795
Construction Failures
BCN 6910 Supervised Research ${ }^{1}$ 1-3
$\begin{array}{ll}\text { BCN } 6916 & \text { Developments in Construction } \\ & \text { Technologies }\end{array}$
BCN $6935 \quad$ Graduate Seminar 3
BCN $6971 \quad 3$
(Total of 6 credit hours spread over at least two consecutive terms with 3 credit hour in each)
${ }^{1}$ Note: A student shall not register for BCN 5905, BCN 6910, or BCN 6971, without the approval of his/her advisor, and the School Director. Not more than 3 credit
hours of BCN 5905 or BCN 6971 may be taken in any one semester.

## Graduate Certificate in Construction Engineering \& Management (CEM)

This certificate program is open to students with a Bachelor's Degree in civil engineering, construction management, construction engineering, architecture, architectural engineering and other closely related fields of study from an accredited institution. This certificate program is open to non-degree-seeking students only. The CEM program develops construction management techniques related to the technological environment of the construction industry. The program blends a carefully chosen mix of civil engineering and construction management courses designed to provide specialization opportunities in Construction Engineering \& Construction Management. The skills, concepts and techniques learned will be related to, but not dependent upon knowledge of construction and engineering with an emphasis on construction management and organizational skills appropriate for the professional construction manager.

Applicants for the program will be required to meet the same entrance standards as those applying to the Master of Science in Construction Management program. Credits earned in the program with a BCN prefix and up to 3 courses with a CCE or CGN prefix with a grade of "B" or better are fully transferable towards a Masters of Science in Construction Management degree program.

To earn a Graduate Certificate in CEM, the students must successfully complete the program's core and elective courses with a minimum grade point average of 3.0 , and have no grade lower than " C ". The program consists of 18 credit hours -6 courses ( 3 core courses +3 electives) of 3 credit hours each. These courses cover functional areas of construction management and specialized technical and engineering functions.

## Required CEM Courses:

| BCN 5645 | Construction Economic Analysis |
| :--- | :--- |
| CCE 5035 | Construction Engineering Management |
| BCN 5728 | Principles of Construction Scheduling |

## Electives CEM Courses:

BCN 5626 Construction Cost Analysis \& Control
BCN 6775 Decision \& Risk Analysis in Construction
BCN 6916 Developments in Construction Technology
BCN 5774 Topics in International Construction
CCE 5505 Computer Integrated Construction
CGN 5315 Civil Engineering Systems
BCN 5716 Productivity in Construction
Additional information about this program can be found at: URL: ohlsc.fiu.edu
E-mail: cminfo@eng.fiu.edu
Tel: (305) 348-3172
Fax: (305) 348-6255

## Master of Science in Construction Management/Juris Doctor Joint Degree Program

Florida International University (College of Engineering and Computing and College of Law) offers a joint degree
program culminating in both a Juris Doctor degree, awarded by the College of Law, and a Master of Science in Construction Management (MSCM) degree, awarded by the College of Engineering and Computing.

Under this joint degree program, a student can obtain expertise in both fields (construction and law) in significantly less time than it would take to obtain both degrees if pursued consecutively.

Essential criteria relating to this joint degree program are as follows:

1. Candidates for the program must meet the entrance requirements for and be accepted by both Colleges. Both Colleges must be informed by the student at the time of application to the second program that the student intends to pursue the dual degree.
2. The joint degree program is not open to students who have already earned one degree.
3. For law students, enrollment in the MSCM program is required no later than the completion of 63 credit hours in the J.D. program. For MSCM students, enrollment in the J. D. program is required no later than the end of the first semester after beginning the MSCM program. (A summer session is counted as a full semester.)
4. The College of Engineering and Computing will allow 9 credit hours of law courses to be credited toward both the MSCM and J.D. degrees. These [9] credit hours of law classes will be in lieu of the three elective courses required for the MSCM degree. Foundation courses must be completed as required and explained in the catalog and cannot be substituted with any College of Law courses. The students must have a minimum GPA of 3.0 in each of the three law courses for inclusion in their MSCM degree program. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the J. D. degree for courses taken in the MSCM curriculum upon completion of the MSCM degree curriculum with a grade point average of 3.0 or higher. These 9 credit hours of construction management courses will be in lieu of electives required for the J.D.
5. A student enrolled in the joint degree program may begin the student's studies in either College, but fulltime law students must take the first two semesters of law study consecutively and part-time law students must take the first three semesters of law study consecutively. Students enrolled in the MSCM program must be enrolled at least in one course in any given semester during his/her entire course of study. Students admitted to one College but electing to begin study in the other College under the combined degree program may enter the second College thereafter without once again qualifying for admission so long as they have notified the second College before the end of the first week of the first semester in the second College and are in good academic standing when studies commence in the second College.
6. A student enrolled in the joint degree program can receive either degree if the student has satisfied all of the requirements for that degree.

## Course Descriptions

Definition of Prefixes
BCN-Building Construction
Student programs of study in the graduate level program are carefully designed and sequenced following consultation with a graduate faculty advisor. Appropriate prerequisite course work is assigned on the basis of individual needs.

BCN 5022 Housing for Developing Countries (3). Problems faced by developing countries in housing their population. Political, economic, social, and technical considerations in decision process.

BCN 5406 Principles of Building Structures for Construction Management (3). Applications of the principles of mechanics to engineering problems of equilibrium, strength, and stiffness. Topics include equilibrium of forces, stress, strain, torsion, beams, and columns.
BCN 5585 Sustainable Construction (3). Study of the concepts and techniques of sustainable construction, in depth review of sustainable materials and construction techniques. Prerequisite: Permission of the instructor.
BCN 5588 Vulnerability Analysis (3). Assessment of risk and potential for damage to a community or facility from the impact of natural or anthropogenic hazards. Physical and construction related issues.
BCN 5589 Hazard Mitigation (3). Reducing potential damage to the built environment from natural hazards, including hurricanes, floods, earthquakes, explosions. Benefit-cost analysis. Regulatory problems.
BCN 5618 Fundamentals of Construction Estimating (3). Principles and practices of estimating, providing application, and drill in surveying quantities of labor and materials for general construction projects: excavation, concrete and formwork, carpentry, masonry, structural steel, lath and plaster, interior finishes.
BCN 5622 Advance Planning and Simulation for Construction (3). The application of advanced planning, scheduling, and simulation techniques and concepts to construction processes and operations.
BCN 5626 Construction Cost Analysis and Control (3). Description of different types of estimating techniques in relation to different stages in a construction project. Productivity analysis, measurement of progress, and techniques of cost control are covered.
BCN 5645 Construction Economic Analysis (3). Nature of construction costs, funding sources and arrangements, capital requirements, bonding, insurance, risk and contingency evaluation, general office operations, and bidding procedures.
BCN 5706 Interdisciplinary Aspects of Housing (3). Recognition and definition of those factors which affect the planning, financing, and construction of housing projects. The operations and responsibilities of a multidisciplinary team dealing with decision process. This course takes a critical look at the housing delivery system to include: how the housing industry operates, various technologies prevalent in housing construction, and constraints to housing. The course will also look at the future, examining problems and forces that will shape opportunities.

BCN 5716 Productivity in Construction (3). An in-depth study of common issues relating to productivity improvements in construction.
BCN 5728 Principles of Construction Scheduling (3). The application of the Critical Path Method and Program Evaluation Review Technique to construction planning, scheduling vs. actual job expenditures. Cost forecasting development of unit prices from field data. Laboratory is included which consists of computer applications.
BCN 5735 Hazardous Materials and Waste in Construction (3). Discussion of the common hazardous materials and waste regulations found in construction activities.

BCN 5738 Construction Safety Management (3). Introduce the graduate student in Construction Management to the important elements essential in managing the safety function of a construction company.
BCN 5741 Construction Claims (3). Construction claims, administration, and avoidance. Covers the importance of construction contact errors, unforeseen and changed conditions, disruptions, acceleration, termination, and proving of claims.
BCN 5746 Construction Legal Environment (3). Legal and business aspects of engineering contracts and specifications in the construction industry. Analysis, study of precedents, and application of contract clauses, including changes, changed conditions, termination, disputes, payments, risk and insurance, inspection, liquidated damages, and technical requirements.
BCN 5747 Construction Law Case Studies (3). Case study and analysis of reported appellate decisions on common construction law issues; licensing; bid disputes; contract issues; construction lien law; surety problems; and unresolved claims.
BCN 5749 Advanced Construction Documentation (3). Construction related documentation requirements for avoidance of litigation before, during, and after completion of construction projects; dispute resolution processes for construction operations.
BCN 5755 Construction Financial Management (3). Money management in construction operations: financing, funding, sources of money, cash flow, disbursement, liability and bonding, cost and managerial accounting, and profit analysis.
BCN 5766 Codes and Regulations (3). Study of building codes required by local, county, and state levels and their relation to quality control.
BCN 5771 Management and Marketing of Construction Services (3). Human effectiveness in marketing construction management services in the public and private sectors.
BCN 5772 Management of Construction Organizations (3). This course studies the management of a construction company. Topics included are: company organization, incorporation structures, policies and procedures, finance, accounting, information modeling, bidding strategies, and operation.
BCN 5774 Topics in International Construction (3). Introduction to procurement, financing and management of international construction projects with emphasis on
international economics, contracts, trade agreements and specifications.
BCN 5784 Construction Information Systems (3). The application of information management techniques, including computer hardware and software systems, to the analysis and solution of typical problems in the practice of construction management.
BCN 5792 Total Quality Management and Planning in Construction (3). The application of TQM philosophy and tools developed by Deming, Juran, Crosby and ISO 9000 standards to solving construction industry related problems will be discussed. Strategic planning as it relates to construction will also be covered in this course.

BCN 5905 Directed Independent Studies (1-3). Individual studies under supervision of faculty, tutor, or advisor. Requires prior approval of advisor and Director.
BCN 5906 Special Topics (1-3). Intensive study for small group of students in a particular topic, or a limited number of topics not otherwise offered in the curriculum.
BCN 5949 Graduate Construction Management Internship (1). Supervised work in construction management. Evaluation and reports required. Prerequisites: Consent of advisor and School Director.
BCN 6473 Systems Approach for Housing Planning (3). Discussions of basic concepts of systems analysis and systems approach to the field of housing planning. The advantage of systems approach. Case studies.
BCN 6642 Value Engineering in Construction (3). Relationship of costs to time and life cycle of construction projects, and methods to improve the economic value of construction projects.
BCN 6775 Decision and Risk Analysis in Construction (3). Techniques of decision analysis for the medium to top level management personnel in the construction industry. Typical construction related problems that involve risk and uncertainty are studied.

BCN 6785 Advanced Estimating and Bidding Strategy (3). Application of computer software to rigorous exercises in construction estimating. Cost information related to construction with applications in current practice.
BCN 6788C Artificial Intelligence Applications in Construction Management (3). The course presents a study of the concepts, techniques, and applications of AI technology in the construction management domain.
BCN 6795 Automation in Construction (3). In depth introduction and analysis of automation technologies in construction, covering issues related to the application, implementation and evaluation of automation technologies throughout the lifecycle of a construction process for smart jobsites. Prerequisite: Permission of the instructor.
BCN 6796 Construction Failures (3). Discussion of issues and presentation of case studies related to failures of construction projects. Prerequisite: Permission of the instructor.
BCN 6910 Supervised Research (1-6). Graduate level research carried out under the supervision of a faculty member.
BCN 6912 Project in Construction Engineering and Management (3). Independent research work culminating
in a professional practice oriented report for the requirements of the project-option of the Masters degree in construction engineering of construction management. Prerequisites: Fifteen graduate credits and approved project plan.

BCN 6916 Developments in Construction Technologies (3). Study of advanced field techniques and emerging uses worldwide. Information flow and creativity are highlighted as crucial elements which stimulate new developments. This course prepares the students to understand and deal with concepts of change.
BCN 6935 Seminar on Construction Management (3). Advanced study of problems, trends, and issues in a time of rapid change in building and management technology. Topics selected or developed by class.

BCN 6971 Thesis (1-3). (Total of 6 credit hours spread over at least two consecutive terms with 1-3 credit hours in each must be completed.) Students develop a thesis under the direction of a senior faculty mentor, and their supervisory committee, and advance and defend their propositions before an audience of peers, scholars, and their supervisory committee. Requires approval of advisor, supervisory committee, and School Director.

## Biomedical Engineering

Wei-Chiang Lin, Interim Chair and Associate Professor
Lynneah Brown, Undergraduate Advisor
Michael Brown, Senior Instructor
Michael Christie, Senior Lecturer and Undergraduate Advisor
Zachary Danziger, Assistant Professor
Anuradha Godavarty, Associate Professor and
Undergraduate Program Director
Joshua Hutcheson, Assistant Professor
Shuliang Jiao, Associate Professor and Graduate Program Director
Ranu Jung, Professor and Interim Dean
Chenzhong Li, Associate Professor
Anthony McGoron, Professor and Associate Dean of Academic Affairs
Jacob McPherson, Assistant Professor
Sharan Ramaswamy, Assistant Professor
Jessica Ramella-Roman, Associate Professor
Jorge Riera Diaz, Associate Professor
Nikolaos Tsoukias, Associate Professor
The mission of the Department of Biomedical Engineering is to bridge engineering, science and medicine:

- to educate and train the next diverse generation of biomedical engineers
- to conduct research leading to significant discoveries in medical sciences
- to conduct design and development of innovative medical technology
- to translate scientific discovery and medical technology to industry or clinical practice for delivery of health care
- to engage with the local to global community for knowledge dissemination
The objectives of the graduate Biomedical Engineering Program at FIU are the following:

1. Provide opportunity for advanced graduate studies and entrepreneurial activities;
2. Encourage FIU graduates to extend their careers into research and teaching;
3. Prepare graduates for conducting innovative and impactful biomedical engineering research, design and development;
4. Provide highly trained professionals in Biomedical Engineering to serve in academic institutions, government agencies, research laboratories, and manufacturing and service industries.
5. Improve minority and hispanic doctoral graduate representation in the Biomedical Engineering field, where they are highly underrepresented; and
6. Help attract more biotechnology industries to MiamiDade County and South Florida.

## Master of Science in Biomedical Engineering

The Department of Biomedical Engineering at Florida International University offers Research and Professional tracks for the Master's Degree. In addition, the Department offers accelerated combined BS/MS and certificate programs. These programs provide an
interdisciplinary education intended to prepare the student for professional practice in Biomedical Engineering.

All work counted for the Master's degree must be completed during the six years immediately following the date of admission to the graduate program.

## Admission Requirements

The following is in addition to the University's graduate admission requirements:

1. A student seeking admission into the program must have a bachelor's degree in engineering, the physical/life sciences, computer science, or mathematics from an accredited institution, or in the case of foreign students, from an institution recognized in its own country as preparing students for further study at the graduate level.
2. An applicant must have achieved a "B" average in upper level undergraduate work. Graduate Record Examination is required with the following minimum scores on the individual components: verbal $\geq 143$, and quantitative $\geq 151$.
3. Applicants who have not satisfied the above will be evaluated for probationary or waiver admission.
4. In addition to the above criteria, International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
5. The GPA, GRE, and TOEFL scores specified above are to be considered minimum requirements for admission. Applicants from science and engineering areas other than biomedical engineering will be expected to complete undergraduate remedial courses selected to prepare them for graduate courses in their area of interest. Full admission into the graduate program requires the completion of these background courses with no grades below "C" and a grade point average of 3.0 or better.

## Graduation Requirements

The degree will be conferred when the following conditions have been met:

1. Recommendation of the advisor and faculty of the Department.
2. Certification provided by the Department Chair, College Dean, and University Graduate School that all degree requirements have been met.
3. Meet the undergraduate deficiencies, if any existed in the student's program, as additional courses toward the degree.
4. Complete the required semester hours of graduate level credit (not more than six graduate semester hours with a grade of "B" or higher can be transferred from other accredited institutions).
5. Successful defense of an acceptable graduate thesis if required of the program.
6. Students must maintain an overall GPA of 3.0. No grade below a "C" will be accepted in a graduate program. In the event that a student is placed on probationary status, he or she must obtain a directed program from his or her advisor and approved by the Graduate Program Director prior to continuing further course work toward the degree. The student must
satisfy the directed course of action within the prescribed time limit; otherwise he or she will be academically dismissed.
7. Comply with all University policies and regulations.

## Professional Track

This track is tailored primarily for engineers currently practicing in the biomedical industry and students interested in pursuing a management career in the biomedical industry. A student shall complete 27 credit hours of course work and a 3 credit hour capstone project. The courses are organized into four core areas: Life Sciences, Mathematics, Engineering Management, and Biomedical Engineering. The student will choose two courses from the Engineering Management core based on personal training requirements. While the degree is structured as a non-thesis program, students will be required to conduct an industrial project ( 3 credit hours). The project will include contemporary topics and trends in biomedical engineering technology development and will require a formal report and presentation upon completion. Students receiving financial support from the department are not eligible for the Professional Track option.

Early in the program (before the end of the second term) the student and advisor will complete a study plan that specifies the courses that will comprise the program. A maximum of three credits of independent studies beyond the MS project may be included in a study plan.

Professional track students are required to take an oral final examination dealing with the objectives of their study plan. The student will briefly summarize the project report (20 minutes) as a part of the exam. The examining committee will include a minimum of three faculty members, at least two of whom have appointments in the Department.

## Course Requirements

| Approved Life Science Elective (3 credits) such as |  |
| :---: | :---: |
| BME 5410 | Biomedical Physiology and Engineering |
| BME 5411 | Biomedical Physiology and Engineering II |
| PHZ 6255 | Molecular Biophysics |
| Mathematics Core (3 credits) |  |
| STA 5676 | Reliability Engineering |

STA $5126 \quad$ Fundamentals of Design of Experiments 3

## Approved Engineering Management Elective (6 credits) such as <br> EIN $5226 \quad$ Total Quality Management for Engineers3 <br> EIN 5322 Engineering Management 3 <br> EIN 5359 Industrial Financial Decisions 3 <br> MAN 6167 Leadership in a Global Environment 3

Biomedical Engineering Core (18 credits)
Biomedical Engineering Electives
BME 6907 Master's Project 3

## Research Track

The research track is geared to prepare the graduate for further graduate study or a career in biomedical research. A student shall complete a minimum of 30 credit hours. This includes a minimum of 24 hours of course work (15 credits of electives in specialty areas, 6 credits of mathematics core courses, 3 credits of life science
elective), one semester of the Biomedical Engineering Seminar and 6 semester credit hours of Master's Thesis or 3 credit hours of Master's Project. Students electing Master's project will need to take one additional biomedical engineering elective course. Early in the program (before the end of the second term) the student and advisor will complete a study plan that specifies the courses that will comprise the program. A maximum of three credits of independent studies other than the MS thesis may be included in a study plan. Students receiving support from the department are not permitted to choose the project option.

All students in the research track are required to complete a research project under the supervision of an advisor and a committee. When the research is completed, the student should schedule a defense with an examining committee consisting of a minimum of three graduate faculty members (at least two of whom have appointments in the Department). The candidate should prepare to summarize the thesis or the report in the manner of a technical paper using appropriate visual aids in 40 minutes or less. Following the presentation, the candidate will answer questions related to the work from the audience and/or the committee. At the conclusion of the defense, the committee will agree upon the outcome pass or fail - and report the results to the Graduate School. Following the exam the student will implement the committee's suggestions for improving the draft document. Each committee member must sign the approval form in the final document. Copies of the approved thesis must be provided to the advisor, Department, and the University Graduate School. Students should become familiar with the University Graduate School's regulations and deadlines available on line at http://gradschool.fiu.edu.

## Course Requirements

## Biomedical Engineering Core (21 credits)

All students in the Research Track must take three courses in one specialty area, and one course in each of the other two specialty areas. The current specialty areas are: 1) Basic research in engineered tissue model systems; 2) Diagnostic bioimaging and sensor systems; and 3) Therapeutic and reparative neurotechnology.

| BME 6970 | Master's Thesis | 6 |
| :---: | :---: | :---: |
| or |  |  |
| BME 6907 | BME Master's Project | 3 |
| BME 6936 | Biomedical Engineering Seminar | 0 |
| Mathematics Core (6 credits) |  |  |
| STA 5126 | Fund Design of Experiments | 3 |
| or |  |  |
| STA 6176 | Biostatistics | 3 |
| BME 6705 | Nonlinear Systems Applications in Life Science | 3 |
| Approved Life Science Elective (3 credits) such as |  |  |
| BME 5410 | Biomedical Physiology and Engineering I | 3 |
| BME 5411 | Biomedical Physiology and Engineering II | 3 |
| PCB 6027 | Molecular and Cellular Biology II | 3 |
| PCB 6025 | Molecular and Cellular Biology I | 3 |
| PHZ 6255 | Molecular Biophysics | 3 |
| CHM 5325 | Physical Chemistry of Proteins | 3 |
| CHM 5506 | Physical Biochemistry | 3 |

CHM $5503 \quad$ Physical Chem of Nucleic Acids 3

## Combined BS/MS Degree Programs

This five-year program seamlessly combines a baccalaureate degree in biomedical, mechanical or electrical engineering with the Master's in biomedical engineering. To be considered for admission to the combined bachelor's/master's degree program, students must have completed 75-90 credits in the bachelor's degree program at FIU, have earned at least a 3.25 GPA on both overall and upper division courses, and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Students enrolled in the program may count up to 9 hours of graduate level courses (i.e., 5000 level or higher) as credits for both the undergraduate and graduate degree programs. For each of the courses counted as credits for both BS and MS degree, a minimum grade of ' B ' is required. Upon completion of the combined BS/MS program, students must have accumulated a minimum of 24 hours of credits at the graduate (5000+) level. Students enrolled in the program are encouraged to seek employment with a department faculty member to work as student assistants on sponsored research projects.

## Doctor of Philosophy in Biomedical Engineering

The PhD program in Biomedical Engineering prepares graduates for industrial or academic research in one (or more) of three areas of specialization: 1) Basic research in engineered tissue model systems; 2) Diagnostic bioimaging and sensor systems; and 3) Therapeutic and reparative neurotechnology. Students can gain valuable exposure to clinical practice and research, and acquire real experience in the practice of engineering, product development, and commercialization. Semester-long clinical research experiences are provided, and students have the opportunity to participate in clinical/industrial R\&D projects.

## Admission Requirements

A prospective student must meet all admission requirements stipulated in the University's Graduate Policies and Procedures. In addition, the requirements for admission to the doctoral program in Biomedical Engineering are stated as follows:

1. A student seeking admission to the doctoral program must have a Bachelor's or Master's degree in Biomedical Engineering, or other closely related field from an accredited institution.
2. A GPA of at least $3.0 / 4.0$ in the upper division coursework of applicant's Bachelor's degree and a GPA of at least 3.3/4.0 in the applicant's Master's degree are required.
3. GRE scores with the following minimum scores on the individual components: verbal $\geq 150$ and quantitative $\geq$ 153.
4. Three letters of recommendation.
5. A statement of research interests and goals.
6. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

The Graduate Admission Committee will examine credentials of all applicants. Applicants who have not satisfied the above will be evaluated for probationary or waiver admission.

## Degree Requirements

## Credit Requirements

The PhD program requires a total of 90 credit hours beyond the BS degree. These credits are comprised of a minimum of 27 hours of coursework and a minimum of 24 hours of dissertation.

Applicants having a Master's Degree in Biomedical Engineering or closely related field from an accredited institution are given a maximum of 30 transferred semester hours. The graduate program committee and the academic adviser may recommend that applicants take additional courses based on their research needs and deficiencies. Applicants from science and engineering areas other than biomedical engineering will be expected to complete undergraduate courses selected to prepare them for graduate courses in their area of interest. Full admission into the graduate program requires the completion of these background courses with no grades below "C" and a grade point average of 3.0 or better.

## Course Requirements

The program of study will require completion of courses (beyond the BS degree) in the following categories:

## Biomedical Engineering - minimum of 15 credits

Courses in this area must cover the major and minor specialty areas of the student. The three current specialty areas within biomedical engineering are:

1. Basic research in engineered tissue model systems
2. Diagnostic bioimaging and sensor systems
3. Therapeutic and reparative neurotechnology

## Engineering Mathematics - minimum of 6 credits

Courses in this area must cover the broad areas of statistics and theoretical/numerical modeling. Example courses in each of these areas are:

Statistics
STA $5126 \quad$ Fund Design of Experiments
STA 6176
or
STA 6176 Biostatistics

## Theoretical modeling

BME $6715 \quad$ Mathematical Modeling of Physiological Systems

BME 6716 Mathematical Modeling of Cellular Systems

## Numerical modeling

BME 6705 Nonlinear Systems with Applications to Life Sciences

## Life Science - minimum of 6 credits

The life science courses maybe selected from approved electives such as:
BME $5410 \quad$ Biomedical Physiology and Engineering I
BME $5411 \quad$ Biomedical Physiology and Engineering II
BME $6019 \quad$ Clinical Research Experience
PCB $6025 \quad$ Molecular and Cellular Biology I
PCB 6027 Molecular and Cellular Biology II
PHZ 6255 Molecular Biophysics
CHM $5325 \quad$ Physical Chemistry of Proteins
CHM 5506 Physical Biochemistry
CHM $5503 \quad$ Physical Chem of Nucleic Acids

## Biomedical Engineering Seminar

BME 7938 Doctoral BME Seminar 0
Qualifying Examination, Candidacy Requirements, and Final Defense

Students must demonstrate Graduate knowledge acquisition in three incremental stages in order to be awarded a PhD in Biomedical Engineering:

- Qualifying Exam
- Proposal Defense (oral and/or written)
- Final Defense (oral)

Qualifying Exam is offered twice a year: one in January and once in August. Students entering the PhD with a Master's degree have to pass the Qualifying Exam within the first year in the PhD program. Students entering the PhD with a bachelor's degree, have to pass the Qualifying Exam within the first two years in the PhD program. In the semester prior to taking the Qualifying Exam, the student must declare an intention to take the exam and must declare a major area. In the event a student fails the Qualifying Exam, the student may retake it one more time the next time it is offered. A student who has successfully passed the Qualifying Exam and completed all the course work will be formally admitted to PhD candidacy.

The student will be required to prepare a formal dissertation proposal, and successfully defend the content of the proposal before his/her advisory committee. Immediately following the proposal defense, the student's dissertation committee will vote to pass the proposal, to have the student resubmit the proposal within six months, or to dismiss the student from the PhD program. A student can only resubmit his/her proposal once. The dissertation committee should be comprised of at least five members, at least three of whom should be biomedical engineering graduate faculty and at least one FIU graduate faculty member must be from outside biomedical engineering.

All students in the PhD program are required to complete a dissertation under the supervision of an advisor and committee. When the dissertation research is completed, the student should schedule a final defense with the examining committee. The dissertation, with an approval cover letter from the advisor, should be given to the examining committee for review not less than four weeks before the scheduled defense. The candidate should prepare to summarize the dissertation in the manner of a technical paper using appropriate visual aids in 40 minutes or less. Following the presentation, the
candidate will answer questions related to the work from the audience and/or the committee. At the conclusion of the defense, the committee will agree upon the outcome pass or fail and report the results to the Graduate School. Following the exam the student will implement the committee's suggestions for improving the draft document. Each committee member must sign the approval form in the final document. Copies of the approved dissertation must be provided to the advisor, Department, and the University Graduate School. Students should become familiar with the University Graduate School's regulations and deadlines available on line at http://gradschool.fiu.edu.

## Course Descriptions

## Definition of Prefixes

BME-Biomedical Engineering; EEE-Engineering: Electrical and Electronics; EEL-Electrical Engineering; EGMEngineering Mechanics

BME 5005 Applied Biomedical Engineering Principles (3). Biomedical engineering applications to instrumentation, transport phenomena, mechanics, materials and imaging. Prerequisite: Permission of the instructor.

BME 5036 Biotransport Processes (3). Transport of fluid, heat, and mass in the human body. Application to dialyzers and heart-lung devices. Prerequisites: BME 3632, BME 4100.
BME 5105 Intermediate Biomaterials Science (3). Materials used in prosthesis for skin and soft tissue, vascular implant devices, bone repair, and artificial joints. Structure-property relationships for biological tissue. Prerequisite: Permission of the instructor.
BME 5316 Molecular Bioprocess Engineering (3). Use of enzyme kinetics, bioreactor design, bioseparations and bioprocessing in the biomedical, biopharmaceutical, and biotechnology industries. Prerequisites: BCH 3033, BME 3632.

BME 5340 Introduction to Cardiovascular Engineering
(3). Quantitative cardiovascular physiology, engineering applied to cardiovascular system: mechanics, materials, transport, and design.
BME 5350 Radiological Engineering and Clinical Dosimetry (3). Quantities for describing the interaction of radiation fields with biological systems. Absorption of radiant energy by biological systems. Applications to clinical dosimetry and radiation safety procedures. Prerequisite: Permission of the instructor.

BME 5358L Clinical Rotation in Radiation Oncology (3). Practical calibration of radiation therapy instruments, dose calculation and planning of radiation treatment under supervision of certified medical physicist. Prerequisite: BME 5505C.

BME 5410 Biomedical Physiology and Engineering I (3). Introductory course on cardiovascular and respiratory physiology and associated engineering concepts frequently encountered in the Biomedical Engineering field.

BME 5411 Biomedical Physiology and Engineering II (3). Introductory course on neural and musculoskeletal
physiology and associated engineering concepts frequently encountered in the Biomedical Engineering field.
BME 5505C Engineering Foundation of Medical Imaging Instrument (3). Engineering basis of medical imaging systems, including radiology, X-Ray CT, SPECT, PET, MRI, and laser and ultrasound based imaging, as well as instrument quality assurance procedures. Prerequisite: Permission of the instructor.
BME 5560 Biomedical Engineering Optics (3). Introduction to physical and geometrical optics of biomedical optical devices. Design of optical microscopes, endoscopes, fiber optic delivery systems, spectrometers, fluorometers, and cytometers. Prerequisites: Calculus, Differential Equations, Chemistry, and Physics.
BME 5573 Nanomedicine (3). Nano-scale tools and nanomaterials that result in new medical products and applications with special emphasis on imaging, diagnosis, drug delivery, regenerative medicine as well as new biomaterials. Prerequisites: BME 5105 or permission of the instructor.

BME 5578 Bio- and Nanomedical Commercialization: Concept to Market (3). This course offers a comprehensive overview of elements involved in commercialization of bio and nano technology-based R\&D.

BME 5726 Protein Engineering (3). Cloning, expressing and purifying proteins, and E. coli and Yeast expression systems. Design of proteins for specific end uses. Prerequisite: Permission of the instructor.
BME 5731 Analysis of Physiological Control Systems (3). Quantitative analysis methods and modeling of the self-regulation processes that result in homeostatic conditions in physiological systems with special emphasis on processes found in the human body. Prerequisites: Permission of the instructor, EEL 3003 or EEL 3110, BME 3404.

BME 5803 Biomedical Device Design and Ethics (3). User inputs; regulatory, ethical, societal, and environmental considerations; creativity; project management; prototype construction and testing; project feasibility; writing and oral communication. Prerequisite: Permission of the instructor.
BME 5935 Nanomedicine Seminar Series (1). This seminar series exposes students to research and innovation in the field of nanomedicine. Experts from hospitals, government, academia, and industry provide weekly rotating talks.

BME 5941 Biomedical Engineering Internship (1-3). Engineering practice in biomedical applications at an industrial partner's site. Intern will be hired through cooperative agreement to conduct collaborative research with supervision of advisor.
BME 6019 Clinical Research Experience (1). Students are matched with and then "shadow" a clinician during procedures (diagnostic and interventional), and research and development activities. Prerequisite: Permission of the instructor.

BME 6037 Controlled Delivery in Biomedicine (3). Overview of methods of controlled drug delivery and their
applications in biomedical engineering. Oral, pulmonary, transdermal, and polymeric delivery/devices. Prerequisites: BME 5105, BME 5036.
BME 6212 Solid Mechanics Applications in Physiological Systems (3). Solid mechanics and numerical methods as applied to analysis of the musculoskeletal system and trauma. Design application in orthotics and prosthesis and heart valves. Prerequisites: BME 4007 or permission of the instructor.
BME 6235 Advanced Cardiac Mechanics (3). Applications of principles of solid mechanics to the human cardiovascular system. 3-D reconstruction of the left ventricle, contractile properties and stress distribution in the myocardium. Prerequisite: BME 6212.
BME 6265 Fluid Mechanics Applications in Physiological Systems (3). Fluid mechanics principles including finite element and finite difference methods as it is applied to the analysis of various physiological systems will be covered. Process flow, diffusion and transport will be discussed in cardiovascular and pulmonary systems. Application of these primarily in the design of heart-lung machines, dialysis units, and heart valves will be discussed. Prerequisites: BME 4007 or permission of the instructor.

BME 6266 Advanced Biofluid Mechanics (3). Applications of fluid mechanics principles to human circulatory systems. Unsteady blood flow and wave propagation in elastic tubes. Influence of fluid dynamics on thrombosis and atherosclerosis. Prerequisite: BME 6265.

BME 6315 Cytomic and Proteomic Measurement Techniques (3). Principles and methods of cytomic, proteomic and genomic technology. Cellular probes, variance of protein expression. Description of the genome. Cytometry assays, protein structure, microarrays.

BME 6330 Cell/Tissue Engineering: Theory and Methodology (3). Overview of tissue engineering theory and practice with emphasis on cell behavior and morphology. Prerequisites: BME 5105, BME 3403/5702.
BME 6345 Advanced Cardiovascular Engineering (3). Engineering modeling, design, and measurements related to cardiovascular system, disease and diagnosis. Prerequisite: BME 5340.
BME 6351C Radiation Safety in Biomedicine (3). Theory and engineering basis of radiation safety in diagnostic and therapeutic radiology. Regulatory issues for the safe use of radiation in medicine. Prerequisite: BME 5350.

BME 6353C Advanced Radiation Dosimetry (3). State of the art of radiation treatment planning in radiation oncology. Intensity modulated radiation treatment methods and instruments.
BME 6359L Clinical Rotation in Diagnostic Radiology (3). Measuring of radiation fields for quality assurance of diagnostic radiology and nuclear medicine instruments under supervision of a certified medical physicist. Prerequisite: BME 5505C.
BME 6501 Applied Biomedical and Diagnostic Measurements (3). Fundamentals of biomedical measurements and the design of biomeasurement
systems and devices. This includes transducers and electrodes, EMG, EEG, ECG and medical imaging techniques, and electrical safety. Prerequisites: BME 4007 or permission of the instructor.
BME 6532 Molecular Imaging (3). Production of PET and SPECT isotopes and radiopharmaceuticals, pharmacokinetics and experimental models of nuclear medicine tracer kinetics, imaging of molecular processes and function. Prerequisite: BME 6645.
BME 6545 Biosensors and Nanobioelectronics (3). Advanced topics in the design and practical application of bioelectronic devices such as biosensors, DNA nanowires, analytical electrochemistry and biomolecular electronics. Prerequisites: Permission of the instructor, CHM 1046, BCH 3033.

BME 6563 Optical Spectroscopy (3). Introduction to the scientific principles of optical spectroscopic technologies and their usage in the field of medicine. Prerequisite: Permission of the instructor.
BME 6564 Optical Imaging Biomedicine (3). Optical techniques for imaging the structure and function of biological tissues. Modeling of light transport in tissue (forward problem) and image reconstruction (inverse problem). The basic physics and engineering of each optical based imaging technique will be covered. Prerequisites: BME 4562 or BME 5560, MAP 2302.

BME 6565 Quantitative Microscopy and Visualization (3). Practical and useful projects in optical, confocal, near field, scanning probe and other advanced microscopy and cytometry. Spatial and spectral quantitation of physiologic measures in living tissue. Prerequisite: Permission of the instructor. Corequisite: BME 5560.
BME 6645 Drug Transport Modeling (3). Theoretical and experimental models of drug transport systems, computer simulations of fluid and mass transport in biomedical systems, pharmacokinetics modeling and molecular imaging. Prerequisite: BME 5036.
BME 6705 Nonlinear Systems with Applications to Life Sciences (3). Concepts and applications of nonlinear dynamics to life sciences. Specific nonlinear models arising from biology and medicine will be investigated using computer simulations. Prerequisite: Permission of the instructor.
BME 6715 Mathematical Modeling of Physiological Systems (3). Engineering modeling, design, and measurements related to cardiovascular system, disease and diagnosis. Prerequisite: Permission of the instructor.
BME 6716 Mathematical Modeling of Cellular Systems (3). Development of mathematical modeling techniques for engineers using cellular systems as an application. Biochemical reactions, membrane potentials, excitable cells, wave propagation, cellular regulation. Prerequisite: Permission of the instructor.
BME 6750 Artificial Organs (3). Theoretical and experimental models of artificial organs for drug delivery, extracorporeal devices, oxygenators, models of tissue engineered organs, computer simulations of fluid and mass transport. Prerequisites: BME 5036, BME 5105, BME 6645.

BME 6763 Bioinformatics in Cytomics (3). Biomedical data archiving, analysis and visualization. Medical imaging, microscopy imaging, multiparameter cytometry sensors, protein and gene sequencing data processing are emphasized.
BME 6905 Independent Studies (1-3). Individual research studies for qualified biomedical engineering graduate students. Work is to be performed under the supervision of an advisor.
BME 6907 BME Master's Project (3). Individual work culminating in a professional practice-oriented report suitable for the requirements of the Professional Track of the MS program in biomedical engineering. Prerequisite: Permission of the instructor.
BME 6910 Supervised Research (1-6). Graduate level biomedical engineering research carried out under the supervision of a faculty member.
BME 6933 Workshop in Biomedical Engineering Techniques (1). A short intensive treatment of specialized research topics or techniques in biomedical engineering. May be repeated for credit with different subject content. Prerequisite: Permission of the instructor.
BME 6936 Biomedical Engineering Seminar (0). Problems in Biomedical Engineering and results of ongoing research will be presented and discussed by invited experts. Prerequisite: Permission of the instructor.

BME 6970 Master's Thesis (1-6). Master's thesis on Biomedical Engineering is to be submitted and an oral presentation is to be made. Thesis should contain aspects of design to fulfill requirements for combined BS/MS program. Prerequisite: Advisor's permission.
BME 7334C Cell/Tissue Engineering: Methods and Applications (4). Overview of tissue engineering theory and practice with emphasis on cell behavior and morphology. Prerequisite: BME 6330.
BME 7938 Doctoral Biomedical Engineering Seminar (0). The course consists of oral presentations made by guests, faculty and graduate students on advanced topics and current research activities in Biomedical Engineering. Prerequisites: Permission of the major professor and Doctoral Candidacy.
BME 7980 Ph.D. Dissertation (1-12). Doctoral Research leading to the Ph.D. Biomedical engineering dissertation. Prerequisites: Permission of the major professor and Doctoral Candidacy.
EEE 5261 Bioelectrical Models (3). Engineering models for electrical behavior of nerve and muscle cells, electrode-tissue junctions, volume conductions in tissue and the nervous system as an electrical network. Prerequisites: EEE 4202C or permission of the instructor.
EEE 5275 Bioradiation Engineering (3). Spectrum of radiation sources, types of fields, properties of living tissue, mechanisms of field propagation in tissue. Applications in imaging and therapy, hazards and safety. Prerequisites: EEL 4410 or permission of the instructor.

EEE 6285 Biosignal Processing I (3). Characterizing biosignals by application of time and frequency domain analytic methods. Comparison of analog and digital processing. Engineering design for VLSI implementations
in implantable devices. Prerequisites: EEE 4202C and EEL 6505 or permission of the instructor.

EEE 6286 Biosignal Processing II (3). Engineering design of advanced systems for processing biosignals. Methods for signal compression. Adaptive systems for automatic recognition. Application of artificial intelligence for signal classification. Prerequisites: EEE 6285 or permission of the instructor.
EEL 5820 Digital Image Processing (3). Image Fundamentals, Image Transforms, Image Enhancement, Edge Detection, Image Segmentation, Texture Analysis, Image Restoration, and Image Compression. Prerequisites: EEL 3135 and knowledge of any programming language (FORTRAN, Pascal, C).
EEL 6816 Electronic Neural Systems (3). This course bridges electronics to the understanding of neurobiologically inspired models. Biological tasks and neural computations are studied in the context of networks and processing elements. Prerequisite: Permission of the instructor.

EEL 6821 Computer Vision (3). Image formation and image properties, radiance and irradiance, introduction to brain topography, color vision, visual machinery of the brain, statistical pattern classification and decision functions, the eigensystem and its computational aspects, stereo vision, motion vision, size and orientation independence. Prerequisite: EEL 5820.
EEL 6836 Computer Visualization of Brain Electrical Activity (3). Computer techniques for the visualization of brain electrical activity. Analysis of the origin of this activity as it relates to its measurement and visualization through computerized systems. Prerequisites: EEL 4510 or permission of the instructor.

# Civil and Environmental Engineering 

Atorod Azizinamini, Ph.D., P.E., Professor and Chair Omar Abdul-Aziz, Ph.D., Assistant Professor Hesham Ali, Ph.D., P.E., Professor of Practice Michael Bienvenu, Ph.D., P.E., Professor of Practice
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Khokiat Kengskool, Ph.D., Instructor
Shonali Laha, Ph.D., P.E., Associate Professor
Kingsley Lau, Ph.D., Assistant Professor
Seung J. Lee, Ph.D., Assistant Professor
Cora Martinez, Ph.D., Instructor and Undergraduate Advisor
Alluri Priyanka, Ph.D., P.E., Assistant Professor
Lakshmi Reddi, Ph.D., P.E. Professor and Dean, University Graduate School
L. David Shen, Ph.D., P.E., T.E., Professor and Graduate Program Director, and Director, LCTR
Lambert Tall, Ph.D., P.E., Professor Emeritus
Walter Z. Tang, Ph.D., P.E., Associate Professor
Berrin Tansel, Ph.D., P.E., Professor and Undergraduate Program Director
LeRoy E. Thompson, Ph.D., P.E., Professor Emeritus
Oktay Ural, Ph.D., Professor Emeritus
Ton-Lo Wang, Ph.D., P.E., Professor and Associate Chair of Undergraduate Studies
Ioannis Zisis, Ph.D., Assistant Professor
Affiliated Faculty
Irtishad Ahmad, Ph.D., P.E., Construction
Management
Assefa M. Melesse, Ph.D., P.E., Earth and Environment
Fernando Miralles-Wilhelm, Ph.D., P.E., Earth and Environment

## Lehman Center for Transportation Research <br> L. David Shen, Ph.D., P.E., T.E., Director

Accelerated Bridge Construction University Transportation Center (ABC-UTC)
(www.abc-utc.fiu.edu)
Atorod Azizinamini, Ph.D., P.E., Director
David Garber, Ph.D., P.E., T.E., Co-Director
The Department of Civil and Environmental Engineering offers advanced study for the degree of Master of Science and Doctor of Philosophy. Degrees offered include: Master of Science in Civil Engineering, Master of Science in Environmental Engineering, and Doctor of Philosophy in Civil Engineering. The areas of specialty are Structures,

Mechanics, Geotechnical, Construction, Transportation, Water Resources, and Environmental Engineering.

## Master of Science in Civil Engineering

The Master of Science program in Civil Engineering emphasizes course work as well as research. The student is required to specialize in a defined area of civil engineering, but may broaden knowledge through studies combining subject material from different areas of specialization and interdisciplinary related courses.

The graduate degree is offered to prepare qualified students for the professional practice of or advanced academic research in civil engineering. The degree is available in a thesis or non-thesis program. The thesis program entails a minimum of six credits for the successful completion of research and a thesis. The non-thesis program must be supported by the successful completion of a project and a report of substantial engineering content for a minimum of three credits. A student must satisfactorily complete a minimum of 30 semester credits of acceptable graduate course work.

## Master of Science in Environmental Engineering

A Master of Science in Environmental Engineering is available to students interested in graduate work in Environmental Engineering. The program is designed to expose graduate students to a wide range of knowledge on environmental engineering and on problem solving while encouraging them to pursue individual research interests. Thus, the curriculum has a common core of courses but is flexible enough to permit an interdisciplinary approach, if so desired, and allows the student to pursue his or her career goals.

The applicant should hold a Bachelor's degree in engineering, the natural sciences, or a closely related field. Students who do not meet the stated criteria may be considered for admission if they satisfy any deficiencies and complete the required prerequisites. A student must satisfactorily complete a minimum of 30 semester credits of acceptable graduate courses, including either a master thesis or an engineering project.

## Admission Policies for Master of Science Programs

A student seeking admission into Civil Engineering or Environmental Engineering graduate program must have a bachelor's degree in Civil Engineering, Environmental Engineering, or related engineering or equivalent from an accredited institution or, in the case of foreign students, an institution recognized in its own country as preparing students for further study at the graduate level. The minimum requirements for admission to the Master programs are:

1. At least a " $B$ " average in upper level undergraduate work, and
2. A bachelor's degree in engineering, science, or a closely related field from an accredited institution, and
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the
iBT TOEFL or 6.5 overall on the IELTS is required, and
4. Three letters of recommendation or the forms provided by the department, and
5. A statement of objectives in which, in addition to other information, the intended concentration must be clearly stated, and
6. A resume including contact information, education and employment history, practical and research experiences (such as projects and publications), skills and other pertinent information.

Students who meet all criteria, except for requirements 1 and 2 above, may be evaluated for conditional admission. Meeting the minimum requirements does not guarantee admission to the programs.

Grades earned at an institution with non-traditional grading systems will be given every consideration and applicants will be treated equally as are students from institutions with traditional grading systems.

## Application Procedures for Master of Science Programs

A student planning to enroll in the graduate program must complete the following:

1. Submit an online Graduate Application for Admission to the Graduate Admissions Office.
2. Have a copy of the official transcripts of all previously earned college or university credits sent from the applicant's former institution(s) to the Graduate Admissions Office.
3. Submit three letters of recommendation, statement of objectives, and resume as part of the online Graduate Application for Graduate Admissions Office.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
It should be emphasized that the admission cannot be acted upon until all of the documents and credentials have been received.

Students seeking a waiver to normal admissions standards must contact the departmental main office for filing instructions and deadlines.

## Degree Requirements for Master of Science Programs

To be eligible for a Master's degree a student must:

1. Satisfy all University requirements for a Master's degree.
2. Meet all undergraduate deficiencies, and requirements as specified by the students' advisory committee.
3. Complete 30 semester hours of acceptable graduate level courses, including up to 3 credits of an Independent Study course. Supervised Research credits are not counted toward the 30 credit degree requirement.
4. Optionally, complete an acceptable thesis (minimum six credits) or engineering project (minimum three credits).
5. Successfully complete the core courses defined for the student's chosen specialty area.
6. Earn a minimum grade point average of 3.0 in all approved courses in the student's program of study.
7. Complete CGN 6939 Graduate Seminar.
8. For students who chose the thesis option, they must get approval and written evaluation of the oral defense and written thesis by their thesis committee. The committee should have, at a minimum, three graduate faculty members, and each member must complete and sign the student evaluation.
9. For students who chose the engineering project option, they must get approval and written evaluation of the oral defense and written engineering project by their project committee. The committee should have, at a minimum, three graduate faculty members, and each member must complete and sign the student evaluation.
10. For students who chose the non-thesis and nonengineering project (all-course) option, they must present a 5-page written report (in the format of a journal article) and an oral presentation (in CGN 6939) of a selected topic that demonstrates substantial professional engineering knowledge and experience. The written report and oral presentation must be evaluated and the student evaluation forms must be completed and signed by two departmental graduate faculty members, at a minimum, and then used by the CGN 6939 instructor to issue a P/F grade. The seminar will be scheduled and will be announced to students and faculty at least one week in advance in the last semester of the student's program.

## Core Courses

In order to master real-life engineering problems, engineers need to have an education with both breadth, as well as depth. Therefore, in addition to the above degree requirements, students must choose an area of technical specialization upon enrollment and satisfy the core course requirements as defined below. A proposed program of study shall be developed by a student's academic advisor together with the student and approved by the Graduate Program Director. All students are strongly encouraged to take the Research Methods for Civil Engineers course - especially those who are pursuing the thesis option. Students are also required to register for the 0-credit Graduate Seminar (CGN 6939) at least once and are encouraged to take it each Fall and Spring semesters.

## Areas of Technical Specialization:

## Environmental Engineering

Environmental engineering students are required to take at least one course in each of the following core areas:

1. Water supply/wastewater/water quality,
2. Air quality,
3. Soil/solid/hazardous waste, and
4. Water resources (including groundwater).

Furthermore, it is advisable that students gain some expertise in environmental chemistry and in computational techniques including GIS techniques, while seeking knowledge in new areas of research and development.
Students are also required to register for the zero-credit Graduate Seminar (CGN 6936) and are encouraged to participate in it each semester.

## Water Resources Engineering

This field involves the analysis of qualitative and quantitative water issues and the search for integrated, innovative and sustainable solutions to problems in the surface, groundwater, and atmospheric water environments.

Students pursuing a M.S. in Civil Engineering with concentration in Water Resources Engineering will follow a program of study that includes 15 credit-hours of engineering coursework emphasizing advanced knowledge and applications in either hydrology, hydraulics or hydrosystems or their combination thereof. The students will also complete a three credit-hour independent study to enrich the area of sought expertise.

Students are also required to comply with the following core requirements:

1. Take one course (3 credit-hours) among the following three background courses:

- CWR 5305Surface Hydrology
- CWR 6125Groundwater Hydrology
- CWR 5140C Ecohydrology

2. Take one among the following applied courses:

- CWR 5235Open Channel Hydraulics
- CWR 5535Advanced Modeling Applications in Water Resources Engineering
- CWR 6236Engineering Sediment Transport

Students are required to take the Graduate Seminar (CGN 6939) once and are strongly encouraged to attend it while registering in the program. Students may also include up to six credit hours from other civil engineering areas or related disciplines, as long as the subjects relevantly add to the student's water resources engineering knowledge.

## Structural Engineering

Students pursuing a M.S. in Civil Engineering with concentration in Structural Engineering will take at least twelve (12) credit hours of elective courses in structural engineering relevant to their track. A maximum of six (6) credits taken outside of the Civil and Environmental Engineering Department to enhance knowledge from related disciplines can be applied, upon approval of the academic advisor (or major professor), to graduation requirements. Furthermore, it is advisable that students gain some expertise in numerical methods.

Students in the Structural Engineering track are required to take at least six (6) credit hours of core course work as follows:

1. One course (3 credits) in design of structures from the following:

- CES 5325 Design of Highway Bridges
- CES 5606 Advanced Structural Steel Design
- CES 5715 Prestressed Concrete Design
- CES 5800 Timber Design
- CES 6706 Advanced Reinforced Concrete Design

2. One course ( 3 credits) in analysis of structures from the following:

- CES 5106 Advanced Structural Analysis
- CES 5587 Topics in Wind Engineering
- CES 6209 Advanced Structural Dynamics
- EGM 5421 Structural Dynamics


## Construction Engineering

Students pursuing a M.S. in Civil Engineering with concentration in Construction Engineering will follow a
program of study that includes at least fifteen (15) credithours of civil engineering coursework that focuses on knowledge and applications within Construction Engineering of civil and environmental engineering infrastructure. The students will also complete a three (3) credit-hour independent study to enrich their graduate experience. Furthermore, it is advisable that students gain expertise in state-of-the-art computational methods in construction engineering.

Students in the Construction Engineering track are required to take at least six (6) credit hours of core course work from the following:

1. CCE 5035 Construction Engineering Management;
2. CCE 5036 Advanced Project Planning for Civil Engineers
3. CCE 5405 Advanced Heavy Construction Techniques

## Geotechnical Engineering

Students pursuing a M.S. in Civil Engineering with concentration in Geotechnical Engineering will follow a program of study that includes at least fifteen (15) credithours of civil engineering coursework that focuses on knowledge and applications to the Geotechnical Engineering of civil and environmental engineering infrastructure. The students will also complete a three (3) credit-hour independent study to enrich their graduate experience. Furthermore, it is advisable that students gain expertise in state-of-the-art computational methods in construction engineering.

Students in the Geotechnical Engineering track are required to take at least six (6) credit hours of core course work from the following:

1. CEG 5065 Geotechnical Dynamics
2. CEG 6017 Theoretical Geotechnical Mechanics; and
3. CEG 6105 Advanced Foundations Engineering

## Transportation Engineering

Transportation engineering is concerned with the planning, design, operation, and maintenance of the transportation infrastructure and systems. A student who chooses to specialize in transportation engineering must complete a minimum of five courses from the list below:
TTE 5205 Advanced Highway Capacity Analysis
TTE $5215 \quad$ Fundamentals of Traffic Engineering
TTE 5607 Transportation Demand Analysis
TTE $5805 \quad$ Advanced Geometric Design of Highways
TTE $6257 \quad$ Traffic Control Systems Design
TTE 6506 Mass Transit Planning
CGN 5320 GIS Applications in Civil and Environmental Engineering
Students are also required to register for the zero-credit Graduate Seminar (CGN 6936) and are encouraged to participate in it each semester.

## Independent Study Course

A student may take up to a total of three credits of independent study, which will be letter graded. If a student needs a course that will not be offered during the student's course of study, special topics courses should be set up to meet the student's needs. There will be no limit on the number of special topics courses provided that the core course requirements are satisfied.

## Grades and Credits

No course in which a grade below a ' $C$ ' is earned may be counted toward a Master of Science degree.

## Transfer Credit

The student may receive permission to transfer up to a maximum of six semester hours of graduate credit earned from another institution or up to 12 semester hours of graduate credit earned as a non-degree seeking students at FIU after admitted into one of the graduate programs in the Civil and Environmental Engineering Department. Such credits are transferable provided that: (1) the course(s) were taken at the graduate level at an accredited college or university; (2) grade(s) of 'B' or higher were earned for the courses; (3) the course(s) are judged relevant by the student's advisory committee; (4) the credits were not used toward another degree; and (5) the credit(s) were completed within six years immediately preceding the awarding of the degree.
Credits are not transferable until the student has earned 12 semester hours in the graduate programs in the Department of Civil Engineering and Environmental Engineering.

## Time Limit

All work applicable to the Master's degree, including transfer credits, must be completed within six years of first enrollment in the master's program.

## Combined BS/MS in Civil Engineering

Students who pursue a BS degree in Civil Engineering and have completed $75-90$ credits and have at least a 3.3 GPA on both overall and upper division courses may apply to enroll in the combined BS/MS program in Civil Engineering upon recommendation from three CEE faculty members. In addition to the admission requirements of the combined BS/MS program, students must meet all the admission requirements of both the department and the University Graduate School. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships.

Students enrolled in the program may count up to nine credit hours of CEE graduate courses as credits for both the BS and MS degrees. The combined BS/MS program has been designed to be a continuous program. However, upon completion of all the requirements of the undergraduate program, students will receive their BS degrees. Students in this program have up to one year to complete the master's degree after receipt of the bachelor's degree. Students who fail to meet this one year post BS requirement or who elect to leave the combined program at any time and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the nine credits in both the bachelor's and master's degrees.

For each of the graduate courses counted as credits for both BS and MS degree, a minimum grade of $B$ is required. All double counted courses must be at 5000 level or higher. Students enrolled in the program may count up to nine credit hours of CEE graduate courses toward the elective engineering BS requirements as well as toward the MS degree. Only graduate courses with formal lectures can be counted for both degrees. The students are responsible for confirming the eligibility of each course with the Undergraduate Advisor.

Students interested in the program should consult with the Undergraduate Advisor on their eligibility for the program. The students should also meet the Graduate Program Director to learn about the graduate program and available courses before completing the application form and submitting it to the Undergraduate Advisor. Applicants will be notified by the department and the University Graduate School of the decision on their applications.

Undergraduate students enrolled in the program are encouraged to seek employment with a department faculty to work as student assistants on sponsored research projects. The students will be eligible for graduate assistantships upon full admission into the graduate school.

## Combined BS in Civil Engineering/MS in Environmental Engineering

Students who pursue a BS degree in Civil Engineering and are in their senior year and have at least a 3.3 GPA on both overall and upper division courses may apply to the department to enroll in the combined BS (Civil)/MS program in Environmental Engineering upon recommendation from three CEE faculty members. To be considered for admission to the combined bachelor's/masters degree program in Environmental Engineering, students must have completed at least 75-90 credits in the bachelor's degree program in Civil Engineering at FIU and meet the admissions criteria for the graduate degree program at FIU and meet the admissions criteria for the graduate degree program to the which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to the Graduate Admissions before the student starts the last 30 credit of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and will be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the credits specified by the program catalog, may be applied toward both degrees. In addition to the admission requirements of the combined BS/MS program, students must meet all the admission requirements of both the department and the University Graduate School.

Students enrolled in the program may count up to nine credit hours of CEE graduate courses as credits for both the $B S$ and MS degrees. The combined BS/MS program has been designed to be a continuous program. However, upon completion of all the requirements of the undergraduate program, students will receive their BS degrees. Students in this program have up to one year to complete the master's degree after receipt of the
bachelor's degree. Students who fail to meet this one year post BS requirement or who elect to leave the combined program at any time and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the nine credits in both the bachelor's and master's degrees.

For each of the graduate courses counted as credits for both $B S$ and MS degree, a minimum grade of " $B$ " is required. All double counted courses must be at 5000 level or higher. Students enrolled in the program may count up to nine credit hours of CEE graduate courses toward the elective engineering BS requirements as well as toward the MS degree. Only graduate courses with formal lectures can be counted for both degrees. The students are responsible for confirming the eligibility of each course with the Undergraduate Advisor.

Students interested in the program should consult with the Undergraduate Advisor on their eligibility for the program. The students should also meet the Graduate Program Director to learn about the graduate program and available courses before completing the application form and submitting it to the Undergraduate Advisor. Applicants will be notified by the department and the University Graduate School of the decision on their applications.

Undergraduate students enrolled in the program are encouraged to seek employment with a department faculty to work as student assistants on sponsored research projects. The students will be eligible for graduate assistantships upon full admission into the graduate school.

## Combined BS/MS in Environmental Engineering

Students who pursue a BS degree in Environmental Engineering and are in their senior year and have at least a 3.3 GPA on both overall and upper division courses may apply to the department to enroll in the combined BS/MS program in Environmental Engineering upon recommendation from three CEE faculty members. To be considered for admission to the combined bachelor's/masters degree program in Environmental Engineering, students must have completed at least 75-90 credits in the bachelor's degree program in Environmental Engineering at FIU and meet the admissions criteria for the graduate degree program at FIU and meet the admissions criteria for the graduate degree program to the which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to the Graduate Admissions before the student starts the last 30 credit of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and will be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the credits specified by the program catalog, may be applied toward both degrees. In addition to the admission requirements of the combined BS/MS program, students must meet all the admission requirements of both the department and the University Graduate School.

Students enrolled in the program may count up to nine credit hours of CEE graduate courses as credits for both the BS and MS degrees. The combined BS/MS program has been designed to be a continuous program. However, upon completion of all the requirements of the undergraduate program, students will receive their BS degrees. Students in this program have up to one year to complete the master's degree after receipt of the bachelor's degree. Students who fail to meet this one year post BS requirement or who elect to leave the combined program at any time and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the nine credits in both the bachelor's and master's degrees.

For each of the graduate courses counted as credits for both BS and MS degree, a minimum grade of " $B$ " is required. All double counted courses must be at 5000 level or higher. Students enrolled in the program may count up to nine credit hours of CEE graduate courses toward the elective engineering BS requirements as well as toward the MS degree. Only graduate courses with formal lectures can be counted for both degrees. The students are responsible for confirming the eligibility of each course with the Undergraduate Advisor.

Students interested in the program should consult with the Undergraduate Advisor on their eligibility for the program. The students should also meet the Graduate Program Director to learn about the graduate program and available courses before completing the application form and submitting it to the Undergraduate Advisor. Applicants will be notified by the department and the University Graduate School of the decision on their applications.

Undergraduate students enrolled in the program are encouraged to seek employment with a department faculty to work as student assistants on sponsored research projects. The students will be eligible for graduate assistantships upon full admission into the graduate school.

## Doctor of Philosophy in Civil Engineering

## Minimum Admission Requirements

The minimum requirements for admission to the doctoral program in civil engineering are:

1. Applicants having a Master's degree in Civil Engineering or Environmental Engineering from a U.S. institution must satisfy the following requirements for admission to the doctoral program:
a. GPA of at least 3.3/4.0 in the master's program
b. Official GRE scores
c. Three letters of recommendation or recommendation forms provided by the department
d. A statement of objectives in which, in addition to other information, the intended research area must be clearly stated. (see identification of Research Area)
e. A resume containing contact information, education and employment history, practical and research experiences (including publications), skills and other pertinent information.
2. Credentials of all other applicants including those with foreign degrees and those with B.S. degrees in other disciplines will be examined by the Graduate Program

Advisory Committee on a case by case basis. Additional credentials that will be considered include, but are not limited to, work experience, awards and recognitions, publications and presentations, and other professional experience.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
4. In addition to the departmental requirements, all students must satisfy the University's Admission and Graduate Policies and Procedures.

## Degree Requirements

## Maximum Length of Study

The maximum length of study is seven years for students admitted with a B.S. degree and six years for students with an M.S. degree. For those students who have not completed their studies within these limits, the length of study may be extended on a yearly basis after petition by the student and approval by the student's supervisory committee. Any extension beyond nine years must be approved by the University Graduate School.

## Identification of Research Area

There are currently three main areas of research or specialization: (1) Structural, Geotechnical, and Construction Engineering; (2) Environmental and Water Resources Engineering; and (3) Transportation Engineering. The student must contact the Department for a list of all faculty members, visit them, and be accepted by one professor to guide the dissertation research. If no such professor can be found, within 15 months of admission, the student will be dismissed from the Ph.D. program.

## Course Requirement

The program will consist of at least 90 semester credit hours beyond the baccalaureate degree, 54 hours of which are course work and 24 hours dissertation, or at least 60 semester credit hours beyond the M.S. degree, 24 hours of which are course work and 24 hours dissertation. The remainder of the required minimum credit hours may be taken as either course work or dissertation or a combination thereof as approved by the student's advisor. Applicants who have a Master's degree in Civil and Environmental Engineering or a closely related field from an accredited institution are given a maximum of 30 transferred semester credit hours. In addition to the above requirements, the selection of courses must meet the following requirements for credits beyond the Master's degree:

1. Minimum three credits in Mathematics or Statistics
2. Minimum 18 core credits in the selected major area in Civil and Environmental Engineering
3. Any deviation from requirements 1 and 2 above must be justified in writing and approved by the CCE Graduate Program Director.
4. Complete CGN 6939.

Additional engineering courses (3000 and 4000 level) may be required as deficiencies for students coming from nonengineering majors.
All courses and dissertation topics must be approved by the student's supervisory committee. A proposed program
of study shall be developed by a student's academic advisor together with the student and approved by the Graduate Program Director.

## Core Courses

All Ph.D. students must satisfy the core course requirements defined for the MS degree programs. In addition, all doctoral students are required to take the Research Methods for Civil Engineers course before or during the first semester of dissertation credits. A student may take additional courses in the specialty as well as other areas as approved by the major advisor and the dissertation committee, provided all the core courses have been completed previously during the MS program or will be completed in the Ph.D. program. Students are also required to register for the 0-credit Graduate Seminar (CGN 6939) at least once and are encouraged to take it each Fall and Spring semesters.

## Independent Study Course

A student may take up to a total of three credits of independent study, which will be letter graded. If a student needs a course that will not be offered during the student's course of study, special topics courses should be set up to meet the student's needs. There will be no limit on the number of special topics courses provided that the core course requirements are satisfied.

## Supervisory Committee

The student's supervisory committee should be appointed as soon as possible and within the 15-month period after the student has been admitted to the Ph.D. program. The committee must have a minimum of four members, at least three from the Department of Civil \& Environmental Engineering, and at least one from outside the department, but within FIU. All committee members should have a Ph.D. degree and must be members of the graduate faculty. The major professor must hold dissertation advisor status. The supervisory committee should meet as early as possible to review student's background, discuss student's expected research areas, provide guidance on course selection, etc.

## Residency Requirements

The Ph.D. student should spend at least one academic year in full residency, after successfully passing his/her Comprehensive Examination (see the following description).

## Examinations

A student must successfully complete the following written exam and oral defenses in partial fulfillment of requirements for the Ph.D. degree in Civil Engineering:

1. Qualifying Exam: The Qualifying Exam must be taken as soon as possible and no later than the semester the student completes the minimum course requirements. The exam consists of eight problems covering materials from core courses as determined by the student's supervisory committee. The exam will be open-book and the student will be given eight hours to solve all eight problems. In the event that a student fails the exam, he or she can retake it only once in the subsequent semester.
2. Proposal Defense: The proposal defense must be completed at least one year prior to the expected graduation date. In addition to the five-page proposal (brief version) required by the University Graduate School, the student must prepare a detailed proposal
that contains, at a minimum, background information, problem statement, objectives, literature review, methodology, work plan, and schedule. The proposal must be submitted to each committee member at least two weeks prior to the defense date. The defense will be given in the form of a graduate seminar that is open to all faculty, students, and visitors. A student can take the proposal defense twice.
3. Dissertation Defense: A draft dissertation must be submitted to each committee member at least six weeks prior to the date of the defense. The defense will be given in the form of a graduate seminar that is open to all faculty, students, and visitors. A student can fail this defense only once. In addition to dissertation copies to the University Graduate School, the student must deliver one final approved bound copy to the Department Chairperson, one to the major advisor, and one to each member of the supervisory committee. Students should become familiar with the University Graduate School's regulations and deadlines available on line at http://gradschool.fiu.edu.

## Graduate Certificate in Information Technology in Civil Engineering (ITCE)

The ITCE program brings information, communication and computing technology to the civil and environmental engineering professionals, who otherwise have little opportunity to be exposed to the rapidly changing technologies and techniques in these areas. The program will provide the opportunity to learn the basics and application techniques of these technologies in an organized, systematic, and formal setting. The program offers a set of carefully selected courses on computing and information technologies tailored to the needs of engineers in the fields of civil and environmental engineering, including structural, transportation, geotechnical, construction, and water resources engineering. The ITCE program also provides specialization opportunities for professionals interested in developing computer and information technology applications in the civil and environmental engineering fields. This program will help professional engineers (PE's) earn continuing education credits required to retain their registration. Interested students will be able to continue to earn a Master of Science in Civil Engineering degree if the admission requirements for the Masters program are met. This certificate program is open to both degree- and nondegree seeking students.
A minimum undergraduate GPA of 2.75 is required for admission. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. To earn a graduate certificate in ITCE, the students must successfully complete the program's core and elective courses.
The ITCE curriculum consists of 18 credit hours - six courses (three core + three elective) of three credit hours each as shown.

Core (Required) Courses:
CGN 6424 Advanced Computing in Civil Engineering
CGN 6308 Intelligent Civil Engineering Systems
CCE 5505 Computer Integrated Construction
Engineering

## Electives:

CGN 5321
CES 5565
CGN 6325
CGN 5315
BCN 5784
EIN 6117
ISM 6222
Applications for Civil and Environmental Engineering Computer Applications in Structures Advanced GIS for Civil and Environmental Engineering Civil Engineering Systems Construction Information Systems Advanced Industrial Information Systems

MAN $6830 \quad$ Organization Information Systems
Additional information about this program can be found at: URL: www.eng.fiu.edu/cee
Tel: (305) 348-3055
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## Academic Standard

The Department of Civil and Environmental Engineering requires that students receive no grade less than a "C" with an overall GPA of 3.0 in order to be awarded the graduate certificate.

## Course Descriptions

## Definition of Prefixes

CES-Civil Engineering Structures; CEG-Engineering General, Civil; CGN-Civil Engineering; CWR-Civil Water Resources; EES-Environmental Engineering Science; EGM-Engineering, Mechanics; EGN-Engineering, General; ENV-Environmental Engineering; TTETransportation and Traffic Engineering; URP-Urban and Regional Planning

CCE 5035 Construction Engineering Management (3). Course will cover construction organization, planning and implementation; impact and feasibility studies; contractual subjects; liability and performance; the responsibility of owner, contractor and engineer. Prerequisites: CES 3100 or equivalent and CEG 4011 or equivalent.
CCE 5036 Advanced Project Planning for Civil Engineers (3). Advanced techniques and methods for planning activities, operations, finance, budget, workforce, quality, safety. Utilize case studies as learning tools for students aspiring to management positions. Prerequisites: CCE 4031 or equivalent.

CCE 5405 Advanced Heavy Construction Techniques (3). Heavy construction methods and procedures involved in large construction projects such as bridges, cofferdams, tunnels, and other structures. Selection of equipment based on productivity and economics. Prerequisite: CCE 4001.

CCE 5505 Computer Integrated Construction Engineering (3). Course covers the discussion of available software related to Construction Engineering topics; knowledge based expert systems and their
relevance to construction engineering planning and management. Prerequisites: CCE 4031 or equivalent.
CEG 5065 Geotechnical Dynamics (4). Analytical, field, and laboratory techniques related to vibration problems of foundations, wave propagations, behavior of soils and rocks, earth dams, shallow and deep foundations. Earthquake engineering. Prerequisite: CEG 4011.
CEG 6017 Theoretical Geotechnical Mechanics (3). A continuum mechanics interpretation of geotechnical engineering; soil rheology; theories of yielding; failure and plastic stability. Analytical and numerical modeling of nonlinear properties. Prerequisites: CEG 4012C and MAP 2302. Suggested corequisite: MAP 4401.

CEG 6105 Advanced Foundations Engineering (3). Computer applications involving the numerical analysis and design of complex soil-structure interactions: highway and airfield pavements, deep foundation groups and NATM tunnelling techniques. Prerequisite: CEG 4012.
CES 5106 Advanced Structural Analysis (3). Extension of the fundamental topics of structural analysis with emphasis on energy methods and methods best suited for nonprismatic members. Prerequisite: CES 3100.
CES 5325 Design of Highway Bridges (3). Structural analysis and design for highway bridge systems which includes design criteria, standards of practice and AASHTO specifications for designing super-structures and substructure elements of various types of bridges. Prerequisites: CES 4605, CES 5715, and CEG 4011.
CES 5565 Computer Applications in Structures (3). Discussion and application of available computer programs, techniques and equipment for the analysis, design and drafting of structures. Graduate students have to do a project. Prerequisites: CES 4605 and CES 4702.
CES 5587 Topics in Wind Engineering (3). The course will cover the nature of wind related to wind-structure interaction and design loads for extreme winds, tornadoes and hurricanes. Prerequisites: CES 3100 Structural Analysis and CWR 3201.
CES 5606 Advanced Structural Steel Design (3). Extension of the analysis and design of structural elements and connections for buildings, bridges, and specialized structures utilizing structural steel. Prerequisite: CES 4605.
CES 5715 Prestressed Concrete Design (3). The behavior of steel and concrete under sustained load. Analysis and design of pre-tensioned and post-tensioned reinforced concrete members, and designing these members into the integral structure. Prerequisite: CES 4702.

CES 5800 Timber Design (3). The analysis and design of modern wood structures. Effect of plant origin and physical structure of wood on its mechanical strength; fasteners and their significance in design. Prerequisite: CES 3100.
CES 6209 Advanced Structural Dynamics in Civil Engineering (3). Response of structures subjected to arbitrary forms of deterministic dynamic loading; formulation of methods to evaluate stresses and deflections due to vibrations. Prerequisite: EGM 5421.

CES 6706 Advanced Reinforced Concrete Design (3). The analysis and design of reinforced concrete and
masonry structural systems to formalize the student's knowledge of the behavior of structural components into a final integrated structure. Prerequisite: CES 4702.
CES 6707 Reinforced Concrete Mechanics (3). Limit analysis of reinforced concrete. Concrete plasticity. Use and advantages of methods derived from basic mechanics. How reinforced concrete members respond to overload and fail. Prerequisite: CES 6706.
CGN 5315 Civil Engineering Systems (3). Application of systems analysis techniques to large scale civil engineering problems. Prerequisites: ESI 3314 or equivalent.
CGN 5320 GIS Applications in Civil and Environmental Engineering (3). Introduction to the basics of geographic information systems, their software and hardware, and their applications in Civil and Environmental Engineering, landscape architecture, and other related fields. Corequisites: TTE 4201 or CWR 3540 or ENV 3001.

CGN 5870 Corrosion Control in Civil Engineering (3). The course provides understanding of principles of corrosion phenomena with emphasis on its application to materials in civil engineering including testing methods, corrosion control, and durability. Prerequisite: Permission of the instructor.
CGN 5874 Building Diagnostics (3). This course will give an introduction into building diagnostics with a focus on non-destructive testing (NDT) techniques used to investigate Civil Engineering materials and structures. Prerequisites: Graduate standing, enrolled in engineering curriculum.
CGN 5930 Special Topics in Civil Engineering (1-3). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. Prerequisite: Permission of the instructor.
CGN 5935 Professional Engineering (Civil) Review (4). Prepares qualified candidates to take the P.E. written examination in the field of Civil Engineering. Reviews hydraulics, hydrology, water supply and wastewater, geotechnics, structures, concrete and steel design, etc.
CGN 6030 Research Methods for Civil Engineers (1). Survey and critical analysis of research in the disciplines of civil and environmental engineering. Emphasizes theory and methods of conducting advanced research, including the scientific method. Prerequisites: First-year doctoral or master standing.
CGN 6308 Intelligent Civil Engineering System (3). Application of artificial intelligence and other techniques to build intelligent civil and environmental engineering systems. Develop planning, design, analysis, diagnosis, control, monitoring applications through projects. Prerequisite: Permission of the instructor.
CGN 6325 Advanced GIS for Civil and Environmental Engineering (3). Advanced GIS concepts and techniques for civil and environmental engineering applications including LRS, temporal GIS, 3D modeling, GIS data accuracy and standards, spatial statistical analysis, and others. Prerequisites: CGN 5930 or permission of the instructor.
CGN 6426 Advanced Computing in Civil Engineering (3). Advanced computer modeling and programming
techniques for civil and environmental engineering applications including data modeling, engineering database design, object-oriented programming, and user interface design. Prerequisite: Permission of the instructor.
CGN 6905 Directed Independent Study (1-3). Individual conferences, assigned readings, and reports independent investigations selected by the student and professor with approval of advisor.
CGN 6910 Supervised Research (1-12). Graduate level research carried out under the supervision of a faculty member. Maximum 12 credits can be counted for Ph.D. students only. Prerequisite: Permission of the Major Professor.
CGN 6916 Engineering Project (1-3). Independent research work culminating in a professional practice oriented report for the requirements of the non-thesis option of the M.S. degree. Prerequisites: Fifteen graduate credits and approved project plan.

CGN 6930 Advanced Special Topics in Civil Engineering (1-3). A course designed to give groups of students an opportunity to pursue special studies in an advanced topic of Civil Engineering not otherwise offered. Prerequisite: Permission of the instructor.

CGN 6939 Graduate Seminar (0). An examination of recent technical findings in selected areas of concern. Emphasis is placed on presentations (oral and written), research activities, readings, and active discussions among participants.

CGN 6971 Thesis (1-6). The student following the thesis option of the Master's degree will pursue research through this course. The research work will culminate with an acceptable thesis. Prerequisite: Permission of the graduate's thesis advisor.
CGN 7980 Ph.D. Dissertation (1-12). Doctoral research leading to Ph.D. civil engineering dissertation. Prerequisites: Permission of the Major Professor and Doctoral Candidacy.
CWR 5140C Ecohydrology (3). Hydrology of ecosystems, interaction between the hydrologic cycle and vegetative processes. Prerequisite: Permission of the instructor.

CWR 5235 Open Channel Hydraulics (3). Theoretical treatment and application of hydraulics. Flow in open channels with special reference to varied flow, critical state hydraulic jump, and wave formation. Prerequisite: CWR 3540.

CWR 5251 Environmental Hydraulics (3). Application of fluid mechanics in the study of physical mixing in surface water bodies, dispersion of materials, and design of hydraulic systems. Prerequisite: Permission of the instructor.

CWR 5305 Surface Hydrology (3). Principles of Hydrology with a particular focus on surficial processes of interest to engineering design. Emphasizes applications to flood prevention and mitigation and stormwater management issues. Prerequisites: CWR 3201, CWR 3540 (or equivalent).
CWR 5535C Advanced Modeling Applications in Water Resources Engineering (3). Complex model applications in hydrology, hydraulics, hydrosystems engineering and
environmental interconnections. Prerequisite: Permission of the instructor.

CWR 6117 Stochastic Hydrology (3). Application of probability and statistics in hydrologic engineering. Frequency analysis of extreme events. Time series analysis and stochastic modeling. Prerequisites: CWR 3201 and CWR 3540.

CWR 6125 Groundwater Hydrology (3). Physical properties, equations of flow/mass transport, saturated/unsaturated zone, wells, pumping tests, quality/contamination control, analytical solutions, introduction to numerical models/computer codes. Prerequisite: Permission of the instructor.

CWR 6126 Advanced Groundwater Hydrology (3). Finite difference/finite element/boundary integral methods, transport and fate of chemically and biologically reacting solutes, tracer tests, hydrological approaches to remedial action and monitoring. Prerequisites: CWR 6125 or permission of the instructor.
CWR 6236 Engineering Sediment Transport (3). Physical processes of sediment transport and deposition, land erosion, river morphology applied to engineering design, design of stable channels, scour, transport of sediment-attached pollutants.
CWR 6625C Ecological Engineering (3). Introduction and incorporation of the important concepts and theories of ecology into water resources engineering principles and designs. Prerequisite: Permission of the instructor.
EES 5135 Water Quality Indicators (3). Ecological studies of micro and macro organisms which are indicators of water quality. Emphasis of bioassays and early warning systems. Prerequisite: Permission of the instructor.

EES 5137 Biological Monitoring of Freshwater Ecosystems (3). The use of aquatic insects and other invertebrates to monitor changes in the aquatic environment. The ecological aspects of aquatic insects in relation to pollution stress are assessed. Prerequisites: EES 5135 or permission of the instructor.

EES 5506 Occupational Health (3). Effects, assessments, and control of physical and chemical factors in man's environment, including chemical agents, electromagnetic radiation, temperature, humidity, pressures, illumination, noise, and vibration. Prerequisite: Admission to graduate program.
EES 5605 Noise Control Engineering (3). Fundamentals of sound and noise. Health hazards and other effects. Measurement and noise control in transportation, construction, and other environments. Prerequisite: Admission to graduate program.

EES 6506 Environmental and Human Factors (3). Effects, assessment and control of physical and chemical factors in the natural and man-made environments, including noise, electro-magnetic radiation, air and water pollution, public and occupational health, vector control, communicable diseases. Prerequisite: Admission to graduate program.
EES 6508 Occupational Health and Toxicology (3). A continuation of EES 6506. Investigation of toxic
substances in air, water, and food in the industrial environment. Prerequisite: EES 6506.

EGM 5111 Experimental Stress Analysis (3). Course covers the necessary theory and techniques of experimental stress analysis and the primary methods employed: brittle coating, strain gauges, photo-elasticity and Moire. Prerequisites: EGM 3520, EGM 5653.

EGM 5351 Finite Element Methods in Mechanics (3). Matrix techniques and variational methods in solid mechanics; single element, assemblage and generalized theory; non-linear analysis; applications in structural and soil mechanics, torsion, heat conduction and hydroelasticity, etc. Prerequisite: CES 5106.

EGM 5421 Structural Dynamics (3). Fundamentals of free, forced, and transient vibration of singles and multidegree of freedom structures, including damping of lumped and distributed parameters systems. Graduate students have to do a project. Prerequisite: CES 3100 and MAP 2302.
EGM 6425 Structural Reliability (3). Fundamentals of probability theory and stochastic processes; probabilistic modeling of structural loads and material properties; reliability analysis and design of structures; reliabilitybased design criteria. Prerequisite: STA 3033.
EGM 6533 Advanced Mechanics of Materials (3). Extension of the fundamental principles of engineering mechanics to include curved beams, warping, stability, etc. Prerequisites: CES 5106 and MAP 2302.
EGM 6653 Theory of Elasticity (3). An advanced course covering the concepts of stress and strain tensors, indicia notation, transformation of stresses, compatibility equations, the stress function and the closed form solution of some important continuum mechanics problems. Prerequisites: EGM 3520, MAP 2302.

EGM 6675 Advanced Plasticity (3). Formulation of the plastic stress-strain relationships; Prandtl-Reuss equations; yield criteria; Plane Plastic Flow and the Plane Slip Line Field Theory; limit analysis and basics of creep. Prerequisite: EGM 3520.
EGM 6736 Theory of Elastic Stability (3). Course will cover the beam-column problem; elastic and inelastic buckling of bars and frames; review of experimental work and design formulas; buckling of rings, curved bars and arches; bending and buckling of thin plates and thin shells. Prerequisite: EGM 3520.
EGM 6796 Theory of Plates and Shells (3). A course covering the concepts of thin plates with small deflections; thin plates with large deflections; thick plates; the Membrane Theory of Shells; and the General Theory of Cylindrical Shells. Prerequisite: EGM 3520.
EGN 5439 Design of Tall Buildings (3). The course analyzes different modern high-rise structural systems, and includes the dynamics of wind and earthquakes to efficiently design very tall buildings and their ancillary structures. Prerequisite: Permission of the instructor.
EGN 5455 Numerical Methods in Engineering (3). Study of procedures that permit rapid approximate solutions, within limits of desired accuracy, to complex structural analysis. Graduate students have to do a project. Prerequisite: CES 3100.

EGN 5990 Fundamentals of Engineering (FE) Review (4). Prepares upper level engineering students to take the Fundamentals of Engineering (FE) State Board examinations. Reviews chemistry, computers, statics, dynamics, electrical circuits, fluid mechanics, mechanic of materials, material science and thermodynamics.
ENV 5002C Fundamentals for Environmental Engineers (3). Laws and principles of the physical, chemical and biological phenomena that define and control the fate of chemical species in natural and engineered systems. Prerequisite: Permission of the instructor.
ENV 5007 Environmental Planning (3). Environmental laws and regulations, ecological principles, planning policies and processes, risk assessment, environmental impact due to growth, and environmental indicators.
ENV 5008 Appropriate Technology for Developing Countries (3). Appropriate environmental technologies and associated factors. Topics include water, air, soil and waste management. Low cost and energy alternatives are emphasized. Prerequisite: Permission of the instructor.

ENV 5027 Bioremediation Processes (3). Biotransformation of subsurface contaminants is gaining recognition as a viable treatment tool. This course provides students with quantitative methods required to design bioremediation systems. Project required. Prerequisite: Permission of the instructor.
ENV 5062 Environmental Health (3). Study of the control and prevention of environmental-related diseases, both communicable and non-communicable, injuries, and other interactions of humans with the environment. Prerequisite: Permission of the instructor.

ENV 5104 Indoor Air Quality (3). Sources and causes of poor indoor air quality (IAQ). Protocols for IAQ investigations; problem evaluation and solution proposals. Approaches to sustainable construction; best IAQ and energy savings.
ENV 5105 Air Quality Management (3). Technical and regulatory aspects of air quality management. Emissions inventories, ambient monitoring, and models used to evaluate the impact of pollutants on local, regional and global air quality.
ENV 5116 Air Sampling Analysis (3). Practical laboratory work and theoretical aspects involved in a wide range of air sampling and analysis systems. Critical comparison and examination of methods and instrumentation. Source testing, instrumental sensitivity, applicability and remote sensing systems. Prerequisites: ENV 5105 or ENV 4101.
ENV 5126 Particulate Air Pollution Control (3). Particulate pollution control devices, principles, design, costs. Cyclones, electrostatic precipitators, filters, bag houses, scrubbers, noval control devices.

ENV 5127 Gaseous Air Pollution Control (3). Gaseous pollution control devices, principles, design, costs. Gaseous pollutants control using adsorption, absorption, incineration, and other novel control systems.
ENV 5334 Spill Response and Hazardous Materials Transport (3). Consequence analysis of accident scenarios covering the release and dispersion of toxic
substances during transport into air, soil, or aquifer and fast response to spills and toxics recovery. Prerequisite: Permission of the instructor.
ENV 5335 Advanced Hazardous Waste Treatment Processes (3). Hazardous waste site assessment, remedial investigation, design of site monitoring strategies and remediation plans. Prerequisites: CHM 1046 and CHM 1046L.
ENV 5347 Waste Incineration (3). Domestic and industrial waste incineration and pollutant stream control of aqueous and airborne pollutants. Design of incineration's.

ENV 5356 Solid and Hazardous Waste (3). Generation, transport, treatment and disposal of solid and hazardous wastes; risk assessment and treatment of contaminated media. Prerequisites: CHM 1046 and CHM 1046L.
ENV 5406 Water Treatment Systems and Design (3). Course emphasizes water quality, quantities, treatment and distribution systems particularly as relates to municipal water supply. Requires laboratory project. Prerequisite: Permission of the instructor.
ENV 5512 Water and Wastewater Analysis (3). Relevance of the main quality parameters and their measurements by wet chemistry and analytical equipment. Includes BOD, COD, TOC, CO, TSS, VSS, alkalinity, acidity, pH hardness, ammonia, TKN, NO2, NO3, PO4, etc. Prerequisites: ENV 5666, CHM 1046, and CHM 1046L. Corequisite: ENV 5512L.

ENV 5512L Water and Wastewater Analysis Laboratory (1). Experiments are conducted which measure gross organic pollution indicators, suspended solids, conductivity, alkalinity, acidity, pH , nitrate, nitrite, TKN, ammonia, total phosphates, chlorine residual and chlorine breakpoint. Prerequisites: ENV 5666, CHM 1046, and CHM 1046L. Corequisite: ENV 5512.
ENV 5517 Design of Wastewater Treatment Plants (3). Wastewater collection systems. Integration of unit operations into the planning and design of treatment plants, including sludge handling and disposal. Prerequisite: Permission of the instructor.
ENV 5519 Chemistry for Environmental Engineers (3). Basis for applying microbial and physicochemical principles to understand reactions occurring in natural and engineered systems including water/wastewater treatment processes. Includes laboratory project. Prerequisite: Permission of the instructor.
ENV 5559 Reactor Design (3). A theoretical and practical basis for reaction kinetics to understand multiphase reactions, analysis and design of batch and continuous flow reactors. Projects on analysis of reactor design and operating data.
ENV 5613 Environmental Entrepreneurship (3). Application of environmental engineering concepts in the development of innovative ideas, products or services; interactive experiences with environmental businesses. Prerequisites: ENV 3001 or permission of the instructor.
ENV 5659 Regional Planning Engineering (3). Theories of urban and regional growth; collective utility analysis; input-output models in planning; application of linear programming to regional social accounting; economic
base analysis. Prerequisites: Computer Programming or permission of the instructor.
ENV 5666 Water Quality Management (3). Predicting and evaluating the effect of human activities on streams, lakes, estuaries, and ground waters; and the relation of human activities to water quality and protection of water resources. Prerequisite: Permission of the instructor.

ENV 5905 Independent Study (1-3). Individual research studies available to academically qualified students on graduate status.
ENV 5930 Special Topics in Environmental Engineering (1-3). Specific aspects of environmental technology and urban systems not available through formal course study. Open to academically qualified students only.

ENV 6045 Environmental Modeling (3). Evaluation of regional resources, environmental stresses, and considerations in regional systems; systems analysis in environmental management and its relation to decision making; modeling of air and water systems. Prerequisites: Computer programming or permission of the instructor.
ENV 6056 Engineering Assessment of Metal Contaminants \& Colloidal Transport (3). Kinetics of metal sorption reactions, colloidal transport, assessment of metal contaminants in soil. Prerequisite: Permission of the instructor.

ENV 6070 Green Engineering (3). Study of green engineering principles and methodologies to enhance environmental performance of societal sectors, including regulatory framework, sustainability, P2, LCA and industrial ecology. Prerequisite: Permission of the instructor.
ENV 6337 Hazardous Waste Site Assessment (3). Phase I and Phase II Investigations, Environmental Testing, Assessment, Monitoring Design. Prerequisites: ENV 5335 or permission of the instructor.
ENV 6510C Advanced Unit Operations I (3). Theory and design of physical and chemical processes for treatment of contaminated media. Application of fluid mechanics, heat and mass transfer to design and operation of physical/chemical systems. Prerequisite: Permission of the instructor.
ENV 6511C Advanced Unit Operations II (3).Theory and design of biological processes for treatment of contaminated media. Application of biochemical reaction kinetics theory to design and operation of biological treatment systems. Prerequisite: Permission of the instructor.
ENV 6511L Advanced Unit Operations II Lab (1). Bench scale experiments for scaling-up and designing the following water and wastewater processes: sedimentation, coagulation, filtration, adsorption, oxidation and gas transfer. Prerequisite: ENV 6510. Corequisite: ENV 6511.

ENV 6516 Advanced Treatment Systems (3). Integration of unit operations into advanced treatment systems for contaminated media. Applications may include either conventional or innovative/emerging technologies. Prerequisite: Permission of the instructor.
ENV 6558 Industrial Wastewater Treatment (3). Characteristics and composition of industrial wastewaters.

Sampling techniques and analyses. Water conservation and reuse. Joint industrial-commercial collection and treatment of wastewaters. Prerequisite: ENV 6516.
ENV 6614 Environmental Risk Assessment (3). Characteristics of risk analysis, hazard identification, exposure assessment, consequence analysis, doseresponse analysis. Prerequisite: Permission of the instructor.

ENV 6615 Environmental Impact Assessment (3). An examination of alternative techniques useful for analysis and environmental impacts of man's activities. Environmental impact assessment methodologies are emphasized.
ENV 6916 Engineering Project (1-3). Individual work culminating in a professional practice-oriented report suitable for the requirements of the M.S. degree-project option. Only three credits are applicable towards degree. Prerequisites: Completion of 20 graduate credits and approved proposal.
ENV 6934 Advanced Special Topics in Environmental Engineering (1-3). Specific aspects of Environmental Engineering requiring advanced engineering and research skills. A maximum of three credits are applicable towards degree. Prerequisite: Permission of the instructor.
ENV 6935 Graduate Environmental Seminar (0). The course consists of oral presentations made by students, guests, and faculty members on current topics and research activities in environmental systems.

ENV 6971 Thesis (1-6). Research for Master's thesis.
TTE 5007 Transportation Systems in Developing Nations (3). Transportation systems in the Developing Nations. Role of international organizations, technology transfer/choices, orientation of transport networks, socioeconomic and environmental impacts. Prerequisites: Graduate standing or permission of the instructor.
TTE 5015 Applied Statistics in Traffic and Transportation (3). Civil and Environmental Engineering statistics methods as applied to traffic and transportation are covered. Topics include: significance tests, standard distributions, analysis of variance, and regression analysis. Prerequisite: Graduate standing.
TTE 5100 Transportation and Growth Management (3). Theory and principles of transportation and growth management, including the growth phenomena and regional impact planning. Design projects required. Prerequisite: TTE 4201.
TTE 5205 Advanced Highway Capacity Analysis (3). Parameters involved in calculating highway capacity and level of service on different highway and transportation facilities. Computer application will be also discussed. Prerequisite: TTE 4201.
TTE 5215 Fundamentals of Traffic Engineering (3). Speed and volume studies, stream characteristics, traffic flow theory, accident characteristics. Prerequisite: TTE 4201

TTE 5273 Intelligent Transportation Systems (3). ITS functional areas, planning architecture, standards, and evaluation. Implementation of selected ITS technologies and strategies. Prerequisites: TTE 4201 or equivalent.

TTE 5315 Highway Safety Analysis (3). Influencing factors (roadway characteristics, vehicle characteristics, and human factors), safety data, network screening, identification and diagnosis of safety problems, selection of countermeasures, evaluation studies, accident reconstruction. Prerequisites: STA 3033, TTE 4201.
TTE 5606 Transportation Systems Modeling and Analysis (3). Modeling and analysis techniques in transportation. Linear Programming, queueing theory, decision making techniques. Prerequisite: TTE 4201.

TTE 5607 Transportation Demand Analysis (3). Travel demand analysis and forecasting. Modeling techniques including trip generation and distribution, mode split, and trip assignment. Practical applications. Prerequisite: TTE 4201.

TTE 5805 Advanced Geometric Design of Highways (3). Parameters governing the geometric design of highways; curve super-elevation; widening on highway curves; elements of intersection design; design of interchanges; use of AASHO design guidelines. Design project required. Prerequisites: SUR 3101C and TTE 4201.

TTE 5835 Pavement Design (3). Analysis and design of sub-base, base, and pavement of a roadway. Discussions of flexible pavement and rigid pavement as structural units. Boussinesq's approach. Westergaard's theory. Beams on Elastic Foundations. Prerequisites: CEG 4011 and CES 4702.
TTE 5925 Urban Traffic Workshop (3). Selected laboratory problems related to urban traffic. Prerequisite: TTE 4201.

TTE 5930 Transportation Seminar (1-3). Oral presentations made by students, guests, and faculty members on current topics and research activities in traffic and transportation engineering. Prerequisite: TTE 4201.
TTE 6257 Traffic Control Systems Design (3). Theory and principles of traffic control systems design, including both freeway and urban streets. Design projects required. Prerequisite: TTE 4201.

TTE 6267 Traffic Simulation Models (3). Traffic simulation modeling and analysis. Application of microscopic and macroscopic traffic simulation models to evaluate and optimize traffic control systems. Prerequisites: TTE 6257 or equivalent.

TTE 6506 Mass Transit Planning (3). Theories and principles of mass transit planning, include highway transit, rail transit and new transit modes. Design projects required. Prerequisite: TTE 5930.
TTE 6525 Bearing Capacity of Roads and Airfields (3). Advanced study of bearing capacity principles and theory; stress-strain behavior of pavements; constitutive modeling; and failure histories of pavement. Prerequisite: Permission of the instructor.

TTE 6526 Airport Planning and Design (3). Theory and principles of airport planning and design, include both general aviation and major commercial airports. Design projects required. Prerequisite: Permission of the instructor.

TTE 6528 Airport Terminal Design and Operations (3). Theory and practice of airport terminal design and
operations, including passenger terminal complex, cargo terminal complex, and ground transportation. Design projects required. Prerequisite: Permission of the instructor.

TTE 6605 Planning and Design of Intermodal Facilities (3). Theory and practice of intermodal facility planning and design, including facility location, site design and access, and intermodal considerations. Design projects required. Prerequisites: TTE 5930 or permission of the instructor.
TTE 6650 Transportation and Land Development (3). Theory and principles of transportation and land development, including site planning, traffic analysis, and access and site circulation. Design projects required. Prerequisite: TTE 4201.
TTE 6701 Light Rail Planning and Design (3). Theory and practices of light rail transit planning and design, including demand analysis, capacity evaluation, geometric design, and track design. Design projects required. Prerequisite: TTE 4201.
TTE 6755 Port Planning and Development (3). Theory and practice of port planning and development, including demand analysis, capacity evaluation, ground access, and port development strategy. Design projects required. Prerequisites: TTE 5930 or permission of the instructor.
TTE 6833 Superpave Asphalt Mixture Design and Analysis (3). Materials characterization and testing; elastic, visco-elastic and plastic behavior; fracture and fatigue, rutting and design of bituminous mixtures. Prerequisite: Permission of the instructor.
TTE 6834 Pavement Maintenance and Rehabilitation (3). Pavement performance assessment; criteria for pavement evaluation, measurement of pavement distress. Analysis and interpretation of pavement condition data. Formulation and evaluation of maintenance and rehabilitation alternative. Prerequisite: Permission of the instructor.

TTE 6837 Pavement Management Systems (3). Theory and principles of pavement management systems (PMS), including PMS at network and project level, PMS strategies, and PMS software packages used for decision making process. Prerequisites: TTE 5835 or permission of the instructor.

URP 5312 Urban Land Use Planning (3). Elements of the general land use plan, location and space requirements; the use of models in planning; development of the land use plan; policy plan, implementation. Prerequisite: Permission of the instructor.
URP 5316 Environmental and Urban Systems (3). Overview of basic issues and principles of environmental and urban planning/design systems. Emphasis will be placed on multidisciplinary linkages.
URP 5912 Research Methods (3). Methods of information search, data interpretation, and hypotheses formulation used in the field.
URP 6222 Urban Regional Analysis (3). The urban areas as a complex system; modeling the urban growth processes; statistical decision making games; modeling and simulation; cost effectiveness; application of the theory; a system-wide view of the Miami area. Prerequisite: Permission of the instructor.

URP 6317 Advanced Environmental and Urban Systems (3). To study the application of physical planning and design concepts and their environmental, infrastructural and social impacts.
URP 6906 Independent Study (1-3). Specialized individual studies in Environmental and Urban Systems. Prerequisite: Permission of the instructor.

URP 6935 Special Topics (3). Intensive treatment of specific subjects in the field of environmental and urban systems. Topics will vary depending upon the interest of students and faculty.
URP 6937 Final Project (1-3). Individual work culminating towards professional practice that also meets a degree requirement of the Master of Environmental and Urban Systems program. Prerequisite: Permission of the instructor.

## Electrical and Computer Engineering

Shekhar Bhansali, Alcatel Lucent Professor and Chair
Malek Adjouadi, Professor
Kemal Akkaya, Associate Professor
Jean Andrian, Associate Professor and Associate
Chairperson
Wilmer Arellano, Senior Instructor
Ou Bai, Assistant Professor
Armando Barreto, Professor
Amaury Caballero, Senior Lecturer
Mercedes Cabrerizo, Assistant Professor
Irene Calizo, Assistant Professor
Hai Deng, Associate Professor
Luis Galarza, Undergraduate Program Advisor
Stavros Georgakopoulos, Associate Professor
Ismail Guvenc, Assistant Professor
Ahmed S. Ibrahim, Assistant Professor
Sakhrat Khizroev, Professor
Grover Larkins, Professor
Osama Mohammed, Professor and Graduate Program Director
Nezih Pala, Associate Professor
Alexander Perez-Pons, Instructor
Gang Quan, Associate Professor
Gustavo Roig, Professor
Mario Sanchez, Associate Director for Undergraduate Advising
Arif Sarwat, Assistant Professor
Atoussa Tehrani, Instructor
Selcuk Uluagac, Assistant Professor
Frank Urban, Associate Professor
Herman Watson, Lecturer and Undergraduate Program Director
Wujie Wen, Assistant Professor
Kang Yen, Professor and Director of International
Program Development

## Master of Science in Electrical Engineering

The Department of Electrical and Computer Engineering offers both thesis and non-thesis options for the Master's Degree. The program provides a broad and multidisciplinary education, followed by in-depth studies of areas of interest.

All work counted for the Master's degree must be completed during the 5 years immediately following the date of admission.

## Admission Requirements

The following is in addition to the University Graduate School admission requirements:

1. A student seeking admission into the program must have a bachelor's degree in engineering, physical sciences, computer science or mathematics from an accredited institution, or, in the case of foreign students, from an institution comparable or equivalent to US degree for further study at the graduate level, or, a bachelor's degree in a related and a minimum of one year work experience in the broad areas of computer engineering and/or technology.
2. An applicant must have a GPA score of 3.0 or higher in upper level undergraduate work.
3. Applicants who have not satisfied the above score may be evaluated for conditional admission.
4. International students whose native language is not English, must take the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System Test (IELTS). Minimum required score is: 550 on the paper-based test (PBT TOEFL), or 80 on the iBT TOEFL, or 6.5 overall on the IELTS test.
5. Applicants from science areas other than electrical or computer engineering will be expected to complete sufficient background material at the undergraduate level prior to unconditional acceptance into the graduate program.

## Graduation Requirements

The degree will be conferred when the following conditions have been met:

1. Recommendation of the advisor and faculty of the Department.
2. Certification by the Dean of the College that all requirements of the degree being sought have been completed.
3. A GPA of at least 3.0 has been earned for certain courses required by the program.
4. Met the undergraduate deficiencies, if any existed in the student's graduate program, as additional courses toward the degree.
5. Completed the required semester hours of graduate level credit (not more than 6 graduate semester hours with a grade of " B " or higher can be transferred from other accredited institutions).
6. Students must maintain an overall GPA of 3.0. No grade below "C" will be accepted in a graduate program. In the event that a student is placed on a probationary status, he or she must obtain a directed program from his or her advisor and approved by the Dean prior to continuing further course work toward the degree. The student must satisfy the directed course of action within the prescribed time limit; otherwise he or she will be academically dismissed.
7. Complied with all University policies and regulations.

## Thesis Option

A student must complete 24 semester credit hours of technical course work plus 6 semester credit hours of EEL 6971 - Master's Thesis. The candidate's Thesis committee shall approve an appropriate thesis topic.

The course requirements include a minimum of 12 hours of 6000 level course credit and a minimum of 9 hours at the 5000-6000 level in Electrical Engineering.

Upon the successful completion of all course work, including thesis work, and after the determination by the student's advisor that he or she has completed the objectives of the thesis research, the student must pass a final oral examination which is primarily a defense of the thesis research.

The courses are chosen by mutual agreement between the student and the thesis advisor.

## Non-Thesis Option

Students may choose the non-thesis option for their master's degree. The degree requirements differ from the thesis option in one aspect. The student must either:

- Complete 27 credits of coursework approved by his advisor and successfully finish EEL 6916 Graduate Project with at least a ' $B$ '.
OR
- Complete 30 credits of coursework approved by the Graduate Program Director.
Students choosing the non-thesis option must take:

1. Two sets of graduate level Electrical Engineering approved sequence courses from the catalog. Each set includes a minimum of 6 semester credit hours.
2. Six semester credit hours at the 5000-6000 level in mathematics.

## Math Electives in ECE

EEL 5171
Advanced System Theory
EEL 5543 Random Signal Principles 3
EEL 6020 Numerical Analysis of Electrical Devices 3
The above list may be changed or expanded by the Graduate Advisory committee.

The remaining elective courses can be chosen from Science, Technology Engineering, and Mathematic (STEM) discipline based upon student approved plan of study and will be selected by the student and his advisor based on the student's career objectives.

Any course taken without the proper prerequisites and corequisites will be dropped automatically before the end of the term, resulting in a grade of "DR" or "DF".

Students, who are dismissed from the University due to low grades, may appeal to the Dean for reinstatement. A second dismissal results in no possibility of reinstatement.

## Combined BS/MS in Electrical Engineering

Students who have completed at least 75-90 hours towards their Bachelors of Science degree in Electrical Engineering and have earned at least a 3.3 GPA on both overall and upper division courses may, upon recommendation from three ECE faculty members, apply to enroll in the combined BS/MS program. These students should also meet the admissions criteria for the graduate program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees. In addition to the admission requirements of the combined $\mathrm{BS} / \mathrm{MS}$ program, students must meet all the admission requirements of the University Graduate School.

Students enrolled in the program may count up to 6 hours of ECE graduate courses as credits for both the BS and MS degrees. The combined $B S / M S$ program has
been designed to be a continuous program. During this combined BS/MS program, upon completion of all the requirements of the undergraduate program, students will receive their BS degree. Students in this program have up to one year to complete the master's degree after receipt of the bachelor's degree. Students who fail to meet this one year post BS requirement or who elect to leave the combined program at any time and earn only the BS degree will have the same access requirements to regular graduate programs as any other students, but will not be able to use the 6 credits in both the bachelor's and master's degrees.

For each of the graduate courses counted as credits for both $B S$ and MS degree, a minimum grade of " $B$ " is required. Students enrolled in the program may count up to 6 credit hours of EE graduate courses toward the elective engineering BSEE requirements as well as toward the MSEE degree. Only graduate courses with formal lectures can be counted for both degrees. The students are responsible for confirming the eligibility of each course with the undergraduate advisor.

Students interested in the program should consult with the undergraduate advisor on their eligibility to the program. The students should also meet the graduate advisor to learn about the graduate program and available courses before completing the application form and submitting it to the undergraduate advisor. Applicants will be notified by the department and the University Graduate School of the decision on their applications.

## Master of Science in Computer Engineering

The Department of Electrical and Computer Engineering offers both thesis and non-thesis options for the Master's Degree.

All work counted for the Master's degree must be completed during the 5 years immediately following the date of admission.

The program provides a broad and multidisciplinary education, followed by in-depth studies of areas of interest.

## Admission Requirements

The following is in addition to the University Graduate School admission requirements:

1. A student seeking admission into the program must have a bachelor's degree in engineering, physical sciences, computer science or mathematics from an accredited institution, or, in the case of foreign students, from an institution comparable or equivalent to US degree for further study at the graduate level, or, a bachelor's degree in a related and a minimum of one year work experience in the broad areas of computer engineering and/or technology.
2. An applicant must have a GPA score of 3.0 or higher in upper level undergraduate work.
3. Applicants who have not satisfied the above score may be evaluated for conditional admission.
4. International students whose native language is not English, must take the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System Test (IELTS). Minimum required score is: 550 on the paper-based test (PBT

TOEFL), or 80 on the iBT TOEFL, or 6.5 overall on the IELTS test.
5. Applicants from science areas other than electrical or computer engineering will be expected to complete sufficient background material at the undergraduate level prior to unconditional acceptance into the graduate program.

## Graduation Requirements

The degree will be conferred when the following conditions have been met:

1. Recommendation of the advisor and faculty of the Department.
2. Certification by the Dean of the College that all requirements of the degree being sought have been completed.
3. A GPA of at least 3.0 has been earned for certain courses required by the program.
4. Met the undergraduate deficiencies, if any existed in the student's graduate program, as additional courses toward the degree.
5. Completed the required semester hours of graduate level credit (not more than 6 graduate semester hours with a grade of " B " or higher can be transferred from other accredited institutions).
6. Students must maintain an overall GPA of 3.0 . No grade below "C" will be accepted in a graduate program. In the event that a student is placed on a probationary status, he or she must obtain a directed program from his or her advisor and approved by the Dean prior to continuing further course work toward the degree. The student must satisfy the directed course of action within the prescribed time limit, otherwise he or she will be academically dismissed.
7. Complied with all University policies and regulations.

## Thesis Option

A student must complete 24 semester credit hours of technical course work plus 6 semester credit hours of EEL 6971 - Master's Thesis. The candidate's Thesis committee shall approve an appropriate thesis topic.

The course requirements include a minimum of 12 hours of 6000 level course credit and a minimum of 9 hours at the 5000-6000 level in Computer Engineering.

Upon the successful completion of all course work, including thesis work, and after the determination by the student's advisor that he or she has completed the objectives of the thesis research, the student must pass a final oral examination which is primarily a defense of the thesis research.

The courses are chosen by mutual agreement between the student and the thesis advisor.

## Non-Thesis Option

Students may choose the non-thesis option for their master's degree. The degree requirements differ from the thesis option in one aspect. The student must either:

- Complete 27 credits of coursework approved by his advisor and successfully finish EEL 6916 Graduate Project with at least a ' $B$ '.


## OR

- Complete 30 credits of coursework approved by the Graduate Program Director.

Students choosing the non-thesis option must take:

1. Two sets of graduate level Computer Engineering approved sequence courses from the catalog. Each set includes a minimum of 6 semester credit hours.
2. Six semester credit hours at the 5000-6000 level in mathematics.

## Math Electives in ECE

EEL 5171 Advanced Systems Theory 3
EEL 5543 Random Signal Principles 3
EEL $6020 \quad$ Numerical Analysis of Electrical Devices 3
The above lists may be changed or expanded by the Graduate Advisory committee.
The remaining elective courses can be chosen from Science, Technology Engineering, and Mathematic (STEM) disciplines based upon student approved plan of study.

## Combined BS/MS in Computer Engineering

Students who have completed at least 75-90 hours towards their Bachelors of Science degree in Computer Engineering and have earned at least a 3.3 GPA on both overall and upper division courses may, upon recommendation from three ECE faculty members, apply to enroll in the combined BS/MS program. These students should also meet the admissions criteria for the graduate program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000 -level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees. In addition to the admission requirements of the combined BS/MS program, students must meet all the admission requirements of the University Graduate School.

Students enrolled in the program may count up to 6 hours of ECE graduate courses as credits for both the BS and MS degrees. The BS/MS combined program has been designed to be a continuous program. Students in this program have up to one year to complete the master's degree after receipt of the bachelor's degree. Students who fail to meet this one year post B.S. requirement or who elect to leave the combined program at any time and earn only the BS degree will have the same access requirements to regular graduate programs as any other students, but will not be able to use the 6 credits in both the bachelor's and master's degrees.

For each of the graduate courses counted as credits for both $B S$ and MS degree, a minimum grade of " $B$ " is required. Students enrolled in the program may count up to 6 credit hours of CpE graduate courses toward the elective engineering BSCPE requirements as well as toward the MSCpE degree. Only graduate courses with formal lectures can be counted for both degrees. The students are responsible for confirming the eligibility of each course with the undergraduate advisor.

Students interested in the program should consult with the undergraduate advisor on their eligibility to the program. The students should also meet the graduate advisor to learn about the graduate program and available courses before completing the application from and submitting it to the undergraduate advisor. Applicants will be notified by the department and the University Graduate School of the decision on their applications.

## Master of Science in Computer Engineering - Network and Security Online

The Master of Science in Computer Engineering Network Security Online program is similar to the existing/approved face-to-face program in terms of curriculum.

## Admission Requirements

The following is in addition to the University Graduate School admission requirements:

1. A student seeking admission into the program must have a bachelor's degree in engineering, physical sciences, computer science or mathematics from an accredited institution, or, in the case of foreign students, from an institution comparable or equivalent to US degree for further study at the graduate level, or, a bachelor's degree in a related and a minimum of one year work experience in the broad areas of computer engineering and/or technology, or a bachelor's degree in any field plus 3 years of relevant work experience will be considered. The student must take and pass two deficient courses required by the program.
2. An applicant must have a GPA score of 3.0 or higher in upper level undergraduate work.
3. Applicants who have not satisfied the above score may be evaluated for conditional admission.
4. International students whose native language is not English, must take the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System Test (IELTS). Minimum required score is: 550 on the paper-based test (PBT TOEFL), or 80 on the iBT TOEFL, or 6.5 overall on the IELTS test.
5. Applicants from science areas other than electrical or computer engineering will be expected to complete sufficient background material at the undergraduate level prior to unconditional acceptance into the graduate program.
The Master of Science in Computer Engineering Network Security Online program requires 30 semester hours beyond the bachelor's degree. Up to 6 semester hours of graduate credit may be transferred into the master's program. The Master of Science in Computer Engineering - Network Security Online program includes two required components (example courses):
Computer Engineering Courses ( $\mathbf{2 4}$ credits)
EEL 6803 Advanced Digital Forensics
EEL 6805 Advanced Malware Reverse
EEL 5718 Computer-Communication Network Engineering
Advanced Ethical Hacking
EEL 5807

EEL $6758 \quad$ Engineering Design of Microprocessor
EEL 6787
TCN 5155 Wireless Communications with
Multimedia Applications with
Multimedia Applications
Ubiquitous and Embedded Sensor
Network-Centric Telecommunications

## Math Electives ( 6 credits)

EEL 5171 Advanced Systems Theory 3
EEL 5543 Random Signal Principles 3
EEL $6020 \quad$ Numerical Analysis of Electrical Devices 3
The Math Electives may be changed or expanded by the Graduate Advisory committee.

## Doctor of Philosophy in Electrical and Computer Engineering

## Admission Requirements

The requirements for admission to the doctoral program in Electrical and Computer Engineering are:

1. Applicants having a Master's degree in Electrical or Computer Engineering from an accredited institution must satisfy the following requirements for admission to the doctoral program:

- GPA of at least 3.3/4.0 in the master's program
- GRE scores
- Three letters of recommendation in the forms provided by the department
- International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

2. Credentials of all other applicants will be examined by the Graduate Admission Committee on a case by case basis.
In addition to the departmental requirements, all students must satisfy the University's Graduate Policies and Procedures.

## Identification of Research Area

Within 12 months upon acceptance into the Ph.D. program, the student has to identify an area of research of his or her interest by contacting and being accepted by a professor willing to guide the dissertation research. If no such professor can be found, the student will be dismissed from the Ph.D. program. Contact the Department for a list of the faculty members with Dissertation Advisor status and their research interests.

## Course Requirements

The Ph.D. in Electrical and Computer Engineering requires at least 78 credit hours beyond the bachelor's degree. A maximum of 30 credit hours of course work earned in a Master's degree in Electrical or Computer Engineering, from FIU or another accredited institution, may be counted toward the Ph.D. provided that a minimum grade of " $B$ " is earned in each course.

## Degree Requirements

1. Students must complete at least 9 credits in their major area and at least 6 credits in two different breadth areas (a grade of "B" or better in each course). The appropriate areas of study and specific courses are determined by the dissertation advisor. Students majoring in Electrical Engineering should have one minor in computer engineering, and those majoring in Computer Engineering should have one minor in Electrical Engineering.
2. The student must have completed a minimum of 45 credits of graduate course work toward the Ph.D. before the student is eligible for the candidacy. This includes up to 30 transfer credits.
3. Registration for EEL 7910 Advanced Research is allowed only after successful completion of the qualifying examination
4. At least 15 credits of EEL 7980 are required. Registration for EEL 7980 Ph.D. Dissertation is allowed only after the student is admitted to candidacy.
5. Fifty percent of the total hours counted toward the doctoral degree have to be at the 6000 and 7000 level (including EEL 7980).

## Residency Requirements

The Ph.D. student must spend at least one academic year in full-time residency. Usually, this will be after being admitted to candidacy. To satisfy the residency requirement for a Ph.D. degree in Electrical and Computer Engineering, the candidate must complete a minimum of 18 credit hours within a period of 12 months in residency at the University.

## Graduate Supervisory and Research Committee

The student's Ph.D. Graduate Supervisory and Research Committee should be appointed as soon as possible and not later than 15 months after being admitted to the Ph.D. program. Consult the Graduate Handbook in the Department for more details on how to select the committee members.

## Ph.D. Course Breadth Requirements

The student must submit information about how the breadth requirement has been satisfied to the Graduate Program Director at the time he/she signs up for the Ph.D. Qualifying Examination.

## Qualifying Examination

To be eligible for the written qualifying examination, the student must have satisfied the Ph.D. course breadth requirements in his or her area of specialization and in two other areas. The students can take the qualifying examination no later than the semester in which all the required coursework for the degree is completed. Failure to do this is causation for dismissal from the Ph.D. program.
One of the following two options will be selected by the student's major advisor for the qualifying exam: (1) Written exam and (2) Research paper preparation and presentation. Failing any part of the exam implies failure of the entire examination. The exam must be retaken the next time it is offered. Failing a second time is cause for dismissal from the Ph.D. program.

Consult the Graduate Handbook available in the Department for details on examination procedures, dates, duration, application and grading criteria.

## Proposal Defense

Proposal defense must be taken within one semester after the satisfactory completion of the qualifying examination.

## Admission to Candidacy

Candidacy status indicates that a doctoral student is ready to commence working the dissertation. A student is admitted to candidacy upon successfully completing all required course work and passing the qualifying examination and proposal defense.

## Oral Defense and Submission of Doctoral Dissertation

A dissertation is required of all candidates for the doctoral degree. A proposal must be submitted to the student's Dissertation Committee for approval, following the general guidelines in the "Regulations for Thesis and Dissertation Preparation". A student must enroll for dissertation credits in the semester in which he or she expects to be admitted to candidacy, and must maintain continuous enrollment for not less than 3 credits of EEL 7980 every semester, including Summers, until the semester in which the doctoral degree is awarded. Upon completion of the dissertation, the degree candidate will submit to the Dean of the Graduate School an application for dissertation defense signed by the student's Dissertation Committee with sufficient time to allow for publishing a notice in the monthly calendar of dissertation and theses defenses to invite members of the university community to observe the defense.

Following the successful defense of the dissertation, as determined by a majority vote of the student's research committee, the dissertation must be forwarded to the Dean of the College of Engineering and Computing and the Dean of the Graduate School for their approval.

All dissertations submitted in fulfillment of requirements for graduate degrees must conform to University guidelines (see "Regulations for Thesis and Dissertation Preparation"). One final, approved copy of the dissertation must be delivered to the Chairperson of the Department of Electrical and Computer Engineering. Library copies must conform to University guidelines, also published in "Regulations for Thesis and Dissertation Preparation".

## Financial Aid

Consult the Department for information on research and teaching assistantships available for doctoral students.

## Graduate Certificate in Electric Power Engineering and Management (EPEM)

This graduate certificate program is open to all students with a Bachelor's Degree in electrical engineering, computer engineering, and other closely related fields of study from an accredited institution. This certificate program is open to both degree- and non-degree seeking students. The EPEM program plans to develop managerial talents for a technological environment in the electrical energy industry. The program blends a mix of electrical engineering and management courses. The EPEM program is designed to provide specialization
opportunities in Electrical Energy area and Management. The skills, concepts and techniques learned will be related to, but not dependent upon, knowledge of power engineering. The emphasis will be on management and organizational skills appropriate for the electrical energy industry.
To earn a graduate certificate in EPEM, the students must successfully complete the program's core and elective courses.
The EPEM curriculum consists of 18 credit hours - 6 courses. These courses cover functional areas of electrical power engineering, management and specialized technical and engineering functions.

## Courses

EIN 5322
ESI 6455

EIN 5346
EEL 5270
EEL 6261
EEL 6273

Engineering Management Advanced Engineering Project Management Logistics Engineering Electrical Transients in Power Systems Power Systems Engineering Power Systems Stability and Control

Additional information about this program can be found at: URL: www.eng.fiu.edulece
E-mail: mohammed@fiu.edu
Tel: (305) 348-3040
Fax: (303) 348-3707

## Academic Standard

The Department of Electrical and Computer Engineering requires that students receive no grade less than a "C", with an overall GPA of 3.0 in order to be awarded the graduate certificate.

## Course Descriptions

## Definition of Prefixes

CNT-Computer Networks; EEE-Engineering: Electrical and Electronic; EEL-Engineering: Electrical; OSE-Optical Science and Engineering; TCN-Telecommunications/ Networkings

CNT 5415 Practical Applied Security (3). Hands-on training in practical installation and maintenance of secure systems, including such topics as security configuration, DMZs, firewalls, anti-virus software, and hardware security modules. Prerequisite: Graduate standing.
EEE 5261 Bioelectrical Models (3). Engineering models for electrical behavior of nerve and muscle cells, electrode-tissue junctions, volume conductions in tissue and the nervous system as an electrical network. Prerequisites: EEE 4202C or permission of the instructor. (F)

EEE 5275 Bioradiation Engineering: Detection and Measurement (3). Spectrum of radiation sources, types of fields, properties of living tissue, mechanisms of field propagation in tissue. Application in imaging and therapy, hazards and safety. Prerequisites: EEL 4410 or permission of the instructor. (S)
EEE 5348 Digital Electronics (3). Analysis and design of logic gates using saturated and non-saturating elements, transmission gates, interfacing of logic families, bistable circuits, A/D and D/A converters. Prerequisites: EEE 4304 or permission of the instructor.

EEE 5352 Bipolar Junction Transistors (3). Bipolar junction transistor physics. Semiconductor bulk properties at equilibrium and nonequilibrium. PN junction theory. Theory of the bipolar junction transistor. Prerequisites: EEE 3396 or permission of the instructor. (S)
EEE 5353 Field Effect Transistors (3). Field effect device physics and technology. MOS capacitor. DC and AC characteristics of the MOS transistor. The MOS transistor in dynamic operation. Prerequisites: EEE 3396 or permission of the instructor. (F)
EEE 5366 Industrial Electronics (3). A study of solid state devices for the control of power, their applications and limitations in power switching circuits and in the control of physical transducer. Prerequisites: EEL 4213, EEE 4304 or permission of the instructor. (F, every third year)
EEE 5371 High Frequency Amplifiers (3). Analysis and design of high frequency amplifiers and oscillators: stability, scattering parameters, use of the Smith chart and other practical design tools, noise. Prerequisites: EEE 4304, EEL 4410 or permission of the instructor. (F, every third year)
EEE 5425 Introduction to Nanotechnology (3). Nanoscale electrical, optical and magnetic device operation. Overview of new devices enabled by nanotechnology, methods for fabrication and characterization of nanoscale and devices. Prerequisite: EEE 3396.
EEE 5427C Advanced Nanofabrication of Electronic Devices (3). This course covers the advanced theory and technology for fabrication of micro/nano-scale electronic devices. Includes lectures and laboratory sessions on techniques such as lithography and etching. Prerequisites: EEE 5425 or permission of the instructor.
EEE 5515 Signal Detection Theory (3). This course thoroughly investigates the fundamentals of modern signal detection theory. The topics to be covered include: Deterministic signals, Random signals, Statistical decision theory. Prerequisites: EEL 5543 or permission of the instructor.

EEE 5718 Advanced Security of Internet of Things and Cyber-Physical Systems (3). In this project-based class, the students will gain advanced hands-on training in the security of Internet-of-Things (IoT) and Cyber-Physical Systems (CPS) areas. Prerequisites: Programming coursework or any CS oriented courses (e.g. COPXXXX) or any embedded coursework or permission of the instructor.

EEE 6285 Biosignal Processing I (3). Characterizing biosignals by application of time and frequency domain analytic methods. Comparison of analog and digital processing. Engineering design for VLSI implementations in implantable devices. Prerequisites: EEL 6505 or permission of the instructor. (F)
EEE 6286 Biosignal Processing II (3). Engineering design of advanced systems for processing biosignals. Methods for signal compression. Adaptive systems for automatic recognition. Application of artificial intelligence for signal classification. Prerequisites: EEE 6285 or permission of the instructor. (S)

EEE 6311 Advanced Electronic Systems I (3). Principles of analog and digital electronics network. Advanced analysis, modeling and computer simulation of op amps. Analog design techniques and practical examples are covered. Prerequisites: EEE 4314 or permission of the instructor. ( $F$, alternating years)
EEE 6312 Advanced Electronic Systems II (3). Study of linear properties of electronic systems and design of fault tolerant systems using A/D and D/A and control algorithms. Prerequisites: EEE 6311 or permission of the instructor. (S, alternating years)
EEE 6315 Advanced Solid State Electronics (3). IC technologies, properties and fabrication concepts. Bipolar, MOS, I2L, CCD, bubble technologies. Ion implantation characteristics. Lithography techniques. Prerequisites: EEE 3396, EEE 4304 or permission of the instructor. (SS, every third year)
EEE 6332 Thin Film Engineering (3). Thin films used in microelectronics and optoelectronics; deposition methods; evolution of film microstructure; film growth modeling; introduction to film analysis. Prerequisite: EEE 3396. (SS, alternating years)
EEE 6335 Electrical Transport in Semiconductors I (3). This course focuses on carrier transport fundamentals, beginning at the microscopic level and progressing to the macroscopic effects relevant to semiconductor devices. Prerequisite: EEE 5352. (F, alternating years)
EEE 6337 Electrical Transport in Semiconductors II (3). This course focuses on quantum phenomena occurring in carrier transport in modern small-size semiconductor devices. Prerequisite: EEE 6335.
EEE 6395 Applied Superconductivity (3). Covers the basic physical properties of superconductors. Superconducting devices: squids, memory \& logic elements. Emphasis is placed on applications of superconductors. Prerequisites: EEE 3396 and EEL 4410. Corequisite: Permission of the instructor. (S)
EEE 6397 Semiconductor Device Theory (3). Device physics and modeling of GaAs FETS. GaAs analog and digital integrated circuits. Modulation doped field effect transistors. Heterojunction bipolar transistor theory. Prerequisite: EEE 3396. (S)
EEE 6399C Electronic Properties of Materials (3). Properties of materials from which electronic components and structures are fabricated; electrical conduction in metals, semiconductors and insulators; thermal; magnetic; optical. Prerequisite: EEE 3396. (F, alternating years)
EEE 6434 Colloidal and Nanoscale Engineering (3). Indepth coverage of the fundamentals of colloidal interactions between surfaces, particles, surfactants and biomolecules, and their relevance to self-assembly. Prerequisites: Knowledge of thermodynamics, statistical mechanics and/or physics.
EEE 6466 Microsystems and MEMS: Chem/Bio Sensors and Microfabrication (3). This course will give students an introduction with an emphasis on design and analysis of fundamentals of electrochemical sensing and integration into microfluidic systems. Prerequisites: EEL 3396 or permission of the instructor.

EEE 6516 Signal Estimation Theory (3). The course covers both the theoretical and practical aspects of statistical parameter estimation from received signals in noise. Both classical estimation and Bayesian estimation are studied. Prerequisite: EEL 5543 or permission of the instructor.
EEE 6525 Advanced Sensor Signal Processing (3). Various sensor systems, sensor signal detection, signal estimations, distributed sensor networks, sensor data fusion approaches, wireless sensor networks, radar networks and optimal sensor allocation and sensor network design. Prerequisite: EEL 3514 or permission of the instructor.
EEL 5009 Concepts in Electrical and Computer Engineering (3). The course covers a broad range of topics and concepts required to pursuing a Master's Degree in Electrical and Computer Engineering. Prerequisite: Permission of the instructor.

EEL 5145 Advanced Filter Design (3). Graduate course in the design and advance analysis of passive and active high order circuits. Use of computer as a design tool. Prerequisites: EEL 4140 or permission of the instructor. (S, alternating years).
EEL 5171 Advanced Systems Theory (3). State-space representations for continuous and discrete-time systems, controllability and observability, pole-zero allocation, Lyapunov stability theorem, state observers. Prerequisites: EEL 3657 or permission of the instructor. (S)
EEL 5270 Electrical Transients in Power Systems (3). Traveling waves on transmission and multi-conductor systems, successive reflections, distributed parameter systems, transients on integrated power systems. Prerequisites: EEL 4213 or permission of the instructor.
EEL 5275 Power Systems Protection (3). Analysis of power systems under faulted conditions using linear transformation. The study of surge, transient and waves on power lines. Computer-aided analysis and design emphasizing protection of equipment. Prerequisites: EEL 4215 or permission of the instructor. (F)
EEL 5278 Smart Grid Cyber Security and Intelligent Electronic Devices (3). Design, simulate and solve smart grid cyber security issues. Manmade and natural large scale disturbances. Smart grid cyber networked standards and new Intelligent Electronic Devices (IED). Prerequisite: Graduate standing.
EEL 5285C Sustainable and Renewable Energy Sources and Their Utilization (3). Alternative energy techniques, solar power, wind power, biomass, and other sources, electric power grid and integration of renewables, energy storage and smart energy utilization and public policy. Prerequisites: EEL 4213 or equivalent.
EEL 5426 RF Circuit Design (3). Transmission lines, guided EM propagation, microwave circuits, resonators, impedance matching, passive components, thin-film circuits, filters, two-port networks, measurements, advanced simulations. Prerequisites: EEL 3135 and EEL 3110.

EEL 5437 Microwave Engineering (3). Microwave guides. Microwave tubes. Microwave solid state devices. Microwave integrated circuits, Microwave enclosures.

Prerequisites: EEL 4410 or permission of the instructor. (S, every third year)
EEL 5467 Antennas for Wireless Communication Systems (3). Antenna principles, wire antennas, printed antennas, antenna arrays, and measurements. Full-wave simulation software is used for the design and analysis of antennas for wireless communication systems. Prerequisite: EEL 4410 or permission of the instructor.
EEL 5482 Fields and Waves Engineering (3). Concepts and theorems in fields and waves, analytic techniques for guided waves, radiation and scattering, numerical techniques for analysis of electrical devices. Prerequisites: EEL 4410 or permission of the instructor. (S)
EEL 5500 Digital Communication Systems I (3). This course will consider the most important aspects of digital communication systems such as noise related subjects, random signals, linear systems, and baseband digital modulation and multiplexing. Prerequisites: EEL 3514 or permission of the instructor. (SS)
EEL 5501 Digital Communication Systems II (3). This course will consider more important aspects of digital communication systems such as matched filters, digital base and modulation, multiplexing, carrier digital modulation and error correction coding. Prerequisites: EEL 5500 or permission of the instructor. (F)
EEL 5543 Random Signal Principles (3). Noise, random processes, correlation, spectral analysis in the analysis and design of communication systems. Optimization techniques; minimum mean square error. Prerequisite: EEL 3514. (SS, alternating years)
EEL 5563C Introduction to Optical Fibers (3). Use of fiber optics as a communication medium. Principles of fiber optics; mode theory; transmitters, modulators, sensors, detectors and demodulators; fiber data links. Prerequisites: EEL 3514, EEE 4314 and EEL 4410 or permission of the instructor. ( $F$, alternating years)
EEL 5587 Long Term Evolution Communication: From Theory to Practice (3). Introduction to the basic concepts in Long Term Evolution (LTE) technology and beyond. Prerequisite: Permission of the instructor.
EEL 5591C Wireless Digital Communications with USRP Applications (3). The course covers the fundamentals of wireless digital communications from a DSP perspective. Hands-on experience with wireless communication principles is achieved through lab experiments and course projects. Prerequisites: EEL 3514, EEL 4510.
EEL 5653 Digital Control Systems (3). Analysis and design of digital control systems. Z-transforms, analysis and control of discrete-time systems, digital control of analog systems. Several digital controller design methods. Computer simulation and microprocessor implementation. Prerequisite: EEL 3657. (SS)
EEL 5718 Computer-Communication Network Engineering (3). System engineering synthesis, analysis, and evaluation of computer-communication networks. Network design, routing and flow control, telecommunication traffic engineering, transmission, switching, etc. Prerequisite: Permission of the instructor. (SS)

EEL 5719 Digital Filters (3). Analysis, design and implementation of digital filters. Hardware and software approach to design. Prerequisite: Permission of the instructor. (F)
EEL 5725 Hardware Description Languages (VHDL or Verilog) (3). This course involves systematic studies of Fault Tolerant Digital Systems, VHDL and VERILOG based dynamic digital system designs, and system implementations with CPLDs, FPGAs, ASICs. Prerequisite: EEE 4304, EEL 4746 or Permission of the instructor. (F)
EEL 5741 Advanced Microprocessor Systems (3). Interfacing of various microprocessors together. Concepts of master-slave systems, virtual memory and I/O control techniques. Digital system evaluation and optimization. Prerequisites: EEL 4746 or permission of the instructor. (SS, alternating years)
EEL 5757 Real-Time Digital Signal Processing Implementations (3). Techniques for the implementation of Digital Signal Processing (DSP) algorithms in dedicated processors, for assessing real-time performance of audio, control, and communication systems. Prerequisites: EEL 4510 or permission of the instructor.
EEL 5807 Advanced Ethical Hacking (3). This will give individuals an exposure to the latest hacking tools and techniques to understand the anatomy of computer attacks and teach them the countermeasures to protect their valuable data.
EEL 5813 Neural Networks-Algorithms and Applications (3). Various artificial neural networks and their training algorithms will be introduced. Their applications to electrical and computer engineering fields will be also covered. Prerequisite: Permission of the instructor. (SS)
EEL 5820 Digital Image Processing (3). Image Fundamentals, Image Transforms, Image Enhancement, Edge Detection, Image Segmentation, Texture Analysis, Image Restoration, and Image Compression. Prerequisite: EEL 3135 and knowledge of any programming language (FORTRAN, Pascal, C). (F)
EEL 5935 Advanced Special Topics (1-3). A course designed to give groups of students an opportunity to pursue special studies in an advanced topic of Electrical Engineering not otherwise offered. Prerequisite: Consent of instructor.
EEL 5941 Graduate Electrical and Computer Engineering Internship (1-3). Graduate students acquire practical experience through supervised internship in industry. The student prepares an internship proposal, and the work performed is documented in a report and presented. Prerequisite: Permission of the student's advisor.
EEL 5945 Electrical and Computer Engineering Teaching Practicum (1). Graduate students acquire practical teaching experience through supervised course teaching. The student prepares an internship proposal, and the work performed is documented in a report and presented. Prerequisite: Permission from student's advisor and department. Corequisite: Teaching at least one full course during that semester.

EEL 6020 Numerical Analysis of Electrical Devices (3). Numerical techniques for the analysis of static and diffusion eddy current type field problems and associated phenomena in electrical devices. Emphasis on implementation and applications to practical problems. Prerequisites: EEL 4213, MAP 3302 or equivalent or permission of the instructor. (SS)
EEL 6141 Advanced Network Analysis (3). Modeling and analysis of networks by t-domain and s-domain techniques. Topics include topology, formulation of loop eqs and node pair eqs., state space networks, computer solutions. Prerequisites: EEL 3112 or permission of the instructor. (S, every third year)
EEL 6167 VLSI Design (3). Study of VLSI Design concepts in MOS/CMOS environment, CAD techniques, VLSI array processors and wavefront array processors, and implementation of array processors. Prerequisites: EEL 5741, EEE 4314. (SS, alternating years)
EEL 6219 Electric Power Quality (3). Modeling of networks under non-sinusoidal conditions, loads which may cause power quality problems, analysis of harmonics, flickers, impulses, standards, power quality improvement methods. Prerequisites: EEL 4213 or permission of the instructor.
EEL 6235 Motor Drives Control (3). Switched, resonant and bidirectional power supplies, DC motors: single, three phase and chopper drives. AC motors: voltage, current and frequency control. Closed loop control. Prerequisites: EEL 4213, EEE 3303, EEL 3657. (SS, alternating years)
EEL 6253 Computer Analysis of Power Systems (3). Power systems analysis and designs by computer solutions. Interactive solutions, power flow, optimum solutions. Dynamic solutions and stability. Prerequisites: EEL 4215 or permission of the instructor. (F, every third year)
EEL 6254 Power Systems Reliability (3). Expansion planning, load forecasting, reliability and availability application to generation planning, bulk power supply systems, generation system operation and production costing analysis. Prerequisites: EEL 4215 or permission of the instructor. (S)
EEL 6261 Power Systems Engineering (3). Steady-state analysis, fault studies, load flow, dynamic and transient performance, on-line control, practical applications. Prerequisites: EEL 4215 or permission of the instructor. (SS, every third year)
EEL 6267 Application of Intelligent Systems to Power System Operations (3). Power system security assessment using intelligence systems techniques such as pattern recognition, expert systems, and neural networks. Class projects include applying is to load forecasting, alarm processing. Prerequisites: EEL 4214, EEL 6273. (SS, alternating years)
EEL 6273 Power System Stability and Control (3). Direct methods for system stability, computer analysis of large scale models, Lyapunov stability, longer term stability, security analysis, MW-frequency control, isolated and multiple area control. Prerequisites: EEL 4215 or permission of the instructor. (S)
EEL 6443 Electro-Optical Devices and Systems (3). Introduction to optical devices and systems such as solid
state laser systems, their applications in industry. Also holography, linear and non-linear optical modulation and demodulation concepts. Prerequisites: EEL 4410, EEE 4314. Corequisites: EEL 5563 or permission of the instructor. (S, every third year)
EEL 6444 Optical Fiber Communication Systems (3). Course focuses on specification, design and application of fiber optic communication systems considering the fiber optic wave guide, optical device sources, photodetector, receiver and transmitter designs. Prerequisites: EEL 5501 or permission of the instructor. (S, every third year)
EEL 6463 Antenna Theory and Design (3). Radiation patterns of dipoles and loops, array analysis and synthesis, self-impedance and mutual impedance, frequency independent antennas and antenna miniaturization, and reflectors and lens antenna. Prerequisite: EEL 4410. (S, alternating years)
EEL 6505 Digital Signal Processing (3). Treatment of digital signal and system characteristics: Z transforms and FFT theory. Real time and correlation functions. Multidimensional signal processing and digital filtering. Prerequisite: Permission of the instructor. (F)
EEL 6509 Digital Communications by Satellite (3). This course will consider processing and non-processing transponders, earth terminals, propagation link characteristics, multiple access techniques, and spread spectrum techniques. Prerequisites: EEL 5501 or permission of the instructor. (S)
EEL 6536 Spectral Analysis (3). Methods for the analysis and estimation of a signal's spectral content. These include nonparametric, parametric and line spectral estimation, filter bank techniques and array processing. Prerequisites: EEL 5543 or 6505 or permission of the instructor.

EEL 6572 Pictorial Information Systems Design (3). Picture input device design, pictorial information systems hardware, picture processor design, picture storage system design, pictorial database system design, picture communication interface design, and engineering applications. Prerequisites: EEL 4709C or CDA 4400. (SS)
EEL 6575 Data Communications Engineering (3). Digital networks for data communications, CCITT, HDLC, SDLC. Real time switching techniques. Microprocessor based network topologies. Busing schemes such as VME, MULTIB, RS232. Prerequisites: EEL 4746 and EEE 4314 or permission of the instructor. (F)
EEL 6614 Modern Control Theory I (3). Graduate level treatment of modern control systems. Optimal control of feedback systems. Performance measures, Pontryagin's minimum principle, dynamic programming, numerical techniques. Prerequisites: EEL 5171 or permission of the instructor. (F, alternating years)
EEL 6615 Modern Control Theory II (3). Graduate level course in stochastic control. Stochastic processes, linear estimation, Kalman filtering techniques in state estimation. Design of feedback control in the presence of noise. Prerequisites: EEL 6614 or permission of the instructor. (S, alternating years)
EEL 6673 Identification Theory (3). System modeling, off-line methods, on-line methods, order and structure
determination, diagnostic tests and model validation. Prerequisite: EEL 5171. (F, alternating years)

EEL 6681 Fuzzy Systems Design (3). Applications of fuzzy theory to develop design methodologies for various engineering systems. Emphasis will be on systems for pattern recognition, model identification, and automatic control. Prerequisite: Permission of the instructor.

EEL 6726 Advanced VLSI Design (3). Advanced design and development of Very Large Scale Integrated Circuit (VLSI) Micro Chip Structures. Mirco Chip routing and thermal optimizations will be emphasized for implementing VLSI units. Prerequisite: Permission of the instructor. (S, every third year)
EEL 6751 Wavelet Theory Applied to Signal Processing (3). Application of wavelet theory to transient and non-stationary signal processing; compression and noise reduction of signals, singularity and edge detection, and time-frequency analysis. Prerequisites: EEL 3135 or equivalent.
EEL 6758 Engineering Design of Microprocessor Based Operating Systems (3). Hardware microprocessor based systems, BIOS (basic input and output), Kernel partitions, memory, stack organization and physical design of operating systems. Prerequisites: EEL 4709C and EEL 4746 or permission of the instructor. (S, every third year)
EEL 6787 Network Security (3). Network Security Requirements, Number Theory, Steganography, Encryption Design Principles and Algorithms, Message Authentication and Digital Signature Principle and Designs, Network System Security Design. Prerequisite: Permission of Instructor.
EEL 6795 Power Aware Computing (3). The power/thermal challenges in computing system design; source of the power dissipation and power/thermal modeling; power/thermal aware design techniques at different design abstraction levels. Prerequisites: EEL 4709C or permission of the instructor.
EEL 6803 Advanced Digital Forensics (3). This course provides students with the advanced skills to track and counter a wide range of sophisticated threats including espionage, hacktivism, financial crime syndication, and APT groups. Prerequisite: EEL 4802.
EEL 6805 Advanced Malware Reverse Engineering (3). This course provides the student with the necessary tools and techniques to perform practical reverse engineering on suspicious files and firmware encountered in a range of devices and understanding the implications associated with a malware attacks. Prerequisite: EEL 4802.
EEL 6812 Advances in Neural Networks (3). Latest concepts in artificial neural networks research and newly developed applications. Implementation, convergence in learning algorithms, accuracy refinement, and optimal structure of neural networks. Engineering applications. Prerequisite: EEL 5810. (F, alternating years)
EEL 6816 Electronic Neural Systems (3). This course bridges electronics to the understanding of neurobiologically inspired models. Biological tasks and neural computations are studied in the context of networks and processing elements. Prerequisite: Permission of Instructor.

EEL 6821 Computer Vision (3). Image formation and image properties, Radiance and irradiance, introduction to Brain Topography, Color Vision, visual machinery of the brain, statistical pattern classification and decision functions, the eigensystem and its computational aspects, stereo vision, motion vision, size and orientation independence. Prerequisite: EEL 5820. (S)
EEL 6825 Patten Recognition (3). Pattern recognition techniques via computer: decision functions, optimum decision criteria, training algorithms, unsupervised learning, feature extraction, data reduction, machine intelligence. Prerequisites: EEL 5543 or permission of Instructor.

EEL 6836 Computer Visualization of Brain Electrical Activity (3). Computer techniques for the visualization of brain electrical activity. Analysis of the origin of this activity as it relates to its measurement and visualization through computerized systems. Prerequisites: EEL 4510 or permission of instructor.
EEL 6870 Intelligent Computer Design (3). The course involves self testing and correcting type of modular computer system development. Also concepts relating to Artificial Intelligence and Expert systems will be integrated into the computer system design. Prerequisite: EEL 4709C. (F, alternating years)
EEL 6894 Real-Time Computing and Applications (3). Introduction to real-time computing; real-time system modeling; classic uniprocessor scheduling; power-aware and thermal-aware real-time scheduling; multiprocessor and distributed real-time computing. Prerequisites: EEL 4709C or permission of the instructor.
EEL 6905 Individual Work (1-4). Special problems or projects selected by the students and a faculty member. The student conducts the project with a minimum of supervision. Consent of Department Chairperson and Faculty Advisor.
EEL 6916 Graduate Project (3). Independent research work culminating in a professional practice-oriented report for the requirements of the non-thesis option of the M.S. degree project. Prerequisites: Fifteen graduate credits and approved project plan.
EEL 6931 Special Topics in Electrical and Computer Engineering (1-3). Course covers advanced topics not in existing graduate courses in electrical and computer engineering. Prerequisite: Permission of the instructor.

EEL 6932 Graduate Seminar (1). An examination of recent technical findings in selected areas of concern. Emphasis is placed on presentations (oral and written), research activities, readings, and active discussions among participants. Prerequisite: Consent of graduate advisor.
EEL 6971 Research Master's Thesis (1-6). The student, following the option of the Master's Degree with thesis, should work for his/her thesis through this course. Prerequisite: Graduate standing.
EEL 6977 Extended Thesis Research (0). For Graduate research students who have completed their sequence of thesis credits, but must register for a course to remain on graduate student status.

EEL 7910 Advanced Research (1-6). Advanced research credits under the supervision of the dissertation advisor. Prerequisite: Completion of the written comprehensive examination.

EEL 7980 Ph.D. Dissertation (1-12). Doctoral research leading to Ph.D. Electrical Engineering Dissertation. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
OSE 6492 Nanophotonics (3). This course focuses on nanoscale processes and devices and their applications for manipulating light on the nanoscale. Photonic crystals, plasmonics, metamaterials and Si photonics are covered. Prerequisites: EEE 3396, EEE 5425 or equivalent.

TCN 5155 Wireless Communications with Multimedia Applications (3). Overview of wireless communications systems; interference, blocking, spectral efficiency; performance of digital modulation in presence of fading; diversity techniques; and multimedia applications. Prerequisite: EEL 3514.
TCN 5271 Ubiquitous and Embedded Sensor NetworkCentric Telecommunications (3). Techniques impacting ubiquitous, embedded sensor network-centric telecommunications, context-awareness, autonomy, data quality, uncertainty, privacy, trustworthiness and wearable computing. Prerequisites: Graduate standing and permission of the instructor.

TCN 6276 Antennas for Wireless and Body-Centric Communications (3). Advanced antenna theory, simulation, and design as applied to wireless communications, advanced state-of-the art antenna systems, and body-centric wireless communications. Prerequisites: EEL 4410 or permission of the instructor.

TPA 5213 Performing Arts Technology (2). Applications of structural, mechanical, electrical and electronic technologies to prepare performing arts students for management and production roles. Includes basic circuits and NEC codes, control systems. Prerequisite: Permission of graduate advisor.

## Mechanical and Materials Engineering

Ibrahim Tansel, Chairperson, Professor and Director, Engineering Manufacturing Center
Arvind Agarwal, Professor, Associate Dean of Research and Director, Advanced Materials Engineering Research Institute
Wei-Yu Bao, Instructor
Benjamin Boesl, Assistant Professor
Yiding Cao, Professor and Graduate Program Director
Jiuhua Chen, Professor
Zhe Cheng, Assistant Professor
George S. Dulikravich, Professor
M. Ali Ebadian, Professor

Bilal El-Zahab, Assistant Professor
Gordon Hopkins, Professor and Dean Emeritus
W. Kinzy Jones, Professor Emeritus

Cesar Levy, Professor
Cheng-Xian (Charlie) Lin, Associate Professor
Pezhman Mardanpour, Assistant Professor
Norman Munroe, Professor
Brian D. Reding, Coordinator of Research and Laboratories Manager
Surendra Saxena, Professor and Director, Center for the Study of Matter at Extreme Conditions
Carmen Schenck, Advisor/Senior Instructor
Jun Sun, Senior Instructor
Sabri Tosunoglu, Associate Professor and Undergraduate Program Director
Andres Tremante, Senior Instructor
Chunlei (Peggy) Wang, Professor
Yu Zhong, Assistant Professor
Mechanical Engineering, a major division of the engineering profession, plays a major role in our technologically advanced society. The design and manufacturing of power plants, automobiles, aircrafts, robots to improved methods of transportation and production by industrial robots are but a few important inventions that would not have been realized without the creativity associated with the mechanical engineering profession. The mechanical engineer is a vital ingredient in most industries that require automation, computers and medical technology, as well as areas as diverse as space exploration, environmental control and bioengineering. In fact, the mechanical engineer has a direct input in all facets of modern life. There is a high demand for graduates in mechanical engineering from high technology industries throughout the United States and the developing world. The Mechanical and Materials Engineering Department at FIU takes pride in providing well educated and technologically competent graduates to serve these industries.

The academic program provides a well-balanced curriculum in the following areas of specialization:

- Mechanical Systems
- Mechanics
- Robotics and Mechatronics
- Thermo/fluid Systems
- Heating-Ventilation-and-Air-Conditioning (HVAC)
- Material Characterization
- Manufacturing and Automation Systems
- Materials Science and Engineering
- Multidisciplinary Design Optimization and Inverse Design
- Computational Analysis and Distributed Parallel Computing
- Biomechanics
- Laser and Plasma Materials Processing
- Nanomaterials
- Nanotechnology
- Electronic Packaging
- Optical Measurement and Diagnostics
- Waste Management
- Renewable Energy

Materials Science and Engineering is a dynamic field involved in the synthesis, structure, properties and performance of materials. Advanced materials are the foundation of manufactured products and many of the technological advances of this century were enabled by the development of new materials. Materials Science and Engineering is a graduate program only, with undergraduate electives offered in the Mechanical Engineering curriculum to prepare the student for graduate education in materials science and engineering. The academic program offers specialization in metallurgy, ceramics, electronic materials, nanomaterials and biomaterials. There is an increasing demand for graduates in materials science and engineering, with high technology industries leading the need for graduates. In fact, many of the companies needing materials scientists and engineers did not exist 20 years ago. Because everything is made of materials and new materials, such as nanomaterials, are rapidly being developed, materials science and engineering is a growth field in engineering.

Opportunities also exist for conducting research in the following Centers:
Advanced Materials Engineering Research Institute (AMERI): This center provides open access to research instrumentation, characterization capabilities and process development laboratories to support materials science and engineering research over the range from nanomaterials to bulk properties. AMERI also houses a nanofabrication facility for device fabrication.
The Center for the Study of Materials under Extreme Conditions (CeSMEC): The center focuses on study of physical property and synthesis of materials at extreme conditions of pressure, temperature and size. The center is equipped with state of the art facilities in X-ray diffraction, spectroscopy, thermodynamic and first principle computations. Recent additions are hydride synthesis and diamond-growth facilities.
Multidisciplinary Analysis, Inverse Design, Robust Optimization and Controls (MAIDROC) Laboratory: It has a 280-processor parallel computer running Linux and MPI. MAIDROC provides independent, secure, and up-todate computing environment for diverse large-scale simulation and design projects involving several engineering disciplines such as fluid dynamics, solid mechanics, heat transfer, electro-magnetics and chemistry.

## Graduate Certificate in Mechanical Engineering

The Graduate Certificate in Mechanical Engineering is open to degree-seeking students, non-degree seeking students, and professional engineers who hold a B.S. degree in engineering or a closely-related field of study from an accredited program. The objective of this certificate is to provide a vehicle for the career enhancement of practicing engineers and serve the needs of recent B.S. graduates and graduate students in other programs. The program consists of two concentration areas; Design, Mechanics and Robotics area, and Thermo-Fluids area, reflecting the diverse nature of mechanical engineering.

## Admission Requirements

The applicants for the Graduate Certificate in Mechanical Engineering must have a B.S. degree in engineering or a closely-related field from an accredited program, and have a GPA of a least 3.0 in the last two years of undergraduate studies, or a GPA of at least 2.5 in conjunction with significant related work experience.

## Course Requirements

A total of 19 credit hours, ( 6 three-credit courses and a one credit capstone course, EML 6908, Independent Studies) must be completed with a GPA of 3.0 or better to receive the Graduate Certificate in Mechanical Engineering. Two of the courses (six-credits) are core courses and must be taken by all students. The remaining four courses (twelve credits) may be selected from one of two concentration areas or a combination thereof to suit the needs of the student/professional engineer.

## Core Courses: ( 6 credits)

EGM 5346 Computational Engineering Analysis
Select one of the following two courses:
EGM 5354 Finite Element Method Applications in Mechanical Engineering
EGM 6422 Advanced Computational Engineering Analysis

## Elective Courses: (12 credits)

Select four courses either from the (1) Design, Mechanics and Robotics concentration area, or the (2) Thermo-Fluids area:
(1) Design, Mechanics and Robotics Area:

EML 5385 Identification Techniques of Mechanical Systems
EML $5505 \quad \begin{aligned} & \text { Smart Machine Design and } \\ & \text { Development }\end{aligned}$
EML 5509 Optimization Algorithms 3
EML 5530 Intermediate CAD/CAE 3
EGM 5615 Synthesis of Engineering Mechanics 3
EML $5808 \quad$ Control Technology for Robotic Systems3
EML 6805 Advanced Design of Robots 3
EAS 5221 Design and Analysis of Aerospace Structures
(2) Thermo-Fluids Area:

EML 5103 Intermediate Thermodynamics
EML 5152 Intermediate Heat Transfer
EML 5606C Advanced Refrigeration and AC Systems
EML 5709 Intermediate Fluid Mechanics 3

| EML 5725 | Computational Fluid Dynamics | 3 |
| :--- | :--- | :--- |
| EAS 6721 | Advanced Aerodynamic Shape Design | 3 |

Capstone course EML 6908 Independent Studies (1 credit) must be taken as a project course and in the last semester of the certificate program.

## Master of Science in Mechanical Engineering

The Department of Mechanical and Materials Engineering offers both thesis and non-thesis options for the Master's Degree in Mechanical Engineering. A student seeking the Master's degree with or without thesis is required to pass a comprehensive oral or written examination.

All work counted for the Master's degree must be completed during the six years immediately following the date of admission.

The program provides a broad education, covering more than one field, followed by in-depth studies in areas of interest.

## Admission Requirements

The following is in addition to the University's graduate admission requirements:

1. A student seeking admission into the program must have a bachelor's degree in engineering, physical sciences, computer science or mathematics from an accredited institution, or, in the case of foreign students, from an institution recognized in its own country as preparing students for further study at the graduate level.
2. An applicant must have achieved a "B" average, GPA of 3.0 in upper level undergraduate work.
3. Applicants who have not satisfied the above will be evaluated for probationary or waiver admission.
4. In addition to the above criteria, International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version, or 213 on the computer-based version of the Test of English as a Foreign Language) or 6.5 overall on the IELTS is required.
5. The GPA and TOEFL scores specified above are to be considered minimum requirements for admission. Applicants from science areas other than mechanical engineering will be expected to complete remedial undergraduate courses selected to prepare them for graduate courses in their area of interest. Full admission to the graduate program requires the completion of these background courses with no grades below ' $C$ ' and a grade point average of 3.0 or better.

## Graduation Requirements

The M.Sc. degree will be conferred when the following conditions have been met:

1. Recommendation of the advisor and faculty of the Department.
2. Certification provided by the Department Chair, College Dean, and University Graduate School that all degree requirements have been met.
3. Completion of the two applied/computational mathematics courses offered by the department, two courses outside student's major area and other courses as suggested by the student's major professor and committee.
4. Completion of undergraduate course deficiencies specified at admission, if any, with no grades below ' C ' and a GPA $\geq 3.0$.
5. Thesis option: Successfully completed a minimum of 30 semester hours of graduate course work as specified in an approved study plan containing at least 6 hours of 6000 level courses with a GPA $\geq 3.0$ (the minimum successful grade is a ' C '. Not more than six semester hours transferred from another accredited graduate program that was not part of a previously awarded degree may be incorporated in the study plan) plus a minimum of six hours of masters thesis research.
6. Non-thesis option: Successfully completed a minimum of 30 semester hours of graduate course work as specified in an approved study plan containing at least 9 hours of 6000 level courses with a GPA $\geq 3.0$ (not more than six semester hours transferred from another accredited graduate program that was not part of a previously awarded degree may be incorporated in the study plan).
7. Thesis option: Successful public oral defense of the thesis. Submission of the approved thesis to the Graduate School.
8. Non-thesis option: Successful completion of a final oral comprehensive examination covering the general objectives of the study plan.
9. Students must achieve an overall GPA $\geq 3.0$ in all graduate work completed at FIU in their approved study plan.
10. Students must complete the Graduate Seminar course.
11. Students must comply with all relevant University policies and regulations.

## Thesis Option

A student shall complete a minimum of 24 semester credit hours of course work, plus a minimum of 6 semester credit hours of EML 6971, Master's Thesis Research, and take MME Graduate Seminar.

The course requirements include a minimum of 12 hours of 6000-level course credit including thesis hours. A maximum of 6 credit hours of courses offered by other departments may be included among the 24 course hour minimum. A maximum of three credit hours of approved independent studies, EML 6908, may be counted toward the M.S. thesis degree. A maximum of six graduate credit hours can be transferred from other accredited institutions provided that the courses have not been used for another degree and have a minimum letter grade of ' $B$ ' and meet university requirements. Transfer courses must be approved by the advisor and Graduate Coordinator.

Early in the program (before the middle of the second term) the student and advisor will complete a study plan that specifies the courses that will comprise the program.

When the thesis research is completed, the student should schedule a defense with an examining committee appointed through the Graduate School consisting of a least three graduate faculty members (at least two of whom should be from the MME Department). The thesis,
with an approval cover letter from the advisor, should be given to the examining committee for review not less than four weeks before the scheduled defense. The candidate should prepare to summarize the thesis in the manner of a technical paper using appropriate visual aids in 40 minutes or less. Following the presentation, the candidate will answer questions related to the work from the audience and/or the committee. At the conclusion of the defense, the committee will agree on the outcome -pass or fail- and report the results to the Graduate School. Following the exam the student will implement the committee's suggestions for improving the draft document. Each committee member must sign the approval form in the final document. Copies of the approved thesis must be provided to the advisor, department, and the library. Students should become familiar with the University Graduate School's regulations and deadlines available on line at http://gradschool.fiu.edu.

## Non-Thesis Option

A student shall complete a minimum of 30 semester credit hours of graduate course work, and one semester of Graduate Seminar. Non-thesis students are encouraged to do a three-credit project under the independent study course registration. An approved study plan must include at least 9 credits of 6000 level graduate course work, including the project if elected. Up to nine credit hours of graduate course work from other departments may be included among the minimum of 30 credits. A maximum of six graduate credits from other accredited graduate programs completed with a ' B ' or better and not counted toward a previous degree may be included in the study plan. Transfer credits must meet university requirements. The advisor and the Graduate Coordinator must approve transfer courses if they are to be included in a study plan. A maximum of three credits of independent study beyond an independent project may be included in a study plan.

Non-thesis students are required to take a final oral comprehensive exam dealing with the objectives of their study plan. If a project has been completed, the student will briefly summarize the project report ( 20 minutes) as a part of the exam. The examining committee will include a minimum of three faculty members, at least two of whom should be from the department.

## Course Requirements

All MSME degree seeking thesis option students must take two of the following applied/computational mathematics courses offered by MME department plus the MME graduate seminar.
EGM 5315 Intermediate Analysis of Mechanical EGM $5346 \quad$ Computational Engineering Analysis $\quad 3$
EGM $5354 \quad$ Finite Element Method Applications in
EGM $6355 \quad$ Nonlinear Finite Element Analysis
EGM 6422 Advanced Computational Engineering Analysis
EML $6725 \quad$ Computational Fluid Dynamics 3
EML $6935 \quad 0$
An additional six credit hours of courses must be taken outside the major area of study of the student. The remaining 4 courses should in the area of the student's specialization or as suggested by the student's major professor and committee. Out of 24 semester credit hours
of course work a maximum of three credit hours of approved independent studies, EML 6908, may be counted towards the M.S. thesis degree. A minimum of 6 credits of EML 6971 Thesis is also required.

All MSME degree seeking non-thesis option students must take two of the following applied/computational mathematics courses offered by MME department plus the MME graduate seminar.
EGM 5315 Intermediate Analysis of Mechanical Systems
EGM 5346 Computational Engineering Analysis 3
EGM $5354 \quad$ Finite Element Method Applications in Mechanical Engineering
EGM $6355 \quad$ Nonlinear Finite Element Analysis 3
EGM 6422 Advanced Computational Engineering Analysis
EML 6725 Computational Fluid Dynamics 3
EML 6935 Graduate Seminar 0
An additional six credit hours of courses must be taken outside the major area of study of the student. The remaining 6 courses should in the area of the student's specialization or as suggested by the student's project professor; one of those courses must be EML 6908 where the students will present their project work. Out of 30 semester credit hours of course work a maximum of six credit hours of approved independent studies, EML 6908, may be counted towards the M.S.

Thermo/Fluid (Each course is 3 credits unless stated otherwise)
EAS 6721 Advanced Aerodynamic Shape Design
EML 5103 Intermediate Thermodynamics
EML $5104 \quad$ Classical Thermodynamics
EML 5152 Intermediate Heat Transfer
EML 5606C Advanced Refrigeration \& A/C Systems
EML 5615C Computer Aided Design in A/C
EML $5708 \quad$ Advanced Design of Thermal and Fluid Systems
EML 5709 Intermediate Fluid Mechanics
EML 6153C Advanced Heat Transfer
EML $6154 \quad$ Conduction Heat Transfer
EML 6155 Convection Heat Transfer
EML 6157 Advanced Radiation Heat Transfer
EML 6712C Advanced Fluid Mechanics
EML 6714 Advanced Gas Dynamics
EML 6725 Computational Fluid Dynamics
Mechanics/Materials (Each course is 3 credits unless stated otherwise)
EAS 5221 Design and Analysis of Aerospace
Structures
EGM 5346 Computational Engineering Analysis
EGM 5354 Finite Element Method Applications in
Mechanical Engineering
EGM 5615 Synthesis of Engineering Mechanics
EGM $6570 \quad$ Fracture Mechanics
EMA $5295 \quad$ Principles of Composite Materials
EMA 5507C Analytical Techn. of Materials Sciences
EMA 5935
Advanced Topics in Materials
Engineering
EMA 6127C Advanced Physical \& Mechanical
Metallurgy
EMA 6165C Polymer Physics \& Analytical
Techniques
EML 5505 Smart Machine Design and
Development

EML 5509
EML 5125
EML 5385
EML 5562
EML 6223
EML 6233
EML 6805

## Design and Manufacturing

EAS 5221 Design and Analysis of Aerospace Structures
EML 5385 Identification Techniques of Mechanical Systems
EML 5505 Smart Machine Design and Development
EML 5509
Optimization Algorithms
EML 5530 Intermediate CAD/CAE
EML 5562 Advanced Electronic Packaging
EGM 5615 Synthesis of Engineering Mechanics
EML 5808 Control Technology for Robotic Systems
EML 5825 Sensors and Applied Machine
Intelligence
EML 6223 Advanced Mechanical Vibration
EML 6532 Advanced CAD/CAE
EGM $6570 \quad$ Fracture Mechanics
EML 6805 Advanced Design of Robots

## Combined BSIMS in Mechanical Engineering

Students, who pursue a BS degree and are in their junior year, with at least a 3.25 GPA on both overall and upper division courses may apply to enroll in the combined BS/MS program. To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least $75-90$ credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only $5000-\mathrm{level}$ or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees. In addition to the admission requirements of the combined BS/MS program, students must meet all the admission requirements of the University Graduate School.

Students enrolled in the program may count up to six credit hours of MME graduate courses as credits for both the BS and MS degrees. The combined BS/MS program has been designed to be a continuous program. During this combined BS/MS program, upon completion of all the requirements of the undergraduate program, students will receive their BS degrees. Students in this program have up to three major semesters to complete the master's degree after receipt of the bachelor's degree. Students who fail to meet this three-major-semester post BS
requirement or who elect to leave the combined program at any time and earn only the BS degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the six credits in both the bachelor's and master's degrees.

For each of the graduate courses counted as credits for both BS and MS degree, a minimum grade of " $B$ " is required. Students enrolled in the program may count up to six credit hours of MME graduate courses toward the elective engineering BS requirements as well as toward the MS degree. Only graduate courses with formal lectures can be counted for both degrees. The students are responsible for confirming the eligibility of each course with the undergraduate advisor.

Students interested in the program should consult with the undergraduate advisor on their eligibility to the program. The students should also meet the graduate advisor to learn about the graduate program and available courses before completing the application form and submitting it to the undergraduate advisor. Applicants will be notified by the department and the University Graduate School of the decision on their applications.

## Master of Science in Materials Science and Engineering

The Department of Mechanical and Materials Engineering offers both thesis and non-thesis options for the Master's Degree. A student seeking the Master's degree with or without thesis is required to pass a comprehensive oral or written examination.

All work counted for the Master's degree must be completed during the six years immediately following the date of admission.

The program provides a broad education, covering more than one field, followed by in-depth studies in areas of interest.

## Admission Requirements

The following is in addition to the University's graduate admission requirements:

1. A student seeking admission into the program must have a bachelor's degree in engineering, physical sciences, computer science or mathematics from an accredited institution, or, in the case of foreign students, from an institution recognized in its own country as preparing students for further study at the graduate level.
2. An applicant must have achieved a "B" average, GPA of 3.0 in upper level undergraduate work. If a student is requesting financial assistance, Graduate Record Examination (GRE) with the following minimum scores on the individual components: verbal $\geq 143$ and quantitative $\geq 151$ is also required.
3. Applicants who have not satisfied the above will be evaluated for conditional admission.
4. In addition to the above criteria, International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version, or 213 on the computer-based version of the Test of English
as a Foreign Language) or 6.5 overall on the IELTS is required.
5. The GPA, GRE and TOEFL scores specified above are to be considered minimum requirements for admission. Applicants from science areas other than mechanical engineering will be expected to complete undergraduate courses selected to prepare them for graduate courses in their area of interest. Full admission to the graduate program requires the completion of these background courses with no grades below ' $C$ ' and a grade point average of 3.0 or better.

## Graduation Requirements

The degree will be conferred when the following conditions have been met:

1. Recommendation of the advisor and faculty of the Department.
2. Certification provided by the Department Chair, College Dean, and University Graduate School that all degree requirements have been met.
3. Completed the three department core course requirements plus the elective courses in the student's major area.
4. Completed undergraduate course deficiencies specified at admission, if any, with no grades below ' C ' and a GPA $\geq 3.0$.
5. Thesis option: Successfully completed a minimum of 30 semester hours of graduate course work as specified in an approved study plan containing at least 6 hours of 6000 level courses with a GPA $\geq 3.0$ (the minimum successful grade is a ' C '; not more than six semester hours transferred from another accredited graduate program that was not part of a previously awarded degree may be incorporated in the study plan) plus a minimum of six hours of masters thesis.
6. Non-thesis option: Successfully completed a minimum of 27 semester hours of graduate course work as specified in an approved study plan containing at least 9 hours of 6000 level courses and a 3 credit hour project with a GPA $\geq 3.0$ (not more than six semester hours transferred from another accredited graduate program that was not part of a previously awarded degree may be incorporated in the study plan).
7. Thesis degree: Successful public oral defense of the thesis. Submission of the approved thesis to the Graduate School.
8. Non-thesis degree: Successful completion of a formal report and presentation.
9. Students must achieve an overall GPA $\geq 3.0$ in all graduate work completed at FIU in their approved study plan.
10. Completed one semester of the Graduate Seminar course.
11. Complied with all relevant University policies and regulations.

## Thesis Option

A student shall complete a minimum of 24 semester credit hours of course work, plus a minimum of 6 semester credit hours of EMA 6971, Master's Thesis, and MME Graduate Seminar.

A maximum of 6 credit hours of courses offered by
other departments may be included among the 24 course hour minimum. A maximum of three credit hours of approved independent studies, EML 6908, may be counted toward the M.S. thesis degree. A maximum of six graduate credit hours can be transferred from other accredited institutions provided that the courses have not been used for another degree and have a minimum letter grade of ' $B$ '. Transfer courses must be approved by the advisor and Graduate Coordinator. Early in the program (before the end of the second term) the student and advisor will complete a study plan that specifies the courses that will comprise the program.

When the thesis research is completed, the student should schedule a defense with an examining committee appointed through the University Graduate School consisting of a least three graduate faculty members (at least two of whom should be from the department). The thesis, with an approval cover letter from the advisor, should be given to the examining committee for review not less than two weeks before the scheduled defense. The candidate should prepare to summarize the thesis in the manner of a technical paper using appropriate visual aids in 40 minutes or less.

Following the presentation, the candidate will answer questions related to the work from the audience and/or the committee. At the conclusion of the defense, the committee will agree on the outcome -pass or fail- and report the results to the Graduate School. Following the exam the student will implement the committee's suggestions for improving the draft document. Each committee member must sign the approval form in the final document. Hardcover bound copies of the approved thesis must be provided to the advisor and the department. Students should become familiar with the University Graduate School's regulations and deadlines available on line at http://gradschool.fiu.edu.

## Non-Thesis Option

A student shall complete a minimum of 30 semester credit hours of graduate course work, and one semester of Graduate Seminar. Non-thesis students are encouraged to do a three-credit project under the independent study course registration. Up to nine credit hours of graduate course work from other departments may be included among the minimum of 30 credits. A maximum of six graduate credits from other accredited graduate programs completed with a ' B ' or better and not counted toward a previous degree may be included in the study plan. The advisor and the Graduate Coordinator must approve transfer courses if they are to be included in a study plan. A maximum of three credits of independent study beyond an independent project may be included in a study plan.

Non-thesis students are required to submit a formal report and presentation of the project, with the report and presentation evaluated by an examining committee that will include a minimum of three faculty members, at least two of whom should be from the department.

## Areas of Specialization

Metals and Alloys
Electronic Materials
Ceramics
Polymers and Biomaterials
Nanomaterials

## Course Requirements

All MSMSE degree seeking students must take the following three courses or equivalent plus one seminar as common core courses:

| EMA 5106 | Thermodynamics and Kinetics of |  |
| :--- | :--- | :--- |
|  | Materials | 3 |
| EMA 5001 | Physical Properties of Materials | 3 |
| EMA 5507C | Analytical Methods in Material Science | 3 |
| EML 6935 | Graduate Seminar | 3 |

The remainder of the courses shall be chosen from the electives with consultation of the student's advisor. Additionally, up to six hours may be taken from courses offered by other departments.

| MSMSE Elective Courses |  |  |
| :--- | :--- | :--- |
| EEL 6332 | Thin Film Engineering | 3 |
| EML 5103 | Inter. Thermodynamics | 3 |
| EMA 5xxx | Surface Science | 3 |
| EMA 5140 | Introduction to Ceramic Materials | 3 |
| EMA 5295 | Principles of Composite Materials | 3 |
| EMA 5200 | Nanomechanics and Nanotribology | 3 |
| EGM 5354 | Finite Element Method Applications in |  |
|  | Mechanical Engineering | 3 |
| EGN 5367 | Industrial Materials and Engineering |  |
|  | Design | 3 |
| EMA 6126 | Adv. Physical Metallurgy | 3 |
| EMA 6127C | Advanced Physical and Mechanical |  |
|  | Metallurgy | 3 |
| EML 6233 | Fatigue and Failure Analysis | 3 |
| EGM 6355 | Nonlinear Finite Element Analysis | 3 |
| EML 5509 | Optimization Algorithms | 3 |
| EML 5562 | Adv. Electronic Packaging | 3 |
| EML 6908 | Independent Study | $1-3$ |
| EML 6971 | Master Thesis | $1-6$ |
| EMA 5015 | Introduction to Nanomaterials |  |
| EMA 5104 | Engineering | 3 |
| EMA 5016 | Adv. Mechanical Properties of Materials | 3 |
| EMA 5017 | Nanoelectronic Materials | 3 |
| EMA 5018 | Nanoparticle Technology | 3 |
| EMA 5646 | Neramic Processing |  |
| EMA 5605 | Fundamentals of Materials Processing | 3 |
| EMA 6518 | Transmission Electron Microscopy | 3 |
| EMA 6665 | Polymer Processing and Engineering | 3 |
| EMA 6449 | Electronic Properties of Ceramic | 3 |
|  | Materials | 3 |
| EMA 6264 | Mechanical Properties of Polymers | 3 |
| EMA 6165 | Polymer Physics and Analytical | 3 |
| EEE 6399C | Techniques | Electronic Properties of Material |
|  | Science | 3 |

## Doctor of Philosophy in Mechanical Engineering

## Admission Requirements

The requirements for admission to the doctoral program in Mechanical Engineering for applicants having a Bachelor's degree in Mechanical Engineering from an accredited institution are the following:

1. GPA of at least 3.0/4.0 in the last 60 upper level credit hours
2. GRE with the following minimum on the individual components: verbal greater than or equal to 150 and quantitative greater than or equal to 151 .
3. Three letters of recommendation.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version, or 213 on the computer-based version of the Test of English as a Foreign Language) or 6.5 overall on the IELTS is required.
5. Applicants having a Master's degree in Mechanical Engineering from an accredited institution must also satisfy the above requirements for admissions to the doctoral program; however a GPA of at least 3.3/4.0 in the Master's program is also required.
Credentials of all other applicants will be examined by the Graduate Admission Committee on a case by case basis. In addition to the departmental requirements, all students must satisfy the University's Graduate Policies and Procedures.

## Identification of Research Area

Within 4 months upon acceptance into the Ph.D. program, the student having a Master's Degree has to identify an area of research of his or her interest by contacting and being accepted by a professor willing to guide the dissertation research. The student with a Bachelor's degree should identify the area of research within 12 months upon acceptance into Ph.D. program. If no professor is obtained, the student will be dismissed from the Ph.D. program. Contact the department for a list of the graduate faculty members and their research interests.

## Course Requirements

Applicants having a Bachelor's degree in Mechanical Engineering are required to complete at least 75 credit hours, of which at least 45 hours must be coursework and 21 hours dissertation. The credit hours earned towards the Ph.D. program have the following requirements:

1. At least 21 credits at the 5000 level or higher, not to include dissertation.
2. At least 12 credits at the 6000 level or higher, not to include dissertation.
3. Breadth criteria could be satisfied by taking 3 courses in a field/area outside the student's own field.
4. Two applied/computational mathematics courses as suggested for M.S. program.
5. A minimum of 21 credits of dissertation.
6. A maximum of 6 semester hours of graduate credit earned from another accredited institution that was not used for a previous degree may be transferred as long as the courses were completed within the six years preceding admission to the program and meet university requirements.
7. EML 6908 Independent Studies counts for a maximum of 3 credit hours of coursework.
8. EML 6910 Supervised Research counts for a maximum of 3 credit hours of coursework.

Applicants entering the Ph.D. program with a Masters degree in Mechanical Engineering are required to complete at least 45 credit hours, of which at least 24 hours must be coursework and 21 hours dissertation. The credit hours earned towards the Ph.D. program have the following requirements:

1. Breadth criteria could be satisfied by taking 3 courses in a field/area outside the student's own field.
2. A minimum of 12 credits of 6000 higher, not to include dissertation.
3. A minimum of 21 credits of dissertation.
4. Additional courses to be determined by candidate's dissertation committee.
5. EML 6908 Independent Studies counts for a maximum of 3 credit hours of coursework.
6. EML 6910 Supervised Research counts for a maximum of 3 credit hours of coursework.

Applicants having a Master's Degree in any other Engineering discipline from an accredited institution may transfer a maximum of 24 semester hours as part of their requirements.
Elective Courses: Possible elective courses from the Mechanical Engineering department include:

## Thermo/Fluid

EAS 6721
EML 5103 Intermediate Thermodynamics
EML 5104 Classical Thermodynamics
EML 5152 Intermediate Heat Transfer
EML 5606C Advanced Refrigeration \& A/C Systems
EML 5615C Computer Aided Design in A/C
EML $5708 \quad$ Advanced Design of Thermal and Fluid Systems
EML 6153C Advanced Heat Transfer
EML $6154 \quad$ Conduction Heat Transfer
EML 6155 Convection Heat Transfer
EML 6157 Advanced Radiation Heat Transfer
EML 6712C Advanced Fluid Mechanics
EML $6714 \quad$ Advanced Gas Dynamics
EML 6725 Computational Fluid Dynamics

## Mechanics/Materials

EAS 5221 Design and Analysis of Aerospace Structures
EGM $5346 \quad$ Computational Engineering Analysis
EGM 5354 Finite Element Method Applications in Mechanical Engineering
EGM $6570 \quad$ Fracture Mechanics
EMA $5295 \quad$ Principles of Composite Materials
EMA $5106 \quad$ Thermodynamics and Kinetics of Materials
EMA $5001 \quad$ Physical Properties of Materials
EMA 5507C Analytical Techniques of Materials Science
EMA $5200 \quad$ Nanomechanics and Nanotribology
EMA 6127C Advanced Physical \& Mechanical Metallurgy
EMA 6165C Polymer Physics \& Analytical Techniques
EML $5505 \quad$ Smart Machine Design and Development
EML $5509 \quad$ Optimization Algorithms
EML 5125 Classical Dynamics
EML 5385 Identification Techniques of Mechanical Systems
EML 5562 Advanced Electronic Packaging
EML 6223 Advanced Mechanical Vibration Analysis
EML $6233 \quad$ Fatigue and Failure Analysis
EML 6805 Advanced Design of Robot

## Design and Manufacturing

EAS 5221 Design and Analysis of Aerospace Structures
EML 5385 Identification Techniques of Mechanical Systems
EML 5505 Smart Machine Design and Development
EML 5082 Advanced Nondestructive Testing and Mechanical Health (MME)
EML 5509 Optimization Algorithms
EML 5519 Fault-Tolerant System Design
EML 5562 Advanced Electronic Packaging
EML $5808 \quad$ Control Technology for Robotic Systems
EML 5825 Sensors and Applied Machine Intelligence
EML 6223 Advanced Mechanical Vibration Analysis
EML 6532 Advanced CAD/CAE
EML 6805 Advanced Design of Robots

## Residency Requirements

The program will provide student access to a wide range of support facilities including research library, cultural events, and other occasions for intellectual growth associated with campus life, significant faculty/student interaction, opportunities for student exposure to and engagement with cognate disciplines and research scholars working in those disciplines, and significant peer interaction among graduate students. Students will be provided with the opportunity for a mentoring apprentice relationship with faculty and students as well as adequate time for in-depth evaluation of the student. To satisfy the residency requirement for the Ph.D. degree, the candidate must complete a minimum of 18 credit hours within a period of 12 months at the University.

## Graduate Supervisory and Research Committee

The student's Ph.D. Graduate Supervisory and Research Committee should be appointed as soon as possible and no later than 4 months after being admitted to the Ph.D. program. Consult the Graduate Guidelines in the department for more details on how to select the committee members.

## Ph.D. Course Breadth Requirements

Breadth criteria could be satisfied by taking 3 courses in a field/area outside student's own field. Examinations and Proposal and Final Defense Student must demonstrate graduate knowledge acquisition in four incremental stages in order to be awarded a Ph.D. in Mechanical Engineering.

## Stages of Progression Towards Degree

A student must demonstrate acquisition of graduate knowledge in five incremental stages in order to be awarded a Ph.D. in Mechanical Engineering:

## I. Formation of the Dissertation Committee

Students must select a dissertation advisor during their first semester of study. Students must select a dissertation committee and submit the D-1 form at least one semester before their first attempt to take the Comprehensive Examination.

## II. Comprehensive Exam (CE)

General written exam to test masters level knowledge.
A student who is admitted to the Ph.D. program with a bachelors degree must take the CE no later than the beginning of the 4th major semester after admission, and a student who enters the Ph.D. program with a masters degree must take and pass the CE no later than the beginning of the 2nd major semester after admission. Students may petition for exceptions from the departmental graduate committee by one major semester at a time. A student who fails the CE may retake the exam once only.

## III. Admission to Candidacy

Candidacy status indicates that a doctoral student is ready to commence working on the dissertation. A student is admitted to candidacy upon successfully completing all required course work and passing the Comprehensive Examination. After completion of coursework credits and the Comprehensive Exam, form D-2 must be turned in.

## IV. Proposal Defense (PD)

The dissertation proposal will be presented by the student in the form of a Graduate Seminar in which he/she must submit a proposal for his/her dissertation.

Students must declare their proposal subject within 6 months after taking and passing the Comprehensive Exam. After completion of proposal defense, form D-3 must be turned in.

## V. Final Defense (FD)

There will be a public defense at a graduate seminar. The defense can be failed no more than once.

The final defense should be presented no later than the 4th year after the master's degree and no later than the 6th year after the bachelor's degree.

Following the successful defense of the dissertation, as determined by a majority vote of the student's examining committee, the dissertation must be forwarded to the Dean of the College of Engineering and Computing and the Dean of the University Graduate School for their approval.

All dissertations submitted in fulfillment of the requirements for graduate degrees must conform to University guidelines (see "Regulations for Thesis and Dissertation Preparation Manual"). One final and approved copy of the dissertation must be delivered to the Chairperson of the Department of Mechanical Engineering and one to the advisor, in addition to the copies required by the University Graduate School.

## Financial Aid

Consult the Department for information on research and teaching assistantships available for doctoral students.

## Doctor of Philosophy in Materials Science and Engineering

The Ph.D. in Materials Science and Engineering will prepare graduates for industrial and/or academic research as well as for higher level jobs in materials related industry in one (or more) of five areas of specialization: 1) electronic materials, 2) nanotechnology, 3) metals and alloys, 4) ceramics, and 5) polymer science and biomaterials.

## Admission Requirements

The requirements for admission to the doctoral program in Materials Science and Engineering for applicants having a Bachelor's degree in Materials Science and Engineering or in a related field, e.g. Mechanical Engineering, Electrical Engineering, Physics, Chemistry, and Geophysics from an accredited institution are the following:

1. GPA of at least 3.0/4.0 in the last 60 credit hours attempted.
2. GRE of at least the following minimum on the individual components: verbal $\geq 150$, quantitative $\geq 151$.
3. Three letters of recommendation.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL (equivalent to 550 on the paper-based version, or 213 on the computer-based version of the Test of English as a Foreign Language) or 6.5 overall on the IELTS is required.
5. Applicants having a Master's degree in Materials Science and Engineering from an accredited institution must also satisfy the above requirements for admissions to the doctoral program; however, a GPA of at least 3.3/4.0 in the Master's program is also required.
Credentials of all other applicants will be examined by the Graduate Admission Committee on a case-by-case basis. In addition to the departmental requirements, all students must satisfy the University's Graduate Policies and Procedures.

## Course Requirements

Applicants having a Bachelor's Degree are required to complete at least 75 credit hours, out of which at least 45 hours must be coursework and 21 hours dissertation. The credit hours earned towards the Ph.D. program have the following requirements:

- At least 21 credits at the 5000 level or higher, not to include dissertation.
- At least 12 credits at the 6000 level or higher, not to include dissertation.
- 9 credits outside the listed courses for Materials Science and Engineering (per advisor permission).
- EML 6908 Independent Studies counts for a maximum of 3 credit hours of coursework.
- EML 6910 Supervised Research counts for a maximum of 3 credit hours of coursework.
Applicants having a Master's Degree in Materials Science, Materials Engineering, and Metallurgical Engineering are required to complete at least 45 credit hours, out of which at least 24 hours must be coursework and 21 hours dissertation. The credit hours earned towards the Ph.D. program have the following requirements:
- At least 12 credits at the 6000 level or higher, not to include dissertation.
- 9 credits outside the listed courses for Materials Science and Engineering (per advisor permission).
- EML 6908 Independent Studies counts for a maximum of 3 credit hours of coursework.
- EML 6910 Supervised Research counts for a maximum of 3 credit hours of coursework.

Applicants having a Master's Degree in any other Engineering discipline from an accredited institution may transfer a maximum of 24 semester hours from their previous course of study.
Materials Science and Engineering Courses Fundamentals

| EMA 5001 | Physical Properties of Materials <br> (Required core course for MSMSE) |
| :--- | :--- |
| EMA 5106 | Thermodynamics and Kinetics of <br> Materials <br> (Required core course for MSMSE) |
| EMA 5507C | Analytical Techniques of Materials <br> Science (Required core course for <br> MSMSE) |

These 3 or equivalent courses should be taken by all PhD students in Materials Engineering

## Specialty Areas

Metals and Alloys

| EMA 5104 | Advanced Mechanical Properties of <br> Materials |
| :--- | :--- |
| EMA 5295 | Principle of Composite Materials |
| EMA 6126 | Advanced Physical Metallurgy |
| EMA 6127C | Advanced Physical and Mechanical <br>  <br> Metallurgy |
| EMA 6185 | Advanced Mechanics of Composites |
| EGM 6570 | Fracture Mechanics |
| EGM 7574 | Advanced Fracture Mechanics |
| EML 6233 | Fatigue and Fracture Analysis |
| Electronic Materials |  |
| EEL 6315 | Advanced Solid State Electronics |
| EEL 6399 | Electronic Properties of Materials |
| EMA 5016 | Nanoelectronic Materials |
| PHZ 6426 | Advance Solid State Physics |
| PHZ 5405 | Solid State Physics |
| Ceramics |  |
| EMA 5140 | Introduction to Ceramic Materials |
| EMA 6646 | Ceramic Processing |
| EMA 6449 | Electronic Properties of Ceramic |
|  | Materials |
| Polymers |  |
| CHM 6511 | Polymer Chemistry |
| EMA 5584 | Biomaterials Science |
| EMA 6165C | Polymer Physics and Analytical |
| EMA 6264 | Techniques |
| EMechanical Properties of Polymers |  |
| EMA 6665 | Polymer Processing and Engineering |

Analytical Techniques in Materials Science
EMA $6516 \quad$ Crystallography and X-ray Diffraction
EMA 6518 Transmission Electron Microscopy
GLY 5287C Scanning Electron Microscopy with EDS Analysis
GLY 5288C Electron Microprobe Microanalysis with EDS Analysis
PHZ 6437 Surface Physics
Nano Structured Materials
EEL 6315 Advanced Solid State Electronics
EEL $6332 \quad$ Thin Film Engineering
EMA $5017 \quad$ Nanoparticle Technology

EMA 5015 Introduction to Nanomaterials
EMA $5016 \quad$ Nanoelectronic Materials
It is important that there will be three 6000 level courses developed for each specialization.

## Stages of Progression Towards Degree

A student must demonstrate acquisition of graduate knowledge in five incremental stages in order to be awarded a Ph.D. in Materials Science Engineering:

## I. Formation of the Dissertation Committee

Students must select a dissertation advisor during their first semester of study. Students must select a dissertation committee and submit the D-1 form at least one semester before their first attempt to take the Comprehensive Examination.

## II. Comprehensive Exam (CE)

The Comprehensive Examination is the general written exam to test master's level knowledge. The exam will cover materials taught in the required courses for the MSMSE. A student who is admitted to the Ph.D. program with a bachelor's degree must take the CE no later than the second term of the 2nd year after admission, and a student who enters the Ph.D. program with a master's degree must take and pass the CE no later than the 2nd term after admission. Students may petition for exceptions from the graduate student committee. A student who fails the CE may retake the CE exam only once.

## III. Admission to Candidacy

Candidacy status indicates that a doctoral student is ready to commence working on the dissertation. A student is admitted to candidacy upon successfully completing all required course work and passing the Comprehensive Examination. After completion of coursework credits and the Comprehensive Exam, form D-2 must be turned in.

## IV. Proposal Defense (PD)

The dissertation proposal will be presented by the student in the form of a Graduate Seminar, in which he/she must submit a proposal for his/her dissertation. Students must declare their proposal subject within 6 months after taking the Comprehensive Examination. After completion of proposal defense, form D-3 must be turned in.

## V. Final Defense (FD)

There will be a public defense at a graduate seminar. The defense can be failed no more than once. The final defense should be presented no later than the 4th year after the master's degree and no later than the 6th year after the bachelor's degree.

Following the successful defense of the dissertation, as determined by a majority vote of the student's examining committee, the dissertation must be forwarded to the Dean of the College of Engineering and Computing and the Dean of the University Graduate School for their approval.

All dissertations submitted in fulfillment of the requirements of graduate degrees must confirm to University guidelines (see "Regulations for Thesis and Dissertation Preparation Manual"). One final and approved copy of the dissertation must be delivered to the Chairperson of the Department of Mechanical and

Materials Engineering in addition to the copies required by the University Graduate School.

## Course Descriptions <br> Definition of Prefixes

EAS-Engineering: Aerospace; EGM-Engineering: Mechanics; EGN-Engineering: General; EMAEngineering: Materials; EML-Engineering: Mechanical

EAS 5124 Aerodynamics and Flight Mechanics (3). Fundamentals of aerodynamics, definition of aerodynamic shapes, analysis of aerodynamic forces, airplane performance, and flight stability and control. Prerequisites: EGN 3321, EML 3126, EGN 3343.
EAS 5221 Design and Analysis of Aerospace Structures (3). Fundamental principles of aircraft design and analysis. Advanced computational methods used for analysis of aerospace structures. Prerequisites: EML 3032, MAP 2302 or EGM 3311, EMA 3702, EML 4140.

EAS 6185 Turbulence (3). Fundamentals of turbulent flow, solutions for bounded and free turbulent flows, dynamics of turbulence, statistical description of turbulence, spectral dynamics, and stability.
EAS 6212 Aeroelasticity (3). Understanding and analysis of aeroelastic phenomena in fixed-wing aircraft, aerostructural dynamics, static aeroelasticity, dynamic aeroelasticity, and dynamic response and transient stresses. Prerequisite: Permission of the instructor.
EAS 6721 Advanced Aerodynamic Shape Design (3). Analytical formulations and numerical algorithms for inverse shape design and optimized shape design of 2D and 3D aerodynamic and aerothermal configurations over a range of flow regimes. Prerequisites: Permission of the instructor. Good programming skills. Basic courses in fluid mechanics.

EGM 5315 Intermediate Analysis of Mechanical Systems (3). First course at the graduate level in the analysis of mechanical systems. Modeling of the system and analytical and numerical methods of solution of the governing equations will be studied. Fluid and thermodynamic systems will be emphasized in this course. Prerequisites: EGM 3311 or permission of the instructor.
EGM 5346 Computational Engineering Analysis (3). Application of computational methods to mechanical engineering problems of translational, rotational, control, thermal and fluid systems employing linear/nonlinear system elements. Prerequisites: EML 2032, MAP 2302, and EML 3222, or permission of the instructor.

EGM 5354 Finite Element Method Applications in Mechanical Engineering (3). Utilize the finite element method to solve problems in heat transfer, fluid dynamics, diffusion, acoustics, vibration, and electromagnetism, as well as the coupled interaction of these phenomena. Prerequisites: EML 2032, EMA 3702, and EML 4140.
EGM 5371 Meshfree and Alternative Methods in Mechanical Engineering (3). Course covers the alternative methods in engineering analysis with a special focus on meshfree method with distance fields in mechanical engineering. Prerequisites: EML 3036, (MAP 2302 or EGM 3311), EGM 5354, or permission of the instructor.

EGM 5615 Synthesis of Engineering Mechanics (3). Unified approach to the analysis of continuous media using constitutive equations, mechanical behavior of materials and their usefulness in handling failure theories and composite materials. Prerequisites: MAP 2302 or EGM 3311, and EMA 3702.
EGM 5935 Review of Topics in Mechanical Engineering (4). To prepare qualified candidates to take the Mechanical Engineering PE written examination. Reviewed courses include Thermodynamics, Fluid Mechanics, Mechanics of Materials, Mechanical Design and Heat Transfer.
EGM 6355 Nonlinear Finite Element Analysis (3). Nonlinear finite element analysis. Geometric and material nonlinearities will be considered in the formulation of different finite elements. Prerequisite: Permission of the instructor.
EGM 6422 Advanced Computational Engineering Analysis (3). Modeling of vibrational and dynamic systems including solution of governing equations by analytical and numerical techniques. Prerequisites: EGM 5346 or permission of the instructor.
EGM 6455 Impact Dynamics (3). Mechanical impact, point-mass collisions, vibratory impact, stress waves in solids, elastic-plastic stress waves, low velocity impact, penetration and perforation applications. Prerequisites: EGN 3321 and EMA 3702.
EGM 6570 Fracture Mechanics (3). Griffith's and Irwin's fracture criteria; stress intensity factors evaluation; cracktip plastic zone; fracture toughness measurement; crack initiation; fatigue crack growth; stress corrosion cracking. Prerequisite: EGM 5615.
EGM 6654 Advanced Theory of Elasticity (3). Modern methods of stress and strain analysis including twodimensional problems of stress concentration, contact adhesion, friction, thermal stresses, and dynamic waves. Prerequisites: EGM 5615, EGM 5315, or permission of the instructor.
EGM 7574 Advanced Fracture Mechanics (3). Modern fracture mechanics including invariant integrals, nanoscale fracture, environmental fracture, penetration mechanics, failure waves, erosion, and fracture by electron and laser beams. Prerequisites: EGM 6570, EGM 6422.

EGM 7676 Classic Topics of Nonlinear Mechanics (3). Classic topics on nonlinear mechanics, such as Theory of Plasticity of Solids, and the Theory of Jets and Cavities of Fluids. Prerequisites: EGM 5315, EGM 6422, EGM 5615, EML 5709.
EGN 5013C Nanoscale Fabrication and Synthesis (3). This course covers the advanced micro/nanofabrication tools and techniques. It includes lab sessions where the students design, fabricate and test selected micro/nanoscale devices.
EGN 5367 Industrial Materials and Engineering Design (3). Industrial materials, material selection, and engineering design process, including synthesis, analysis, optimization, and evaluation.

EMA 5001 Physical Properties of Materials (3). The physical properties of materials, including the influence of
structure on properties, thermodynamics of solids and phase transformations and kinetics on microstructural development. Prerequisite: EGM 4521C.
EMA 5015 Introduction to Nanomaterials Engineering (3). The science and engineering of nanomaterials, the fabrication, behavior, and characterization of the nano-size particles and materials. Prerequisites: EGN 3365, EGM 3311.

EMA 5016 Nanoelectronic Materials (3). Course provides an understanding of nanotechnology based on materials engineering. Topics include energy bands in semiconductors, MOSFET scaling, materials processing and other applications. Prerequisite: EGN 3365.
EMA 5017 Nanoparticle Technology (3). An interdisciplinary overview of the nanoparticle engineering. Synthesis of nanoparticles, nanoparticle growth and transport, characterization methods, and applications. Prerequisites: EGN 3365 or permission of the instructor.
EMA 5018 Nanoscale Modeling of Materials (3). Overview of computational nanotechnology. Modeling, simulation and design of nanomaterials. Energy minimization, molecular dynamics and advanced multiscale numerical techniques. Prerequisites: EGN 3365 or permission of the instructor.
EMA 5104 Advanced Mechanical Properties of Materials (3). Advanced treatment of the mechanical behavior of solids; examines crystal plasticity, dislocations, point defects and grain boundaries, creep and fatigue behavior, fracture. Prerequisite: EGN 3365.
EMA 5106 Thermodynamics and Kinetics of Materials (3). Laws of thermodynamics. Entropy and free energy. Diffusion mechanisms. Transition state theory and field effects. Phase diagrams. Nucleation in condensed phases. Crystal growth. Prerequisite: EGN 3343 Thermodynamics 1 .
EMA 5140 Introduction to Ceramic Materials (3). Synthesis of ceramics, inorganic glasses and their microstructure as related to physical properties. Prerequisites: EGN 3365 or instructor's permission.
EMA 5200 Nanomechanics and Nanotribology (3). Mechanical and tribological properties at nano-scale length, fundamentals of nanoindentation and nanoDMA, application of nanoindentation for hard, soft, natural and biological materials. Prerequisites: EGN 3365 or permission of the instructor.
EMA 5295 Principles of Composite Materials (3). The mechanical behavior of composite materials used in the automotive, aircraft and sporting goods industries; material and laminar properties; design of composites; failure analysis; and environmental effects. Prerequisites: EGM 5615 or permission of the instructor.
EMA 5326 Corrosion Science and Engineering (3). Electrochemical principles of corrosion, methods of corrosion control and measurement. Prerequisites: EGN 3365 or permission of the instructor.
EMA 5507C Analytical Techniques of Materials Science (3). Fundamental theories and techniques of the analytical methods for materials including: X-ray diffraction, scanning and transmission electron
microscopy, thermal and surface analysis, and vacuum systems. Prerequisite: EGN 3365.
EMA 5605 Fundamentals of Materials Processing (3). Extraction of materials from the minerals using pyro, hydro and electro techniques. Fundamentals of solidification process. Prerequisites: MSE 4521 or permission of the instructor.
EMA 5646 Ceramic Processing (3). Introduction to the science of ceramic processing, with emphasis on theoretical fundamentals and current state-of-the-art processing. Prerequisite: EMA 5140.
EMA 5935 Advanced Topics in Materials Engineering (3). Topics include thermodynamics of solids, principles of physical metallurgy, including phase transformation and diffusion and analytical methods in materials engineering. Prerequisites: EGN 3365 and EGM 3343.
EMA 6113 Advanced Materials Thermodynamics (3). Advanced thermodynamic study of materials using thermochemical and computational methods. Prerequisite: EMA 5106.

EMA 6126 Advanced Physical Metallurgy (3). Energetics of phase transformation and spinodal decomposition, homogeneous and heterogeneous nucleation in solid state reactions, and martensite transformations. Prerequisites: EMA 4121 or permission of the instructor.

EMA 6127C Advanced Physical and Mechanical Metallurgy (3). Advanced topics in physical and mechanical metallurgy including statics and dynamics of dislocations, plastic deformation of fracture, creep solidification, phase transformation, and heat treatment. Prerequisites: EGN 3365 or permission of the instructor.
EMA 6165C Polymer Physics and Analytical Techniques (3). Topics in polymers and the analytical techniques, including: synthesis, characterization, state of polymers, plasma processes, X-ray diffraction, scanning, and transmission electron microscopy. Prerequisites: EGN 3365 or permission of the instructor.
EMA 6185 Advanced Mechanics of Composite Materials (3). Study of micromechanics and mechanical processes in microscale, including fracture, reinforcement and delamination. Prerequisite: EMA 5295.
EMA 6264 Mechanical Properties of Polymers (3). Advanced concepts of solid mechanics and mechanical behavior of polymers; stress-strain relationships, stress transformation, beam bending, elasticity, plasticity and fracture. Prerequisites: EMA 6165C or permission of instructor.
EMA 6449 Electronic Properties of Ceramic Materials (3). The defect solid state and its relation to electrical properties of ceramics. Solid electrolytes. Theory of electron transport in metallic, semiconducting and insulating ceramics. Prerequisite: EMA 5140.
EMA 6516 Crystallography and X-ray Diffraction (3). Principles of crystallography and the use of x-ray diffraction and Raman Spectroscopy to characterize crystalline solids. Prerequisite: Instructor's permission.
EMA 6518 Transmission Electron Microscopy (3). Kinematic and dynamic theories of diffraction contrast and electron interaction in materials. Diffraction analysis for
structural and compositional determination. Specimen preparation techniques. Prerequisite: EMA 5507.
EMA 6665 Polymer Processing and Engineering (3). Standard and advanced processing methods, characterization of morphology, and reaction processing. An industry-based case study analysis integrates heat and mass transport, and fluid flow during materials processing; and the economics of materials processing and recycling. Prerequisite: Permission of instructor.
EMC 5415 Digital Control of Mechanical Systems (3). Discrete modeling of mechanical systems. Digital feedback systems. Computer interface of mechanical systems. Controller design with emphasis on hydraulic, pneumatic and electromechanical devices. Prerequisite: EML 4804.

EML 5082 Advanced Nondestructive Testing and Mechanical Health Monitoring (3). Theory and application of Nondestructive Testing (NDT) and Mechanical Health Monitoring (MHM) techniques will be discussed. Automated interpretation of signals and advanced methods will be presented. Prerequisite: Permission of the instructor.
EML 5103 Intermediate Thermodynamics (3). Thermodynamic approach to processes and engines; alternative formulations and Legendre transformations; Maxwell relations, first and second order phase transitions. Prerequisite: EML 3101.
EML 5104 Classical Thermodynamics (3). Mathematical analysis of the laws of classical reversible and irreversible thermodynamics. Applications to mechanical, electromagnetic, and chemical systems, under ideal and real conditions. Prerequisite: EML 3101.

EML 5125 Classical Dynamics (3). Kinematics of rigid body motion, Eulerian angles, Lagrangian equations of motion, inertia tensor, momental ellipsoid. Rigid-body equations of motion, Euler's equations, force-free motion, polhade and herpolhade, theory of tops and gyroscopes. Variational principles. Hamiltonian equations of motion. Poinsote representation. Prerequisites: MAP 2302 or EGM 3311, and EGN 3321.

EML 5152 Intermediate Heat Transfer (3). Multidimensional heat conduction under steady and transient conditions. Heat, mass and momentum transfer. Radiation heat transfer. Gas radiation. Free and forced convection. Prerequisite: EML 4140.
EML 5385 Identification Techniques of Mechanical Systems (3). FFT, time series analysis and neural networks are introduced. Applications of these techniques are discussed for identification of mechanical structures, and machine diagnostics. Prerequisite: EML 4804.
EML 5290 Fundamentals of Microfabrication (3). Science of miniaturization will be introduced. Materials choices, scaling laws, different options to make very small machines and practical applications will be emphasized. Progress related to state-of-the-art BioMicroElectro Mechanical Systems will be presented.

EML 5412 Combustion Processes (3). Introduction to combustion processes, thermochemistry, chemical kinetics, laminar flame propagation, detonations and explosions, flammability and ignition, applications in IC
engines and gas turbines. Prerequisites: EML 3101 and EML 4140.

EML 5505 Smart Machine Design and Development (3). Design of independently operating smart electromechanical systems (most consumer products) which monitor their environment, give decisions, and create motion. Prerequisites: EML 4804 or permission of the instructor.
EML 5509 Optimization Algorithms (3). Multi-disciplinary numerical analysis combined with single objective and multi-objective unconstrained and constrained optimization and sensitivity analysis techniques to optimize the design. Prerequisites: Permission of the instructor.
EML 5519 Fault-Tolerant System Design (3). Fault tolerance in mechanical, manufacturing, computer, and aerospace systems. Basic stages of fault isolation. Fault tolerance measures, architectures, and mechanical system design methodologies. Prerequisite: EML 3500.

EML 5530 Intermediate CADICAE (3). Computer aided geometrical modeling of spatial mechanical systems. Design criteria and analytical approaches for planer kinematic systems will be emphasized. Prerequisites: EML 4535 or permission of the instructor.

EML 5555 Special Projects in Mechanical Engineering Design and Business Development (3). Mechanical engineering design project that encompasses conceptual and structural design, analysis, and optimization complemented by a study to develop a business venture to produce the designed product. Prerequisites: EML 4501 or equivalent, QMB 6357C, and MAN 6209.
EML 5559 Design, Production and Marketing (3). Student teams will evaluate the market and identify promising mechatronics systems. They will simulate design, development, and commercialization of the products in realistic environment.
EML 5562 Advanced Electronic Packaging (3). Advanced topics in electronic packaging. Evaluation of first through fourth level assembly. Applications of computer layout design, thermal management and mechanical stability analysis. Prerequisites: EML 4561 or permission of the instructor.
EML 5599 Heat Pipe Theory and Applications (3). Heat pipe theory, heat pipe design and its applications, especially in the areas of energy conversion and conservation. Prerequisites: EML 3101 and EML 4140.
EML 5606C Advanced Refrigeration and Air Conditioning Systems (3). The various methods used in the thermal design and analysis of both refrigeration and heat pump systems are investigated. Various methods of producing heating and cooling are examined including vapor compression, absorption, air cycle, steam jet, thermoelectric, solar heating and cooling systems. Prerequisite: EML 4601.

EML 5615C Computer/Aided Design in Air Conditioning (3). Software will be used to demonstrate heating, ventilating and air conditioning design concepts and sizing equipment and determining performance parameters. Project design is required. Prerequisites: EML 2032 and EML 4601.

EML 5708 Advanced Design of Thermal and Fluid Systems (3). Advanced design of pumps, compressors, heat exchangers, HVAC systems and thermal and fluid control devices. Prerequisite: EML 4706.
EML 5709 Intermediate Fluid Mechanics (3). Basic concepts and scope of fluid dynamics; non-inertial reference frames. Two-dimensional potential theory. Applications to airfoils. The Navier-Stokes equations; selected exact and approximate solutions. Prerequisite: EML 3126.

EML 5808 Control Technology for Robotic Systems (3). State-space equations of robots. Controller design based on linearization, nonlinearity cancellation, optimal control, adaptive control and other methods. Stability analysis, performance comparison. Prerequisites: EGN 3321, EML 4804, or equivalent.

EML 5825 Sensors and Applied Machine Intelligence (3). Sensors, signal analysis techniques, and error compensation methods will be introduced for machine intelligence. Production Machine Modeling and Design. Prerequisites: EML 4804, EML 4503, or equivalent, or permission of the instructor.
EML 5927 Professional Development and Leadership for Mechanical Engineers (3). Consequences of engineering and concepts for personal career management, decision making leadership, and entrepreneuring that enhance the effectiveness of professional engineering practice. Prerequisite: Senior standing in engineering.

EML 6148 Microscale Transport Phenomena (3). Transport phenomena in small length and time scales are studied. Deviations from classical behavior are addressed. Applications include heat transfer in electronics, MEMS, and laser machining. Prerequisites: EML 5152, EML 5709, or permission of the instructor.
EML 6153 Advanced Heat Transfer (3). Review of analogies among heat, mass and momentum transfer. Free and forced convection from theoretical and experimental viewpoint for laminar and turbulent flows. Film and dropwise condensation. Prerequisite: EML 5152.
EML 6154 Conduction Heat Transfer (3). Heat transfer by conduction for steady and unsteady one and multidimensional systems with and without heat generation. Temperature distribution analysis using analytical and computational methods. Prerequisite: EML 4140.

EML 6155 Convection Heat Transfer (3). Development and solution of governing equations of parallel flows, boundary layer flows, instability and turbulence with convective heat transfer. Prerequisite: EML 4140.
EML 6157 Radiation Heat Transfer (3). Heat transfer by radiation for steady and unsteady one and multidimensional systems. Radiation parameters effecting different systems will be studied, analytically or numerically. Prerequisite: EML 4140.
EML 6223 Advanced Mechanical Vibration Analysis (3). Multi degree-of-freedom systems, discrete and continuous systems; vibration control and introduction to vibration of non-linear systems. Prerequisites: EML 3222 or EML 4220.

EML 6233 Fatigue and Failure Analysis (3). A study of the theoretical and practical aspects of material failure including failure modes, life prediction, corrosion with the goal of designing a safe product. Prerequisite: EGM 5615.
EML 6518 Advanced Modeling in Mechanical Engineering (3). Basic principles of mathematical modeling following a variety of problems in mechanical engineering. Prerequisites: EGM 6422 and EGM 5615.
EML 6532 Advanced Computer-Aided Design/ Computer-Aided Engineering (3). Advanced CAD techniques in design of mechanical systems. Architecture of CAD systems including database applications. Advanced computational geometry student programming. Prerequisite: EML 5530.
EML 6574 Advanced Mechanical Design Optimization (3). Advanced topics in numerical optimization, sensitivity analysis, approximation techniques and shape optimization. Prerequisite: Consent of the instructor.
EML 6712 Advanced Fluid Mechanics I (3). Turbulent flows with emphasis on engineering methods. Momentum, energy, and species transfer. Production, dissipation, and scaling laws for turbulence. Mixing length, effective viscosity. Prerequisite: EML 5709.
EML 6714 Advanced Gas Dynamics (3). Thermodynamic and fluid mechanics principles applied to high speed flows. Flows to be studied include flows with friction and heat loss/addition. Prerequisite: EML 4711.
EML 6725 Computational Fluid Dynamics (3). Basic computational methods for incompressible and compressible flows. Methods for solving the stream function equation. Boundary conditions for vorticity and stream function equations. Finite difference and finite element techniques. Prerequisite: Consent of the instructor.
EML 6747 Mechanics of Fluid Flow in Porous Materials
(3). The mathematical theory of fluid penetration through porous materials and lungs, heat transfer, fluidized beds, non-stationary flows, and double continua. Prerequisite: EML 5709.
EML 6750 Multiphase Suspension Flow (3). Definition of multiphase flow, experimental observation, mathematical modeling of multiphase systems, measurement techniques, suspension boundary layer flow, and fluidization techniques. Prerequisite: Permission of the instructor.
EML 6805 Advanced Design of Robots (3). Kinematic analysis of mechanisms and robot arms, geometric configurations, analytical and numerical methods in kinematics. Prerequisites: EML 3222, EML 4806, and EML 4501.

EML 6908 Independent Studies (1-3). Individual research studies available for qualified graduate students. The work is to be performed under the supervision of an advisor. A report is to be submitted. Students may register for 1 to 3 credits per semester. Prerequisite: Advisor's permission.
EML 6910 Supervised Research (1-6). Graduate level research carried out under the supervision of a faculty member.

EML 6935 Graduate Seminar (0). Different problems in Mechanical Engineering and results of ongoing research will be presented and discussed by invited experts. The seminar will expose the students to advances in existing and emerging areas of research. Prerequisite: Graduate standing.
EML 6946 Mechanical and Materials Engineering Internship (1-3). Graduate students gain work experience through supervised internship in industry. The student prepares an internship program proposal, and the work performed is documented in a report and presented. Prerequisite: Permission of the student's thesis advisor.
EML 6971 Masters Thesis (1-6). Master's thesis in any advanced topic, a report is to be submitted and an oral presentation is to be made. Students may register for one to six credits per semester. Total of six credits to be earned for the Master's Degree. Prerequisite: Advisor's permission.
EML 7837 Boundary Value Problems in Engineering (3). Analytical methods and skills for closed-form solutions of boundary value problem of mathematical physics and mechanics for engineering applications based on Riemann theory. Prerequisites: MAP 5407, MAA 4402, or permission of the instructor.

EML 7939 Ph.D. Seminar (0). Various subjects in Mechanical Engineering and results of ongoing research will be presented and discussed by invited experts. The seminar will expose the students to advances in existing and emerging areas of research. Prerequisite: Ph.D. students only.
EML 7979 Ph.D. Dissertation (3-12). Doctoral research leading to Ph.D. Mechanical Engineering dissertation. Prerequisites: Permission of Major Professor and Doctoral Candidacy.

## College of Engineering and Computing

Interim Dean
Ranu Jung
Director, School of Computing and Information Sciences
S. S. Iyengar

Director, OHL School of Construction Irtishad U. Ahmad Associate Dean for Academic Affairs

Anthony J. McGoron
Associate Dean for Research
Interim Chairperson, Biomedical Engineering

Arvind Agarwal

Chairperson, Civil and Environmental Engineering

Weichiang Lin
Atorod Azizinamini
Chairperson, Electrical and Computer Engineering

Shekhar Bhansali
Interim Chairperson, Mechanical and Materials Engineering

Ibrahim Tansel
Director, Engineering Management Chin-Sheng Chen
Director, Accelerated Bridge Construction University Transportation Center Atorod Azizinamini Interim Director, Advanced Materials Engineering Research Institute
Director, Bioinformatics Research Group

Arvind Agarwal

Director, Center for Advanced Distributed Systems Engineering

Xudong He
Director, Center for Advanced Technology and Education
Director, Center for Diversity in Engineering and Computing

Norman Munroe
Director, Center for Emerging Technology for Advanced Information Processing and High-Confidence Systems

Naphtali Rishe
Director, Center for the Study of Matters at Extreme Conditions

Surendra Saxena
Director, Distributed Multimedia Information Systems Laboratory

Shu-Ching Chen
Director, Division of External Program

Mercy Rueda Schott
Director, Engineering Information Center

Hernan Bormey
Director, Engineering Manufacturing Center
Director, High Performance Database Research Center

Ibrahim Tansel

Director, International Hurricane Research Center
Director, Lehman Center for
Transportation Research
Director, Telecommunications and Information Technology Institute
Director, Space Planning
Naphtali Rishe

## Stephen Leatherman

L. David Shen

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Roig, Gustavo, A., Ph.D. (University of Florida), Professor, Electrical and Computer Engineering
Sadjadi, Masoud, Ph.D. (Michigan State University), Associate Professor, School of Computing and Information Sciences
Sanchez, Mario, M.S. (Florida International University), Lecturer and Advisor, Industrial and Systems Engineering, Senior Engineer and Manager, Engineering Manufacturing Center
Saxena, Surendra, Ph.D. (Upsala University), Professor, Mechanical and Materials Engineering and Director, Center for the Study of Matters at Extreme Conditions

Schenck, Carmen, M.S. (Florida International University), Advisor and Senior Instructor, Mechanical and Materials Engineering
Schmahl, Karen E. (University of Cincinnati), Associate Professor, Engineering Management
Shaw, Gregory, M.S. (Barry University), Senior Instructor, School of Computing and Information Sciences
Shen, Lon-Li, David, Ph.D., P.E., T.E. (Clemson University), Professor, Civil and Environmental Engineering; Director, Lehman Center for Transportation Research
Smith, Geoffrey, Ph.D. (Cornell University), Professor, School of Computing and Information Sciences
Smith, Joslyn, M.S. (University of New Brunswick), Senior Instructor, School of Computing and Information
Sun, Ju, Ph.D. (State University of New York at Stony Brook), Senior Instructor, Mechanical and Materials Engineering
Sun, Xin, Ph.D. (Purdue University), Assistant Professor, School of Computing and Information Sciences
Tang, Walter Z., Ph.D., P.E. (University of Delaware), Associate Professor, Civil and Environmental Engineering
Tansel, Berrin, Ph.D., P.E. (University of WisconsinMadison), Associate Professor, Civil and Environmental Engineering
Tansel, Ibrahim, Ph.D. (University of WisconsinMadison), Interim Chairperson and Professor, Mechanical and Materials Engineering and Director, Engineering Manufacturing Center
Tosunoglu, Sabri, Ph.D. (University of Florida), Associate Professor, Mechanical and Materials Engineering
Tremante, Andres, Ph.D. (UNAM-Paris, France), Senior Instructor, Mechanical and Materials Engineering
Tsoukias, Nikolaos, Ph.D. (University of California, Irvine), Associate Professor, Biomedical Engineering
Urban, Frank K., Ph.D., P.E. (University of Florida), Associate Professor, Electrical and Computer Engineering
Wang, Chunlei (Peggy), Ph.D. (Jilin University), Associate Professor, Mechanical and Materials Engineering and Interim Director, Advanced Materials and Engineering Research Institute
Wang, Ton-Lo, Ph.D., P.E. (Illinois Institute of Technology), Professor and Associate Chair, Undergraduate Studies, Civil and Environmental Engineering
Watson, Herman, Ph.D. (Florida International University), Lecturer and Undergraduate Program Director, Electrical and Computer Engineering
Wei, Jinpeng, Ph.D. (Georgia Tech), Assistant Professor, School of Computing and Information Sciences
Weiss, Jill, M.S. (Barry University), Senior Instructor, School of Computing and Information Sciences
Weiss, Mark, Ph.D. (Princeton University), Eminent Scholar Chaired Professor and Associate Director, School of Computing and Information Sciences
Xia, Jin, Ph.D. (University of Wisconsin-Milwaukee), Assistant Professor, Civil and Environmental Engineering
Xie, Ning, Ph.D. (Massachusetts Institute of Technology), Assistant Professor, School of Computing and Information Sciences

Yen, Kang K., Ph.D., P.E. (Vanderbilt University), Professor, Electrical and Computer Engineering
Zeng, Wei, Ph.D. (Chinese Academy of Sciences), Assistant Professor, School of Computing and Information Sciences
Zhong, Yu, Ph.D. (Pennsylvania State University), Assistant Professor, Mechanical and Materials Engineering
Zisis, loannis, Ph.D. (Concordia University), Assistant Professor, Civil and Environmental Engineering

## College of Law

Dean

R. Alexander Acosta

## Associate Deans

Associate Dean, Academic Affairs Tawia B. Ansah
Senior Associate Dean, Clinical Education,
Experiential Learning \&
Engagement
Associate Dean, International and Graduate Programs
Associate Dean, Faculty Research and Development

Michelle D. Mason

Associate Dean, Information Resources
and Library Director
Assistant Dean, Student
Services
Angelique Ortega Fridman
Interim Associate Dean and Director, Law Library

Lisa Davis

## Assistant Deans

Assistant Dean, Academic Support Louis N. Schulz, Jr. Assistant Dean, Career Planning and Placement

Ana Bierman
Directors
Director, Legal Skills and Values Program
Co-Director, Legal Skills and Values Program
Director, Finance and Administration
Director, Admissions and Financial Aid
Director, Development
Director, Trial Advocacy Program
Registrar
A complete listing of faculty and administration is available at http://law.fiu.edu/faculty-2l and
http://law.fiu.edu/faculty-2/administration/

## Mission

The mission of the Florida International University College of Law is to serve the citizens of the State of Florida, particularly South Florida, by providing access to the legal profession through a contemporary, high-quality educational program. Like the University and metropolitan communities of which they are a part, the student body, faculty and administration reflect a broad range of backgrounds, interests, and professional possibilities. Out of this diversity, the College of Law seeks to create a scholarly community in which students and faculty discuss issues freely and with respect for differing perspectives.

The faculty takes seriously its obligations to the profession and the society it serves; so faculty participate actively in local, state, national and international professional service activities. Similarly, the College of Law seeks to graduate students who appreciate the lawyer's professional and ethical obligations to serve the community, including those in need. To this end, students must complete a community service requirement. The College of Law also offers clinical legal education programs in which students represent indigent clients.

## Curriculum

Accredited by the American Bar Association and admitted to the Association of American Law Schools, the College of Law offers both a full-time program and a part-time program. Ordinarily, full-time students will earn the J.D. degree in three years and part-time students in four years (including summer sessions). Students are admitted to either the full-time/day division or the part-time/evening division, and generally may not transfer from one division to the other or take required courses in the other division. All students must complete a minimum of 90 hours of course work with a cumulative grade point average of 2.0 or higher to earn the J.D. degree.

In addition to the traditional courses offered by nearly all U.S. law schools, the College of Law builds on FIU's international distinction by incorporating important developments in the globalization of both public and private law. The curriculum does this by requiring all first year students to take an introductory class on international and comparative law, including international and comparative content into all domestic law classes, and offering a rich array of upper level electives in international, transnational and comparative law. Recognizing the importance of a solid grounding in the skills and values of the profession, the College of Law curriculum further provides students with extensive, rigorous legal research and writing experiences, introduces other skills such as counseling and negotiation.

The curriculum is taught by a faculty committed to excellence in both teaching and scholarship. Faculty members are actively engaged in research in their respective areas of expertise. The scholarly mission of the College of Law enriches classroom teaching and learning; contributes to the understanding, development and reform of the law; and promotes the University's mission as one of the nation's leading urban public research institutions.

The College of Law also maintains joint degree programs with the College of Business, Latin American and Caribbean Studies, Department of Environmental Studies, Department of Public Administration, Department of Social Work, and, the Department of Psychology. In addition to these programs, students may be able to arrange for other cross-disciplinary graduate studies, with advance permission of the College of Law and the Dean of the other graduate discipline.

## Admissions

The College of Law Admissions Committee seeks to enroll a diverse group of students who have demonstrated academic and personal achievement and who show signs of future promise. While the admissions process gives much weight to a prospective student's academic record and performance on the LSAT, the Admissions Committee, in its discretion, also takes into account other factors relevant to one's potential as a lawyer. Positive factors include leadership ability, commitment to public service, international experience, work history, military service, and evidence of overcoming substantial obstacles (for example: a native language other than English; economic, family, or social hardship, etc.) Negative factors include a history of criminality or academic misconduct. The Admissions Committee encourages each applicant to answer all questions with candor, detail
and, where appropriate, to provide specific examples of relevant background experiences.
Completed applications for admission will be considered on a rolling basis beginning in late October. Please see the College of Law website for complete application details at
http://law.fiu.edu/prospective-students/admissions-financial-aidl.

The deadline for submission of a completed application is May 1. Please note: the FIU College of Law will not accept LSAT scores earned prior to June 2005; students must sit for the LSAT no later than February for fall application consideration; candidates for whom English is not their first language must take the Test of English as a Foreign Language. Please contact T.O.E.F.L. at TOEFLTSE Services, Educational Testing Services, P.O. Box 6151, Princeton, NJ, 08541-6151, telephone number (609) 771-7100, website: www.toefl.org.

## Juris Master in Law

## Admission Requirements

Admission to the J.M. program will be based on the following factors:

1. Undergraduate GPA;
2. Professional and academic background;
3. Personal statement (essay or statement of interest);
4. Professional and academic references; and
5. Graduate degree or LSAT, GRE, GMAT or MCAT score report.

The candidate for the J.M. degree must have a bachelor's degree from a regionally accredited U.S. institution, or a comparable degree from an international institution, with a minimum 3.0 (on a 4.0 scale) grade point average (GPA) in all work attempted while registered as an upper-division undergraduate student. Alternatively, the candidate must have received a graduate degree from a regionally accredited U.S. institution, or a comparable degree from an international institution. Any international degree would need to be evaluated to be determined equivalent. The J.M. Admission Committee will have discretion to waive the GPA minimum if the candidate's achievements in activities after receiving the bachelor's degree suggest a high likelihood of success in the J.M. program. Candidates may not have completed or currently be enrolled in a professional law degree program.

Acceptance into the program will be based on the candidate's standardized test scores, academic training and professional background, a personal statement, and professional references. For students from non-English speaking countries, demonstrated proficiency in English (at a level needed to comprehend lectures, class discussion, and reading assignments in law) will be required. TOEFL scores for non-English speakers will be assessed, unless the applicant submits a TOEFL Waiver Request from in order to be evaluated for a waiver to the TOEFL requirement.

## Degree Requirements

The full-time J.M. candidate will take 11 credits in the fall, 13 credits in the spring, and 6 credits in the summer, to complete the program within one year. Students may elect to complete the program on a part-time basis by taking fewer credits per semester. The sequence of courses will be as follows:
Required Core Courses: (18 credits)
Introduction to American Law ..... 4
Legal Analysis and Writing for Non-Lawyers ..... 3
Fundamentals of Contract Law ..... 4
Fundamentals of Tort Law ..... 4
Introduction to Regulation and Admin Law ..... 3
Choose one of the following concentration:
Advanced Legal Skills and Litigation Management Concentration: (12 credits)
Legal Procedure and the Legal System ..... 3
Litigation Management ..... 3
Discovery and e-Discovery ..... 3
Choose one of the following:
Family Law ..... 3
Real Estate Law ..... 3
Health Law Concentration: (12 credits) Health Law ..... 3
Regulation of Hospitals and Medical Practices ..... 3
Medicare and Medicaid Law ..... 3
Legal Requirements of Employers under Affordable Care Act3
Banking \& Finance Law Concentration: (12 credits)
Banking Law ..... 3
Bank Secrecy Act and Anti-Money Laundering Law ..... 3
Law and Procedure: Federal Financial Institutions ..... 3
Offshore Financial Centers: Use \& Abuse ..... 3
Employment \& Labor Law Concentration: (12 credits)
Employment Law ..... 3
Employment Discrimination \& Harassment ..... 3
Labor Law ..... 3
Worker's Compensation \& Employee Benefits ..... 3
Education Law Concentration: (12 credits) Education Law ..... 3
Education Regulation \& Legislation (incl. FERPA) ..... 3
No Child Left Behind ..... 3
Individuals with Disabilities Education Act (IDEA) ..... 3

## Master of Law (LL.M.)

The LL.M. is a post-graduate course in law for lawyers who have completed their first law degree in another country. It is composed of 24 credits and is based entirely on coursework that runs one academic year from August to May. It does not have subject specialties, and the courses taken by LL.M. students are determined on an individual basis.

It is a residential program. LL.M. students live in Miami, go to class with students from the United States, study in the library, and experience daily life on and off the campus. The FIU LL.M. graduate has studied law in the United States in English and knows not only the content of United States law but also the daily life and culture of the country from personal experience.

## Admissions Requirements

1. Transcripts from foreign law degree;
2. English proficiency exam requirement: TOEFL - 590 (paper-based), 250 (computer-based), 90 (internetbased) or IELTS - 7.0;
3. 2 Letters of recommendation;
4. Resume or curriculum vitae;
5. State of purpose;
6. Interview by phone if requested

## Credits required: $\mathbf{2 4}$

## Required Courses

U.S. Law 1
U.S. Law 2

## Recommended Course

Legal Skills \& Values: LLM

## Elective courses

Chosen by student and faculty advisor

## Graduate Certificate in Environmental and Natural Resources Law

The Environmental and Natural Resources Law certificate program seeks to provide graduate-level interdisciplinary instruction in the diverse fields of Environmental and Natural Resources law. Specifically, the Certificate Program will provide law students with in-depth study and training in state and federal legislation shaping environmental policy and governing the exploitation and preservation of natural resources, thereby increasing their competitiveness amongst law graduates in the state of Florida and elsewhere. The certificate will allow students to complement their legal studies by designing a unique curriculum that focuses on their particular environmental interests, leveraging Florida's unique geographic location and increasing demand for lawyers with training in environmental and natural resources law.

## Certificate Requirements: (15 credits)

Required Courses: ( 9 credits)

| LAW 6471 | Environmental Law |
| :--- | :--- |
| LAW 6470 | Natural Resources Law |
| LAW 6520 | Administrative Law |
| Elective Courses: (at least 6 credits) |  |
| LAW 6492 | Water Resources Law |
| LAW 7475 | Ocean and Coastal Law |
| LAW 6936 | Seminars (Biodiversity Law) |
| LAW 6936 | Seminars (Climate Change Law) |
| LAW 6460 | Land Use Planning and Control |
| LAW 7268 | International Environmental Law |
| LAW 6936 | Seminars (Energy Law) |
| LAW 6905 | Independent Study |
| LAW 7946 | Advanced Externship Placement |

LAW 6470 Natural Resources Law
LAW 6520 Administrative Law
Elective Courses: (at least 6 credits)

LAW 6936 Seminars (Biodiversity Law)
LAW 6936 Seminars (Climate Change Law)
LAW 6460 Land Use Planning and Control
LAW 7268 International Environmental Law
Seminars (Energy Law)

LAW 7946 Advanced Externship Placement
Related Courses (may be taken to count for 0-2 of the 6 elective credits)

| LAW 6730 | Admiralty Law |
| :--- | :--- |
| LAW 6250 | Comparative Law |
| LAW 6425 | Construction Law |
| LAW 6302 | Federal Courts |
| LAW 6580 | Food and Drug Law |
| LAW 6720 | Health Law |
| LAW 6263 | International Human Rights Law |
| LAW 6555 | Law and Economics |
| LAW 6821 | Law, Science, and Technology |
| LAW 6523 | Legislation |
| LAW 6531 | Local Government Law |
| LAW 6297 | NAFTA and Other Regional Trade |
|  | Agreements |

2-3
2-3
2-3

LAW 6426
Real Estate Transactions
2-3

## Graduate Certificate in Intellectual Property

This certificate program is open to degree-seeking students only.

## Program Requirements

1. (a) Earn at least 15 credits from the Intellectual Property course list, (b) take at least two courses or seminars from the Entrepreneurship course list, and (c) take the Intellectual Property survey course.
2. Students must earn a GPA of 2.7 over their law school career, as well as a GPA of 3.0 in their courses on the Intellectual Property course list.
3. (a) Complete a seminar or independent study that includes a research paper on a topic related to Intellectual Property, (b) ensure that the paper satisfies the College's writing requirement.

| Intellectual | Property Course List |  |
| :--- | :--- | :--- |
| LAW 6550 | Antitrust | $2-3$ |
| LAW 6233 | Computer and Internet Law | $2-3$ |
| LAW 6845 | Fashion and Design Law | $2-3$ |
| LAW 6570 | Intellectual Property | $3-4$ |
| LAW 6574 | International Intellectual Property Law | $2-3$ |
| LAW 6573 | Patent Law | $2-3$ |
| LAW 6936 | Seminars: Internet Law | $2-3$ |
| LAW 6936 | Seminars: IP and Human Rights |  |
|  | Seminar | $2-3$ |
| LAW 6936 | Seminars: Advanced Copyright Law | $2-3$ |
| LAW 7844 | Sports and Entertainment Law | 3 |
| LAW 6480 | Sports Law | $2-3$ |
| LAW 6576 | Trademark and Geographic Indications |  |
|  | Law | $2-3$ |

Entrepreneurship Course List
LAW 6520 Administrative Law 2-3
LAW 6730
LAW 6052
LAW 6060
LAW 7308
LAW 6425
LAW 7064
LAW 7549
LAW 6545
LAW 6471
LAW 6280
LAW 6302
LAW 7511
LAW 6720

LAW 6310 Alternative Dispute Resolution 2-3
$\begin{array}{ll}\text { Alternative Dispute Resolution } & 2-3 \\ \text { Admiralty Law } & 2-3\end{array}$
Bankruptcy Law 2-3
Business Organizations 4
Complex Litigation 2-3
Construction Law 2-3
The Law of Corporate Finance 3
Employment Discrimination 3
Employment Law 2-3
Environmental Law 3
European Union Law (including during $2-3$
Study Abroad)
Federal Courts 3

First Amendment 2-3
Health Law 2-3
International Business Transactions 2-3
International Commercial Arbitration 2-3
International Litigation 2-3
International Trade Law and Policy 2-3
Labor Law 2-3
Land Use Planning and Control 2-3
Law and Economics 2-3
Law Firm Management 2-3
Law, Science, and Technology 3
Mergers and Acquisitions 2-3
Remedies 3
Sales 2-3
Secured Transactions 2-3

| LAW 6560 | Securities Regulation | $2-3$ |
| :--- | :--- | :--- |
| LAW 6936 | Seminars: Financial Crisis | $2-3$ |
| LAW 7948 | Small Business Clinic | $4-6$ |

## Course Descriptions

Definition of Prefixes
LAW-Law

## FOUNDATION CURRICULUM

LAW 5300 Civil Procedure (4). This course entails study of civil litigation from the inception of a suit through trial and appeal. The course considers problems of personal and subject-matter jurisdiction, service of process, venue, leadings, rules governing joinder of multiple parties and multiple claims, discovery and pretrial, the trial itself (with or without a jury), judgments, and appeals.
LAW 5501 Constitutional Law (4). This course deals with the fundamental principles of American constitutionalism. It considers the relationships between the branches of the federal government within the separation of powers and the relationship of the national government with the states within our federalism. It focuses on the institution of the Supreme Court and its power of judicial review and how that power is exercised to interpret the Constitution. The various powers of Congress are studied, especially the commerce clause power, including its negative effects on the state police power. The executive powers of the President, both domestic and foreign, are explored. The constitutional relationship between the individual and the government are analyzed within the context of the due process and equal protection clauses of the fourteenth amendment.
LAW 5000 Contract Law (4). This course introduces and explores the function of contracts in a free enterprise economy. It covers the evolution and application of common law doctrines and, where applicable, those provisions of the Uniform Commercial Code governing the contracts process, including mutual assent, consideration, reliance, conditions, interpretation of contract language, performance and breach, and remedies. The course may also cover impossibility and frustration, beneficiaries, and assignments.
LAW 5100 Criminal Law (3). The purpose of the course is to introduce the principles and objectives of the criminal law and to explore its utility and limitations as a means of social control. The course covers general common law elements and principles, including actus reus and mens rea; general defenses, including insanity, ignorance and mistake, duress, self-defense, defense of others and of property, necessity, and entrapment; the criminal capacity of children and of corporations; theories of liability for various parties to crime; and vicarious strict liability.
LAW 5259 Introduction to International and Comparative Law (3). This new course introduces students to public international law, international economic law, and comparative law. Exposure to the law of nations in the international component of the course poses critical jurisprudential questions on the nature of law, the role of enforceability, and the prospects for constructing an international society. The comparative component compares and contrasts the common law system that prevails in the United States to civil law systems,
especially as they have evolved in Latin America. Together the course provides the foundation for later advanced study in these and other topics as part of the upper level curriculum.
LAW 5792 Legal Skills and Values I (3). LAW 5793 Legal Skills and Values II (2). The Legal Skills and Values Program at the College of Law combine demanding traditional instruction in legal research and writing with an introduction to other lawyering skills, like interviewing and counseling, and to issues of professionalism. It is a required three-semester curriculum that will run throughout the first year, and must be completed by the end of the fourth semester by full-time students and by the end of the fifth semester by part-time students. It is premised on the beliefs that 1) strong research and writing skills are vital to lawyers in all areas of practice; 2) other lawyering skills should be introduced early in a student's academic career; and 3) concerns for the ethical sensitivity and civility of lawyers demand an early and recurring emphasis.
LAW 5400 Property (4). This course introduces and examines concepts of property ownership, possession, and transfer. It includes acquisition and protection of personal property; estates in land, including present, concurrent, and future interests; leasehold estates; easements, covenants, and private controls of land use; some aspects of real property transfers, including deeds, descriptions, recording and priority, and the real estate contract; and an introductory treatment of nuisance, zoning and other public controls of land use.

LAW 5700 Torts (4). This course examines the body of law directed toward the compensation of individuals for injuries to their protected legal interests. It includes liability for negligence and for intentional interference with person and property, and liability without fault ("strict liability"). Covered are doctrines including duty, breach of duty, causation, damages, and defenses.

## UPPER LEVEL CURRICULUM

LAW 6760 Accounting for Lawyers (2-3). This is a study of the basic principles, conventions and methods of accounting to enable the lawyer to understand the legal economic environment, with specific reference to accounting problems encountered in such areas of the law as tax and corporations.
LAW 6520 Administrative Law (2-3). This is an introduction to the laws controlling executive branch agencies of government. Major topics include delegation of power to agencies, modes of agency action, control of agencies by the legislative branch, control by the judicial branch, and public access and influence.
LAW 6730 Admiralty Law (2-3). This course is an introduction to the law of the sea under federal and international law. Topics covered will include rules governing liability for maritime collision, rights and duties arising from personal injury or death of a seaman, liabilities of ship owners and insurers, maritime liens and mortgages, and special problems caused by involvement of governments as parties to maritime transactions and litigation. Other topics will include admiralty practice and procedure and maritime environmental law.

LAW 6783 Advanced Legal Analysis (2). Advanced legal analysis presents students with the opportunity to refine the core skills necessary for success on the bar exam. After an introduction to the testing methods used on the bar exam, students will learn optimal ways to prepare for their bar study. Students will then complete numerous multiple choice and essay questions, similar to those used on the Multistate Bar Examination and on the state day of the bar, and receive extensive feedback from faculty regarding their strengths and weaknesses. The course culminates in an examination designed to stimulate the actual bar exam. Prerequisite: Open to students in the fall semester of the final year of study at the College of Law.
LAW 6114 Criminal Procedure: Adjudication (3). This course examines topics not covered in the basic course in Criminal Procedure, including the grand jury process, bail, the plea-bargain process, right to jury trial, double jeopardy, joinder and severance, and right to confront and examine witnesses.
LAW 6791 Advanced Electronic Legal Research (2-3). The goal of Advanced Legal and Electronic Research is to review and expand the legal research skills that have been introduced in Legal Skills and Values courses. The course focuses on practitioner-oriented materials and their use, as well as more sophisticated Internet and electronic research techniques. In addition, the student will choose a specific subject area of interest to the student, and then prepare a research guide to be presented to the class.
LAW 7943 Advanced Immigration and Human Rights Clinic (1-2). Advanced clinical training under the supervision of a law school faculty member in order to undertake work on complex cases or projects, including completing project(s) or case(s) begun by a student during the Immigration and Human Rights Clinic. Such advanced work may include appellate advocacy, impact litigation, legislative advocacy, community organizing, and other work in the area of immigration and human rights.
LAW 7946 Advanced Externship Placement (2-4). To perform advanced legal work at the same area or to explore a different area of careers in government, public interest or corporate (in house) law. Prerequisites: Criminal Externship or Civil Externship or Judicial Externship.
LAW 7944 Advanced Legal Clinic (1-5). Advanced clinical training under the supervision of a law school faculty member in order to complete projects or cases begun by the student during a clinic, or to pursue in more depth the subject of the clinic. Prerequisites: One prior clinical course. Must be approved by the Supervising faculty member.
LAW 7364 Advanced Trial Advocacy (3). This course focuses on advanced elements, concepts, and strategies in presenting complex cases to a jury, namely jury selection, presentation of scientific evidence, and examination of expert witness. Prerequisites: Trial Advocacy, Evidence, Approval by the Director of the Trial Advocacy Program.
LAW 6310 Alternative Dispute Resolution (2-3). This course entails an examination of the alternative dispute resolution mechanisms and techniques for incorporating them into legal practice. A variety of readings and exercises are used as background for discussions of the
utility of different mechanisms for resolving certain kinds of disputes. This course focuses on adjudication, negotiation, and mediation.
LAW 6271 American Indian Law (3). The course will begin with historical materials, followed by an overview of federal Indian policy periods, and then will proceed to examine the legal framework chronologically then by subject matter.
LAW 6550 Antitrust (2-3). The course is a study of judicial decisions construing and applying the federal antitrust laws (i.e., Sherman, Clayton, Robinson-Patman, and Federal Trade Commission Acts) to the control of the competitive process in the American economy.
LAW 7952 Appellate Advocacy Competition (2). Students selected as members of the Board of Advocates Appellate Advocacy Group will compete in a regional, national, or international appellate advocacy competition and will earn credit for satisfactory completion of their competition duties. Students, working in a team, will typically prepare an appellate brief and then deliver an appellate oral argument multiple times during the competition oral argument rounds. Prerequisite: Appellate Procedure.
LAW 6372 Appellate Procedure I (2-3). Students, working in two-person teams, will prepare an appellate brief and deliver an appellate oral argument in a competition format. Students will receive substantial classroom instruction in persuasive brief writing and oral advocacy as well as the relevant appellate rules and procedure topics. Prerequisite: Course open to any second-year fulltime student or third-year part-time student who has completed LSV I and II and who is not under academic supervision.
LAW 7373 Appellate Procedure II (2-3). This course focuses on practice and procedure in the Florida District Courts of Appeal and the Eleventh Circuit. The course covers selected state and federal statutes and court rules governing appellate procedure as well as key appellate topics such as the merits of appeal, ethical limitations, jurisdiction, finality, issue selection, preparation of the record, preservation of error, fundamental/plain error, harmless error, and standard and scope of review. During the course students will typically draft several short appellate documents, such as a Notice of Appeal, a Designation of Record/Directions to Clerk, and a Request for Oral Argument, as well as an appellate brief outline; unlike Legal Skills and Values II or III, the course will not cover brief writing or oral argument.
LAW 6291 Aviation and Space Law (2-3). Air Space Law at the FIU College of Law examines post-9/11 national aviation and space policy, together with key administrative, antitrust, business, constitutional, and legislative and regulatory issues confronting the civil and general airplane transportation industry, Florida's "Space Coast", and the international communities for which Miami-Dade County serves as a gateway. Prerequisite: First year curriculum.
LAW 6088 Bank Secrecy Act and Anti-Money Laundering Law (3). This course offers a study of the rules and regulations through which the Federal Deposit Insurance Corporation (FDIC) establishes and maintains procedures designed to assure and monitor compliance
with the BSA and implementing regulations. The course reviews the penalties and other regulatory enforcement actions imposed for noncompliance with money laundering laws, as well as criminal prosecutions for willful violations of same. The course introduces students to the administrative and enforcement mechanisms of OFAC (Office of Foreign Assets Control) of the U.S. Department of Treasury.
LAW 7085 Banking Law (2-3). This course is concerned with the federal regulation of national and state-chartered financial institutions. Topics include the history of banking in the United States, entry restrictions, expansion through the bank holding company structure, branching, liability issues, limitations on bank activities, and the regulation of failing financial institutions.
LAW 6052 Bankruptcy (2-3). This course covers such diverse matters as the various forms of relief available to different kinds of debtors, including liquidation, reorganization of a business, and adjustment of an individual's debts; financing a Chapter 11 debtor in possession; the automatic stay and the rights of secured and unsecured creditors; the trustee's avoiding powers, exemptions, discharge of debts and the treatment of executory contracts. The basic concepts underlying the 1978 Bankruptcy Code such as discharge, reorganization and equitable distribution are also investigated.
LAW 6958 Board of Advocates (1-2). Students selected as members of the Board of Advocates will earn credit for satisfactory completion of their Board duties, which will include participation on at least one competition team (competition credits will be awarded separately); service as bailiffs, timekeepers, clients, witnesses, jurors, and judges for practice rounds and courses; and participation in Board meetings and activities. Board officers, as well as student coaches for competition teams, may earn additional credit for satisfactory completion of their duties as officers or coaches.
LAW 5072 Business Law and Intellectual Property for Engineers and Entrepreneurs (3). Focused on the formation, governance, operation, and legal protection of businesses. Coverage includes contracts, malpractice, products liability, employment law, and intellectual property law. Prerequisite: Permission of the instructor. Corequisite: Engineering students only - not for law majors.
LAW 6060 Business Organizations (3-4). This is a basic course on state and federal law governing incorporated business enterprises, partnerships and limited liability companies.

LAW 7070 Business Planning (2-3). This course explores the application of laws relating to unincorporated and incorporated business organizations and the federal income taxation of such organizations in the context of business planning and counseling situations. Prerequisites: Business Organizations, Federal Income Tax, Corporate and Partnership Tax.
LAW 6935 Caribbean Law and Development (2-3). This course will cover the legal and judicial systems of the Caribbean countries and the process by which these systems were introduced. A focus of the course is on Regional Cooperation in the political and especially economic areas. Similarities and differences across the
countries of the region that both propel and hinder legal integration will be highlighted.

LAW 6943 Carlos A. Costa Immigration and Human Rights Clinic (4-6). Students enrolled will represent lowincome immigrant clients in federal immigration court. Prerequisites: 45 credits, Professional Responsibility, Evidence and Immigration Law. Corequisites: Professional Responsibility, Evidence and Immigration Law.
LAW 6714 Children and the Law (2-3). This course will consider: Constitutional issues posed by the allocation of power as between the state and the family; the status of the child within the family, including economic status, scope of parental privilege to discipline, problems of medical consent, disputes over custody, and adoption; and the juvenile court system, dealing with delinquent, incorrigible, neglected and abused children.

LAW 6949 Civil Externship Placement (2-4). To enhance the student's understanding of the legal profession and its standards by exposing the student relevant lectures and experiential opportunities in civil litigation. Prerequisite or Corequisite: Professional Responsibility.
LAW 7510 Civil Rights (2-3). This course focuses on selected federal statutes enacted to remedy violations of federal constitutional rights. The principal Reconstruction Era statutes, 42 U.S.C. sections 1981, 1982, and 1983, are examined in depth.
LAW 7953 Client Counseling Competition (1). Students selected as members of the Board of Advocates Client Counseling Group will compete in a regional or national client counseling competition and will earn credit for satisfactory completion of their competition duties. Students, working in a team, will typically prepare for and then interview and counsel a client.

LAW 7948 Small Business Clinic (4-6). Law students provide basic corporate legal assistance to for profit small businesses, entrepreneurs, and non-profit organizations that cannot afford to pay market rates for legal services. Prerequisites: 45 credits, Professional Responsibility, Business Organization. Corequisites: Professional Responsibility, Business Organization.
LAW 7813 Community Law Teaching (2-3). The course focuses on the delivery of law-related education by law students to lay persons, specifically, high school students. Law students study legal pedagogy focusing on ways to teach legal concepts to high school students and present classes about law, democracy and human rights in local high schools.

LAW 6251 Comparative Constitutional Law (2-3). This course will analyze elements of constitutionalism, including: the legitimacy of constitution-making and constitutional amendment; limited government; the consent of the governed, majority rule and representative government; separation of powers; judicial and other institutions for constitutional review; civil, political, social, economic rights, and different conceptions of equality; and the relevance for constitutionalism of a society's economic system. The course will consider how and to what extent the elements of constitutionalism are realized in the United States and, selectively, in various countries in different parts of the world, and the factors that render different countries more receptive or more resistant to the
development of a culture of constitutionalism or to any of its principal elements.
LAW 6253 Comparative Criminal Law (2-3). This course entails a comparative analysis of important issues of substantive criminal law and criminal procedure against the background of various legal systems. The analysis focuses on American and continental European law and practice. Topics include structure and dynamics of criminal trials, prosecutorial and police discretion, lay participation in the administration of criminal justice, and a comparative analysis of crucial doctrines of substantive criminal law.
LAW 6257 Comparative Environmental Law Urban Issues (3). This course offers students the opportunity to study a wide range of environmental problems in a comparative context. The course examines Brazilian legal and regulatory responses to issues such as urbanizations an its threat to biodiversity of the Atlantic Rainforest, water and wastewater management in a less developed country, the use of international and national legal instruments to improve urban air quality, ecosystem conservation, and environmental education. Brazilian experience and efforts will be compared to US and other legal responses where relevant. Students will have the opportunity to study these and other questions through in class lectures from US and Brazilian faculty, role-playing exercises, and field visits.
LAW 6254 Comparative Family Law (2-3). This course will entail the study of U.S. and other countries' domestic relations laws, including laws governing marriage, divorce, and children.

LAW 6250 Comparative Law (2-3). This course is designed to develop a technique by which lawyers trained in one system of law may be enabled to recognize, analyze and study legal problems arising in a different system. The first part is devoted to procedural and evidentiary problems faced by domestic courts when they have to decide cases involving foreign law and foreign facts. Following this, the fundamental, historically conditioned differences in approach and method between common law and civil law will be explored. Throughout the course, foreign legal institutions will be compared to our own, with the aim of gaining perspective in understanding and appraising the solutions provided by our own system.
LAW 6255 Comparative Law: Constitutions and the Judicial Process (1-4). This course introduces the major legal traditions in the contemporary world while focusing on public law and related institutions. A broad comparative and historical framework provides the basis for closer study of topics including constitutions, constitutional actions, courts, judicial review, judicial process, administrative law, and the legal profession. Special emphasis is placed on Spain and Latin America. Readings and discussion in class are supplemented with visits to Spanish legal institutions in Seville and Madrid.
LAW 6831 Comparative Property Law (2-3). This course offers the students an opportunity to study a comparative analysis of a wide array of property law issues in differing property law systems. Topics include rights in personal property, present and future interests, martial property, real estate transactions and financing, landlord/tenant law, and takings. These concepts may be examined in either a commercial or residential context. Students interested in property law generally and in transnational property transactions would benefit from an understanding of the
differing property law systems. Prerequisite: Introduction to International and Comparative Law when offered on campus to FIU students.
LAW 6830 Comparative Public Law: Government Administration and the Judiciary (3). This course focuses upon both constitutional and ordinary judicial control over government administration from civil law and common law perspectives, in unitary and federal nationstates. Particular emphasis will be placed upon the emergence of divergent legal control mechanisms over government in the Spanish-speaking Americas, on the other hand, and in Spain itself, on the other. A civil law training perspective will be used more than a common law perspective in the teaching of the course, in order that the U.S. students might better appreciate how the learning of a linguistic and conceptual grid of legal reference points up front, rather than an experiential learning of law through the case law method, can affect the way in which the differently trained legal professionals approach their work. Readings and discussion in class will be supplemented with visits to Spanish legal institutions in Seville and Madrid, providing the students an enriched exposure to a different legal culture.
LAW 7308 Complex Litigation (2-3). Students learn how the federal rules of civil procedure, particularly in the area of complex litigation, can become instruments of policy. Topics include class actions and multi-district litigation.
LAW 6233 Computer and Internet Law (2-3). This is a course on law in the Information Age. Topics may include patent and copyright protection for computer software, Internet copyright and trademark issues, privacy concerns, jurisdictional issues and computer crime.
LAW 6318 Conflict Management Practice Comparative Perspective of Mediation (2-3). Designed to provide students with both a theoretical background and practical experience in mediation and mediation advocacy, with an emphasis on its practice in an international context. In recent years, individuals and their lawyers are increasingly turning to mediation to resolve disputes, and effective lawyers will need to understand the nature or conflict and to be equipped with the skills essential to effective mediation. This course will introduce students to the various mediation models and mediator styles and to the policy, practical, and ethical implications of the growing use of mediation. It also will offer the opportunity to develop and enhance the skills necessary to both mediate disputes and to represent clients in a mediation setting.
LAW 6317 Conflict Management Practice-Comparative Perspectives of Negotiation (2-3). Provides an overview of the theory and practice of negotiation, with an emphasis on its practice in the international context. All attorneys spend much of their professional lives negotiating with clients, co-counsel, opposing counsel, and others. Further, in an increasingly interdependent worlds, counselors will need a strong foundation in crosscultural negotiation techniques to effectively represent their clients in local and national disputes and in of negotiation and to enhance students' negotiation skills. In addition to negotiation skills and theory, students will also be introduced to the ethical issues in negotiation.
LAW 6340 Conflicts of Law (2-3). This course deals with the special problems that arise when the facts or the parties in a case have contacts with more than one state
or country. These problems relate to: jurisdiction in persona, in rem and quasi-in rem; choice of the applicable law; and after rendition of a judgment, that judgment's recognition and enforcement in other states and countries. Jurisdictional and choice of law rules are studied with special emphasis on situations involving torts, contracts and property transactions cutting across state and national boundaries. Also considered are interstate and international problems concerning marriage, divorce, and decedents' estates.

LAW 6293 Conflict Prevention and Community Improvement (3). Will study responses to community conflict in Rio and other Brazilian communities and will examine their impact on law and society. The course will offer students an opportunity to examine and discuss the dispute resolution design process with professionals and to visit Brazilian community programs to observe first hand active conflict prevention programs. Students will consider the Brazilian models in the context of the institutionalization of dispute resolution/conflict prevention in both legal and extralegal settings in developed and less developed communities internationally.
LAW 6425 Construction Law (2-3). This course will consider legal issues encountered in construction projects, beginning with the role of the construction lawyer and review of duties and liabilities of the construction team Architect, Engineer, Owner, Contractor, Construction Manager. The course includes discussion of the bidding process (including bid protest and bid awards), the contracting process with emphasis on key contract provisions, contract performance issues, litigation liability and damage issues, and bonding issues.
LAW 6942 Consumer Bankruptcy Externship (6). The Bankruptcy Clinic a two semester course combines classroom and practical work experience. Students may enroll for one semester with permission. They will represent clients in federal bankruptcy proceedings, as permitted by the Florida Limited Practice Act and the Rules of the United States District Court for the Southern District of Florida. The classroom component examines legal, social and ethical dimensions of bankruptcy law practice, including legal skills and knowledge in federal bankruptcy law practice, such as client interviewing, legal analysis, drafting legal documents, arguing motions, professional responsibility, and practice issues such as choice of relief under state law or the Bankruptcy Code, relief from the automatic stay, objections to discharge and dischargeability, and confirmation of a chapter 13 plan. Case developments and issues will be shared in case rounds exposing students to many ethical and practice concerns and issues. Prerequisites: 45 credit hours, Professional Responsibility, Evidence, and Bankruptcy Law. Corequisites: Professional Responsibility, Evidence, and Bankruptcy Law.
LAW 6572 Copyright Law (3). A basic introduction to copyright law is included in the Intellectual Property survey course. However, due to that course also covering Patent, Trademark, and Trade Secret law, coverage of copyright law is necessarily limited. This course will expose students to more in-depth knowledge of the rules governing copyright protection for architecture, fashion, and computer software; the ownership and co-ownership of copyrights; the registration and transfer of copyright interests; musicians' royalty rights; copyright interests in

Latin America, Asia, Africa, and Europe; the exclusive rights to distribute, perform, and display works; theories of copyright protection the economic analysis of copyright law; and U.S. implementation of copyright treaties such as the Anti-Counterfeiting Trade Agreement, Trans-Pacific Partnership, North American Free Trade Agreement, GATT Annex on Intellectual Property, WIPO Performances and Phonograms Treaty, WIPO Audiovisual Treaty, and WIPO Copyright Treaty.
LAW 6610 Corporate and Partnership Tax (2-3). The course examines the income tax treatment of corporations and their shareholders and of partnerships and their partners arising from various transactions including incorporations, distributions, redemptions, liquidations, and non-taxable acquisitive reorganizations. Prerequisite: Federal Income Tax.

LAW 6945 Criminal Externship Placement (2-4). To enable students to gain a better understanding of the major issues involved with criminal law practice and the criminal justice system. Prerequisite or Corequisite: Professional Responsibility.

LAW 6112 Criminal Procedure: Investigation (3). This course explores pre-trial aspects of criminal procedure under the Fourth, Fifth and Sixth Amendments to the United States Constitution, with emphasis on searches and seizures, police interrogation and the right against self-incrimination, and the right to counsel.

LAW 6230 Critical Legal Theory (2-3). This course explores the relationship between law and legal institutions and ideology. It addresses questions relating to the role of law in society and whether and to what extent law serves to perpetuate existing economic and social privileges, at the expense of less powerful members of society.
LAW 6294 Cross Cultural Communication in International Dispute Resolution (3). This course surveys the impact that culture has on international dispute resolution processes. In any increasingly interdependent world, counselors will need a strong foundation in cross-cultural communication skills to effectively represent their clients in local and national disputes and in conflicts with a transnational character. This course will explore cultural differences in social customs, business practices, religious and ethical values, and language in the context of various dispute resolution processes through classroom discussions, simulations, and role-plays, many of which will involve Latin and South American settings and will address environmental, land use, and trade issues. Students will develop and enhance their skills in critical thinking, listening, and cross-cultural communications and will have the opportunity to learn about and observe the use of these skills with lawyers and other professionals in Rio.
LAW 6106 Death Penalty Clinic (4-6). This course will involve students working on death penalty cases under the direct supervision of a clinical professor and a lawyer representing a client on a capital case. Students will assist in investigations, interviewing clients and witnesses, gathering documents, legal research, drafting pleadings, assisting with strategic decisions and in developing integrated theories of defense. The emphasis will be on making a case for life. Prerequisites: 45 credits, Death

Penalty, Professional Responsibility. Corequisite: Professional Responsibility.
LAW 6105 Death Penalty Law (2-3). This course will introduce a basic outline of the many components of the death penalty post Furman, including the procedural regulations placed upon litigation. Topics will include Eighth Amendment challenges (e.g. juveniles, the mentally retarded), jury sentencing, racial disparities, the prosecution function, effective defense representation, and international law. There will be a particular emphasis on the sentencing phase of death penalty cases. Prerequisites: Foundation courses completed. Corequisite: Evidence preferred but not required.
LAW 6515 Disability Law (2-3). This course explores the right of individuals with disabilities to be free from discrimination in several major aspects of life including employment, higher education, elementary and secondary education, public accommodations, and housing. The primary legal authorities covered will be the Americans with Disabilities Act, the Rehabilitation Act of 1973, and the Individuals with Disabilities Education Act. The course will consider both the traditional civil rights roots of these laws as well as the latest trends unique to disability in this rapidly emerging field of law.
LAW 6820 Discovery and e-Discovery (3). This course is an in-depth study of the principles, methods and investigative techniques utilized to "discover": that is to locate, gather, document and disseminate information. In response, to discovery, ESI (Electronically Stored Information) involves the identification, collection, preservation and production of documents. The predominance of ESI has changed the context of information exchanges between adverse parties in litigation, raising complex problems of interpretation and litigation costs. Indeed, the failure to properly comply with the rules covering the exchange of ESI and spoliation of evidence has resulted in severe monetary sanctions. The course covers the statutes and court rulings governing this burgeoning and important aspect of litigation practice.
LAW 6037 E Commerce (2-3). This course will consider special issues that arise when business is conducted electronically. Topics may include the jurisdiction of courts over disputes arising from on-line transactions between distantly located parties, contract formation and enforcement issues, electronic signatures, and choice of law problems.
LAW 6583 Education Law (2-3). The course focuses on educational policy and the intersection of public schools and the law. The course covers topics such as school desegregation, compulsory school attendance laws, curriculum content, the First Amendment in schools (flag salutes, school prayer, government aid to parochial schools), school financing, voucher plans, community control of schools, bilingual education, and issues surrounding single-sex schools.
LAW 6590 Education Regulation and Legislation (No Child Left Behind) (3). This course provides an understanding of the US education system and the challenges of education reform. Particular attention will be paid to the wide-reaching effects of the No Child Left Behind Act of 2001, the government's flagship aid program for disadvantaged students.

LAW 6717 Elder Law (2-3). This course covers such areas as income tax provisions of special interest to senior citizens, Social Security, pension plan distributions, Medicare and Medicaid coverage, long-term care and nursing home admission, powers-of-attorney regarding health care proxies and financial/legal matters, guardianship, and ethical considerations in advising elderly clients. The emphasis is on understanding federal statutory provisions that affect the care, comfort, and financial security of persons as they live longer, to permit informed advising and sensitive planning.
LAW 6584 Election Law (2-3). This course examines federal and state law regulating the conduct of elections and the financing of campaigns. It includes: aspects of federal and state constitutional law on speech, association, and equal protection; state law on who gets to vote and who gets voted for; and problems of apportionment, gerrymandering, race-conscious districting under the Voting Rights Act, and party governance. With respect to campaign finance, it considers: how much and what kinds of legal regulation are appropriate regarding parties, candidates, independents, political action committees, corporations, unions, and individuals; and the appropriate role of the courts.
LAW 7549 Employment Discrimination (3). This course will assesses the major federal and state employment discrimination statutes (e.g., Title 7, Americans with Disabilities Act, Age Discrimination in Employment Act) with emphasis on the relationship among the legislative, executive, and judicial branches in the development and implementation of public policy.
LAW 6545 Employment Law (2-3). This course is a survey of basic legal and policy concepts governing the employment relationship. Subject areas include: personal service contracts, including grounds for discharge and the at-will doctrine; the collective bargaining process, including the notion of exclusivity/concerted activity, unfair labor practices, duty to bargain, impasse resolution and contract enforcement; employment discrimination, including race, sex, handicap, age, and remedial affirmative action; statutory regulation of conditions of employment, including workers' compensation, fair labor standards, safety and health and whistleblower statutes; public and private employment distinctions, including civil service systems and employment as a property right.
LAW 7575 Entertainment Law (2-3). The course will examine the various complex contractual issues facing attorneys representing clients in the entertainment industry. The course will focus on issues arising in the production, distribution and exploitation of theatrical film and television properties and will also address issues arising in the music industry. Topics will include, among others, negotiating talent services and talent management agreements; acquiring and protecting property rights to creative works; protecting rights of privacy and publicity; and negotiating and accounting for profit participation, residuals and royalties.
LAW 6471 Environmental Law (3). This is a survey of environmental regulation, addressing the environmental policies, rights, and remedies provided by the common law and various federal statutes. The course focuses on the National Environmental Policy Act, the Clean Air Act, the Comprehensive Environmental Response, Compensation
and Liability Act, and various other statutes and common law doctrines related to hazardous wastes and toxic substances. Throughout the course, students will be asked to pay attention to the regulatory and administrative structures invoked by these statutes and doctrines.
LAW 6256 Environmental Health Law and Policy (3). This course is an inter-disciplinary course examining a range of legal responses to questions of environmental health law and policy in the context of modern Rio de Janeiro, Brazil. In conjunction with graduate students in public health, students are asked to consider appropriate legal, regulatory and policy responses to a range of environmental health challenges, from the effects of pesticides on consumers to efforts to control communicable and insect-born disease. Because this course is offered abroad, students are also asked to consider the appropriate role of foreign lawyers and policymakers in formulating appropriate responses to the environmental health challenges studied. The course features extensive lecturing by Brazilian faculty drawn from the worlds of law, public health and other social sectors, and students are asked to tackle role-playing exercises in order to apply the material studied.
LAW 6621 Estate and Gift Tax (2-3). This course covers federal estate and gift taxes and their impact on gratuitous property transactions during life and at death. The course includes brief consideration of the tax on generation skipping transfers. Prerequisites: Federal Income Tax, Wills and Trusts.
LAW 6431 Estate Planning (3). This course will explore the theories and skills involved in the estate planning process. Topics include the estate planning engagement, information gathering, identification of client objectives, development of remedial and conventional estate plans, and selection of fiduciaries. Prerequisites: Federal Income Tax, and Wills and Trusts.
LAW 6222 European Legal History (2-3). This course introduces students to European legal history from the Roman era to the present day. Although focusing predominantly on the development of the continental tradition and subsequent national legal systems, the course also incorporates aspects of English legal history. The materials selected highlight the political and cultural context within which Europe formed and adapted a highly sophisticated legal science. The course provides essential background for any student interested in understanding civil law systems found throughout the world today in Europe, Latin America, and Asia.
LAW 6280 European Union Law (2-3). This course is a review of major legal aspects of the institutions of the European Union and the law of the European Community. It will emphasize: the development of law of a "constitutional" nature, the system for enforcement of EC law; the relationship between national law and law at the European level (federal and subsidiary); the breakdown of barriers in the internal market and the free movement of goods and services; competition policy; and other internal market policies.
LAW 6330 Evidence (3). This course addresses the law of evidence, including: hearsay, judicial notice, burden of proof, and presumptions; functions of judge and jury; competency and privileges of witnesses; and exclusion of testimony of witnesses and documents.

LAW 6591 Family Education Rights and Privacy Act (FERPA) (3). The Family Education Rights and Privacy Act is a federal law that protects the privacy of student records of any educational institution that receives federal Department of Education funds. FERPA prohibits the federal funding of institutions that release education records without the consent of parents or eligible students. FERPA compliance is complex, because the law contains numerous exceptions applicable to certain individuals and to different situation, as well as several gray areas. The course explores these complexities and the difficulties of compliance in detail.
LAW 6710 Family Law (2-3). This course examines state regulation of sexual and marital relationships, including the conflict between the doctrines of family privacy and state intervention in the marital relationship.
LAW 6940 Family Law Clinic (4-6). Students in the Family Law Clinic will represent individuals with family law disputes. Prerequisites: 45 credits, Professional Responsibility, Evidence, and Family Law. Corequisites: Professional Responsibility, Evidence, and Family Law.
LAW 6845 Fashion and Design Law (2-3). This course will introduce students to Fashion and Design Law, with a focus on the relationship between intellectual property laws, fashion, and culture. Students will learn about how intellectual property laws can, and cannot, be used to protect fashion and designs nationally and internationally. The course may also cover licensing, global legal disputes, relevant trade law mechanisms, and other related fashion law topics. No technical background is required for this course. Intellectual Property Law is highly recommended but not required.
LAW 6302 Federal Courts (3). The course examines the power and role of the federal courts as defined by the United States Constitution, federal statutes and judicial decisions. Among the topics examined are federal question, diversity and civil rights jurisdiction, habeas corpus, immunities of state and local governments from suit, and abstention.
LAW 6600 Federal Income Tax (3). This course offers an introduction to the fundamental principles of federal income taxation, particularly as applied to individuals, including the concepts of gross income, identification of the proper taxpayer, deductions, income tax accounting, capital gains and losses, deferred payment sales and nonrecognition transactions. Consideration will be given to issues of tax policy and tax planning techniques.
LAW 7511 First Amendment (2-3). This course is an examination of the historical origins and underlying values of the rights of conscience protected in the First Amendment. The emphasis will be on the fundamental principles articulated in Supreme Court interpretations of its provisions relating to free speech, free press, and religious liberty.
LAW 7303 Florida Civil Practice (2-3). This course entails a study of Florida civil practice from the commencement of an action through final judgment.
LAW 6403 Florida Condominium and Community Association Law (2-3). This course shall focus on the planning, structuring and operation of condominium and community associations in Florida. The course will cover issues related to community planning and the day to day
operations of an association. The students will be provided with a sample set of governing documents for a condominium and homeowner's association before the first day of class. Simulations will be provided to the students on a weekly basis. Students will be required to draft a legal opinion advising their client on the best course of action for each simulation. Students will also draft several documents relevant to the practice of Florida Condominium and Community Association Law. Prerequisites: Property, Civil Procedure.
LAW 7503 Florida Constitutional Law (2-3). This course studies the Constitution of the State of Florida, including recent decisions of the Florida Supreme Court and analysis of current proposals for constitutional change.
LAW 5309 Florida Law and Procedure (2). Focused on differences and distinctions between state law and general common law principles in certain fundamental areas of law typically tested on the Florida bar examination. Prerequisites: Foundation courses or substantial equivalent.
LAW 6580 Food and Drug Law (2-3). This course offers a comprehensive study of the Food and Drug Administration's regulatory standards governing the production and marketing of food and pharmaceuticals in the United States. The new drug pre-market approval process, good manufacturing practice requirements, drug labeling and advertising rules, and related FDA enforcement powers and activities are covered.
LAW 6506 Foreign Relations and National Security Law (2-3). This course assesses foreign relations law, with a focus on national security law under the United States Constitution. It examines the scope of presidential powers, the role of executive agreements, treaties, and legislative powers pertaining to foreign affairs and national security.
LAW 6723 Medical-Legal Partnership Clinic (2-6). The Medical-Legal Partnership Clinic is a legal services delivery model designed to improve legal client/patient outcomes by addressing social determinants of health (poverty, education and employment, income, housing, legal status, personal and family stability, etc.) Under the MLP Clinic, supervised students-lawyers will provide legal assistance to underserved, low-income households in association with community partners. Prerequisites: 45 credits, Professional Responsibility, and one of the following: Health Law or Administrative Law or Disability Law or Immigration Law. Corequisites: Professional Responsibility, and one of the following: Health Law or Administrative Law or Disability Law or Immigration Law.

LAW 6720 Health Law (2-3). This is a study of numerous topics, including national health care programs, health care financing, reimbursement, licensing and accreditation, hospital organization, physician and patient autonomy, antitrust law, quality of care and medical malpractice, and ethical issues related to availability of health care and services.
LAW 6981 Immigrant Children's Clinic (4-6). Students will gain experience representing children in state dependency proceedings, appeals, and in some cases, in federal immigration proceedings. Prerequisites: 45 credits, Professional Responsibility, Evidence, and Family Law.

Corequisites: Professional Responsibility, Evidence, and Family Law.

LAW 6264 Immigration Law (2-3). This course examines the major aspects of the Immigration and Nationality Act. The interrelationship between the administrative agencies empowered to execute the Immigration and Nationality Act's mandate will be studied. Major attention will be focused on the immigrant and nonimmigrant visa systems, political asylum and refugees, exclusion and deportation of the foreign-born, and naturalization. Policy implications of the statute and judicial interpretations are addressed.
LAW 6905 Independent Study (1-2). A student may pursue an independent study project, including a research and writing project, under the supervision of a faculty member who has a special interest in the subject area of the project. The student must obtain the consent of the faculty member before registering for the course.
LAW 6080 Insurance Law (2-3). The course deals with: the making, administration and interpretation of insurance contracts; governmental (including judicial) regulation of insurance; common insurance contract provisions; subrogation; excess liability of insurers; and property, life and liability insurance policies and problems.
LAW 6570 Intellectual Property (3-4). This is a survey course that introduces students to patent, copyright, trademark, trade secret, right of publicity and unfair competition law. The course is designed to give students entering a general business or civil litigation practice a thorough overview of the various intellectual property doctrines.
LAW 6015 International and Comparative Sales (3). This course entails the study of legal rules governing the international sale of goods, and a comparison of these rules with Spanish and United States domestic law counterparts. The course will focus on the United Nations Convention on Contracts for the International Sale of Goods and the UNIDROIT Principles of Commercial Contracts. The comparative law component of the course will examine the related Spanish and U.S. domestic contract law governing sales of goods, including Article 2 of the Uniform Commercial Code. Comparing and contrasting the three systems offers the student greater insight into the choices, interests and policies pursued under each respective system of law.
LAW 6551 International Antitrust (2-3). This course considers all major aspects of international antitrust law affecting United States businesses, including the Justice Department's international enforcement guidelines, issues of extraterritorial application of United States antitrust law, and the "effects doctrine." International enforcement cooperation and European Union antitrust enforcement will also be discussed.
LAW 6087 International Banking (2-3). This course addresses issues of banking and financial law in international private transactions. Topics include letters of credit, banking and bank secrecy regulation, efforts to combat money laundering, and currency regulation.
LAW 6261 International Business Transactions (2-3). The course provides an overview of the domestic, foreign, and international law governing international business transactions. Transactions discussed include export sales, agency and distributorship agreements, licenses, joint
ventures, privatization, project finance, and foreign government debt. The course also covers U.S. regulation of international transactions in such areas as antitrust, securities, intellectual property, tax, foreign corrupt practices, and export controls, as well as the impact of North American Free Trade Agreement and the General Agreement on Trade and Tariffs.
LAW 6316 International Commercial Arbitration (2-3). The course covers the basics of the law and practice of international commercial arbitration, including: drafting arbitration clauses in international transactions and enforcement of arbitral agreements; preparing and presenting cases before arbitral tribunals, including issues of witnesses, experts, discovery and evidence; recognition, enforcement and setting aside of arbitral awards; the major international arbitral institutions and their rules of procedure; the relationship between international arbitration and national court systems; and various treaties and conventions dealing with international arbitration.
LAW 6103 International Criminal Law (2-3). The course explores international crimes, such as genocide, crimes against humanity, torture, narcotics trafficking, terrorism, and war crimes. It focuses on contemporary responses by way of international criminal jurisdiction claimed by individual states, bilateral cooperation on extradition and evidence gathering, prosecutions before ad hoc international tribunals, and the development of an international body of criminal law and procedure. Particular attention is paid to the question of jurisdiction, including the reach of U.S. Constitutional protections to investigations and law enforcement activities overseas. Special consideration is given to international terrorism, the role of human rights in international criminal law, and the establishment of an international criminal court.
LAW 7268 International Environmental Law (2-3). This course focuses on issues including marine pollution, transboundary movement of hazardous waste, climate change, biodiversity, the relation of population and the environment, and other global and transboundary environmental problems.
LAW 6263 International Human Rights Law (2-3). This course is an introduction to the international law protecting human rights. It examines the theory and the history of the field, together with key United Nations documents. International treaty and non-treaty mechanisms for protecting and promoting human rights, including regional systems and the role of nongovernmental organizations, are covered.
LAW 6574 International Intellectual Property Law (2-3). This course provides students with an overview of intellectual property (IP) law in the global context, commencing with a survey of patent, copyright and trademarks. We will learn about the multilateral institutions that address IP issues, and study the leading multilateral IP treaties, including the World Trade Organization Agreement on Trade-Related Intellectual Property Rights, the Paris Convention for the Protection of Industrial Property, the Berne Convention for the Protection of Literary and Artistic Works, and other international agreements that facilitate the protection of IP interests in multiple countries. In addition to studying domestic and international mechanisms for the protection of IPRs, we
will review current issues in International IP law and policy. No technical background is required for this course.
LAW 6987 International Law Internship (2-6). The International Law Internship is a non-paid credit-based work experience that provides a student with the ability to gain advances legal knowledge and skills within an organization, industry or functional area reflecting the student's academic and professional interests.
LAW 6265 International Litigation (2-3). This is a study of international litigation for the resolution of private and public disputes.
LAW 6295 International Organizations (3). This course aims to introduce students to the fascinating and complex world of international organizations, and situate specifically the United Nations, World Bank, and regional institutions within the context of the dynamic international legal order and world politics.
LAW 7680 International Taxation (2-3). The course involves a study of the federal income tax laws and international tax treaty provisions that apply to transactions that cross international boundaries.
LAW 6269 International Telecommunications Law (23). This course surveys telecommunications laws and regulations worldwide, with particular emphasis on the United States, Europe, and Latin America. Also to be addressed are major international agreements and organizations affecting telecommunications.
LAW 7262 International Trade Law and Policy (2-3). This course concerns the national and international regulation of imports and exports. Law, policy and economics of the international trading system will be discussed. The course primarily focuses on import restrictions on goods; however, export restrictions and trade in services will also be considered. Topics include the pure theory of trade, industrial policy, the World Trade Organization and its dispute settlement process, dumping and countervailing duties, retaliation, and economic sanctions.
LAW 6381 Interviewing and Counseling (2). A study of theories and skills involved in interviewing and counseling, this course entails student performances in role playing and simulations as a primary means of instruction.
LAW 6785 Introduction to American Law (4). This is a required course for all students in the J.M. program. It provides a basic overview of the U.S. legal system. An effort is made to include broad coverage of important areas of American law, including constitutional law, criminal law and procedure, environmental and natural resources law, and family law. Students will be introduced to some of the most important cases in U.S. legal history.
LAW 6041 Investor Advocacy Clinic (4-6). Students enrolled in this Clinic will represent clients in securities arbitration proceedings. Prerequisites: 45 credits, Professional Responsibility, Business Organization. Corequisites: Professional Responsibility, Business Organization.
LAW 7940 Judicial Clinic (3-12). Students enrolled in this course will have the opportunity to combine substantive study with practical experience as a judicial extern. Students will be assigned to work (up to fulltime in limited cases) with judicial officers or trial and appellate judges in
the state and federal courts. Students will observe hearings and trials, research legal issues, draft orders and opinions and review case files as assigned. A classroom component will examine the legal, political and ethical dimensions of the judicial decision making process.

LAW 6984 Judicial Externship Placement (2-4). To enable students to serve as judicial externs with participating judges, magistrates or referees in State or Federal Courts. Prerequisites: Student must have a G.P.A. of 2.75 and a writing sample.
LAW 5210 Jurisprudence (2-3). This course is an investigation of the nature of law, and considers the differences between law and custom, morality, policy, "common sense," logic, and reason. The course considers the philosophic underpinnings of the Restatements and other codes. It further inquiries into the sources and legitimacy of law, and asks whether law must be enforced and why wrongs should be righted.
LAW 6540 Labor Law (2-3). This course is about labor union activities and other forms of concerted activity. It focuses upon an employee's right to form or join a union and the right to refrain from such activities. The course covers the representational and unfair labor practice provisions of the National Labor Relations Act, including the formation of a labor organization and negotiation and administration of collective bargaining agreements.
LAW 6460 Land Use Planning and Control (2-3). Since the 1920s, our society has regulated urban and rural uses of land in an attempt to encourage the prudent allocation of land resources, thus this course undertakes an intensive analysis of the traditional regulatory techniques, including general and specific planning, zoning, and subdivision mapping, and relates them to the practical and political aspects of the land use entitlement process and to resolve conflicting use preferences.
LAW 6281 Latin American Private Law (2-3). Commercial transactions, business entities, interests in property, family law, inheritance, and torts are all considered part of the broad category of private law in Latin America. This course aims to provide historical and institutional background for these areas of law followed by an investigation and evaluation of present practices and developments, particularly in the Spanish-speaking countries. The ways private law in practice and in theory respond or do not respond to internal and external economic, social, and political forces will be considered. Topics to be addressed may include methods of structuring transactions, land reform, notions of civil responsibility, courts and alternative dispute resolution, and the privatization of state-owned enterprises.
LAW 6553 Law and Development (2-3). This course examines the role of law and the legal system in economic and social development, particularly in less developed countries, emerging markets, and nations in transition. It will explore how law, in its various forms, may bring about or impede development, however defined, and how development may affect or change the legal system of the country concerned. At key moments, the course will use a comparative method to explore how similar issues such as gender, child labor, industrial regulation, working conditions, corporate governance among others were treated in the United States.

LAW 6555 Law and Economics (2-3). The course gives a presentation of economic principles that are important for understanding the relationship between economics and the law. Traditional microeconomics subjects, including demand, supply, market exchange, consumer behavior, and the theory of the firm are presented with special reference to legal problems. Tools of microeconomics are used for the analysis of economic regulation of business, environmental protection, and the economics of discrimination.

LAW 6245 Law and Literature (2-3). This is a course that uses the perceptions of the novelist as a way of exploring the interactions of law with the larger society.
LAW 6282 Law and Politics in Latin America (3). This course examines a series of issues related to law and legal systems in Latin America. It draws out the interrelationship of theory and politics that constitute "lawyerly thinking" by Latin Americans. It has both a practical orientation, addressing how to understand and work with Latin American law and lawyers, and a theoretical orientation, examining how legal practices are the result of both overlapping and competing projects of social organization. This course in comparative law and politics examines a cross-section of the institutions, doctrines, and interpretive theories of Latin American codes, courts and legal commentators. As against the widely-held view that Latin American law is merely imitative of foreign models or is mainly irrelevant to their societies, the course examines the strategic and programmatic function of law in the service of national governance, cultural identity, and existing economic arrangements.
LAW 6091 Law and Procedure: Federal Financial Institutions (3). The course provides an overview of BSA/AML compliance program requirements, BSA/AML risks and risk management expectations, industry sound practices, and examination procedures. Special focus on federal institutions such as the Federal Reserve.
LAW 6350 Law and Procedure: US and Florida (4). The course will function as a capstone course reviewing differences and distinctions between state law and general common law principles in certain fundamental areas of law. The differences and distinctions will focus on those areas determined to be of significance to the Florida Board of Bar Examiners, as indicated by the areas typically tested on the Florida and Multistate portions of the bar examination. Prerequisites: Offered to 3 L and 4 L students.

LAW 6751 Law Firm Management (2-3). This course focuses on all aspects of the formation, management, development and growth of a law firm, forms of partnership, licensing requirements, insurance, human resources and employment practice. Prerequisites: This course should be open to second- and third-year students. However, it may be more suitable for third-year students.
LAW 6043 Law of Consumer Credit (3). State and federal statutes, including the Truth-In-Lending Act, privacy and legislation on credit card practices and fees, and the legislation resulting from the 2008 financial crisis.
LAW 7064 Law of Corporate Finance (3). An advanced corporations course on legal and economic issues involved in corporate financing decisions, covering a broad range of issues including basic accounting, valuation of
corporate entities and their securities, corporate capital structures including the relationship of corporate debt to equity and the impact of leverage, dividend and investment policy, and new financial instruments such as derivatives and structured finance. Prerequisite: Business Organizations.
LAW 6753 Law of Legal Malpractice (2-3). This course will examine the bases for legal malpractice as well as the interplay between the law of legal malpractice and ethical obligations to which lawyers are held by the Lawyers' Code of Professional Responsibility and the ABA Model Rules of Professional Conduct. It will explore the basic elements of the tort of legal malpractice, the creation of the attorney-client relationship, and applicable defenses. A major emphasis of the course will be on the prevention of malpractice, and we will examine common mistakes made by practicing attorneys which give rise to malpractice claims. Overall, the course will seek to instill a commitment to achieve the highest ideals of the legal profession.
LAW 6950 Law Review: Board of Editors (1-2). Students selected as members of the Board of Editors of the Law Review may earn credit for satisfactory completion of their Board duties. As members of the Board of Editors, students will solicit, select, edit and publish articles submitted by lawyers, judges, and professors from across the country. The Board of Editors also may organize and solicit participants for symposia on legal topics of current interest and publish the papers presented at the symposia. Student editors will supervise the preparation of student comments by new members of the Law Review and will select and edit those comments for possible publication. Student editors will train new Law Review members on proper citation format and citechecking requirements for articles published in the Law Review. Student editors will be responsible for all other aspects of the Law Review, including obtaining subscriptions, managing its finances, working with the publisher and others in the printing and distribution of the Law Review.
LAW 6956 Law Review: Senior Members (1-2). Senior Members of the Law Review may earn credit for satisfactory completion of their duties. Senior Members will assist the Board of Editors in all aspects of the Law Review, including cite checking articles to be published in the Law Review.
LAW 6821 Law, Science, and Technology (3). To examine the various ways in which the legal system interacts with science technology, including the impact of the legal system on evolving fields of science and technology and the influence of these fields on the legal system. Each class will focus on a different theme involving the interaction of law, science and technology, using a specific case study. Prerequisites: First year curriculum.
LAW 6957 Law Review: Staff Members (1-2). Staff Members may earn credit for satisfactory completion of their duties. The student members are required to write a comment of publishable quality, complete instruction on cite checking, and assist the Board of Editors and Senior Members in cite checking and any other assigned duties needed to publish the Law Review.

LAW 6780 Legal Analysis (1-2). This course will advance students' legal analysis, legal writing and test taking skills. Students will address legal methods useful in developing a full understanding of doctrinal rules and of how those rules operate within legal analytical frameworks. There will be regular practice exams, in-class writing assignments and individual conferences.
LAW 6784 Legal Analysis and Writing for NonLawyers (3). Students in this required course are introduced to the art of analytical legal writing. Students will learn to analyze cases, statutes and other authorities. The course emphasizes student development in the following skills: organizing the analysis of legal issues logically and coherently; expressing written legal analysis clearly, concisely, and effectively; developing and defending legal arguments, both in writing and orally; performing basic legal research; drafting selected legal documents; and using proper citation form. The writing exercises promote the students' awareness and appreciation of relevant ethical standards.
LAW 6941 Legal Clinic (3-7). Students enrolled in the Clinic will represent actual clients in either a litigation or transactional context, as permitted by the Florida Limited Practice Act. The course is open only to students who have completed at least 60 credit hours of law school course work. Prerequisites: Professional Responsibility, Evidence (for the litigation clinic), Trial Practice (for the litigation clinic), and Business Organizations (for the transactional clinic).
LAW 6226 Legal History (2-3). This course deals with the history of the United States viewed through aspects of the law, the legal profession, legal education, and the evolution of constitutional principles. The focus of this course is on the background and context of the growth of American law and legal institutions, and on the ways in which law and legal concepts have been centrally important in American history. Major emphasis is given to the period of the Revolution, the growth of positivism, the Gilded Age, the Progressive Era, the New Deal, and the Cold War period.
LAW 6352 Legal Procedure and the Legal System (3). This course provides an overview of the major principles and functions of the legal system. It introduces students to criminal procedure, civil procedure, and other rules and processes governing litigation and transactional law. The course will select and follow the typical procedural trajectory of a major case. This course is the substantive "external" complement to the "internal" procedural course, LAW 6822 Litigation Management and Legal Technology.
LAW 5781 Legal Reasoning (2-3). This course is a skillsbased class offered as a two or th ree credit class during the spring semester. The course is designed to teach and reinforce skills relating to legal analysis and academic performance, including skills relating to legal problem solving and written expression. Ideally, class size is limited to allow for assessment and feedback.
LAW 6728 Legal Requirements for Employers under the Affordable Care Act (3). This course will explore the obligations of large and small employers with respect to health insurance. The ACA includes a "shared responsibility" provision, with potential penalties for employer noncompliance. The course covers employer liability under the ACA and the specific ways the Act will
impact access, quality, costs, and tax implications. The course provides a general understanding of the US health care system and the challenges of health care reform in relation to employer compliance under the Act.
LAW 6797 Legal Skills and Values III (2-3). This course will advance students' legal skills in analysis, research, objective writing, persuasive writing, and oral communications, and also raise new professionalism issues. Students will interview and counsel a client regarding a dispute and then research the legal issues raised by the dispute. Students will write a Complaint or Answer, a Demand Letter or Response Letter, an objective memo to a senior attorney describing the legal issues and a proposed course of action, and then prepare or respond to discovery requests. Students will mediate with opposing counsel to resolve the dispute, and ultimately will write a brief in support of their client's position.
LAW 6806 Legal Skills and Values: LL.M. (2-3). This course provides graduate law students with essential training on legal research, writing, and analysis to understand common documents found in the practice of law in the United States. It covers basic aspects of professional communication, including legal correspondence and memorandum writing.
LAW 6523 Legislation (2-3). This course entails a study of the legislative process.

LAW 6822 Litigation Management and Legal Technology (3). The course covers the litigation process from the pre-suit investigation to the appeal. The student will acquire the knowledge and the skills to effectively manage the workflow of major litigation for the attorneys at each phase, with an emphasis on leveraging legal technology to create efficiencies for the attorney and the client. Important topics such as litigation principles, lawyer and client relationship and ethics, gathering evidence, depositions, preparation for a civil trial, structure of a civil trial, judgments, appeals, and more are discussed in detail.

LAW 6531 Local Government Law (2-3). The powers, limitations, and special legal rules concerning local governments are studied in this course. Emphasis is given to Florida problems concerning counties, cities, and special districts.
LAW 6383 Mediation (3). Students will gain an understanding of the practice of mediation from the perspective of a lawyer representing a client, along with acquiring the skill to focus on the interactions of the participants.
LAW 7959 Mediation Competition (1). Students selected as members of the Board of Advocates Mediation Group will compete in a regional or national negotiations competition and will earn credit for satisfactory completion of their competition duties. Students, working in a team, will typically prepare and then mediate an agreement on multiple issues.
LAW 6725 Medical Malpractice Law (2-3). Medical Malpractice Law examines legal claims that may be brought against physicians, hospitals, and other allied health professionals and organizations, as a result of the provision of medical and/or health services, or as a result of relationships with medical and health services
providers. The course will examine the duties of care imposed by law on medical and health care providers, legal remedies for breach of the standards of medical care, defenses to legal claims, and medical ethics. Recommended but not required as a prerequisite: Evidence Law.
LAW 6727 Medicare and Medicaid Law (3). This course provides students with a fundamental understanding of the Medicare and Medicaid programs and the practical skills for using this information to serve their clients. The course examines the purpose and design of Medicare and Medicaid; the Medicare and Medicaid vocabulary; and the criteria for eligibility and enrollment in these programs.

LAW 7065 Mergers and Acquisitions (2-3). This course will approach the study of major corporate restructuring from both an academic and a practice perspective. Included in the course will be a review of underlying economic objectives and sources of efficiency gains in restructuring ownership interests in publicly financed firms and factors affecting choice of transaction form. Major emphasis will be on the corporation law and securities laws pertaining to M\&A transactions. Both hostile and friendly deals will be covered. More briefly addressed will be tax law, competition law and executive compensation issues encountered in such transactions. Prerequisite: Business Organizations.
LAW 6741 Military Justice (2-3). Course presents students with the development of Western military justice systems and reasons for having unique justice systems for the military; provides an overview of the actors and institutions in the American military justice system; illustrates the military's unique criminal offenses and defenses, rights of the accused, Rules for Courts-Martial, Military Rules of Evidence, rules for professional responsibility, all set in the context of a mock courtsmartial.

LAW 6297 NAFTA and Other Regional Trade Agreements (2-3). This course analyzes the legal structures of non-global freer trade agreements, including but not limited to NAFTA. It reviews GATT Article XXIV and the economic and policy debate (global vs. regional trade arrangements); discusses key aspects of NAFTA, including industrial development, investment dispute and other disputes; and analyzes legal and policy issues relating to the negotiation of a Free Trade Agreement of the Americas (FTAA). Other regional trade arrangements, including the Southern Cone Common Market (Mercosur), are also considered. A focus of the course is efforts in NAFTA to deal with environmental and labor concerns.

LAW 6507 National Security Law and the Constitution (2-3). The goal of this class is to examine the growing body of national security law under the Constitution.

LAW 6470 Natural Resources Law (3). Natural Resources Law will cover the laws regulating the exploitation of natural resources. Major topics include: Wildlife and Biodiversity, Marine Resources, Public Lands, Water, Rangelands, Oil and Gas. Prerequisite: Completion of 1 L year.
LAW 6313 Negotiation (2-3). The course is designed to provide students an understanding of the history, process and practice of negotiation through role-plays, simulations and life experiences.

LAW 7954 Negotiation Competition (1). Students selected as members of the Board of Advocates Negotiations Group will compete in a regional or national negotiations competition and will earn credit for satisfactory completion of their competition duties. Students, working in a team, will typically prepare and then negotiate an agreement with opposing counsel.
LAW 6061 Non-Profit Organizations (2-3). This course will address the legal regulation of nonprofit organizations from the perspective of state law and federal tax law. Topics to be covered include: the theoretical rationales for the nonprofit sector and federal tax benefits; formation and dissolution of nonprofit corporations and charitable trusts; operation and governance, including the legal duties and liabilities of directors and trustees; requirements to qualify and maintain federal tax-exempt status; the distinction between public charities and private foundations; the tax consequences of business and investment activities of nonprofits; basic charitable giving strategies; and regulation of charitable solicitation.
LAW 7475 Ocean and Coastal Law (2-3). This course considers aspects of land use law, water law, natural resources law, property law, and constitutional law from the perspective of the special needs of the coast. The course examines the common law and major acts protecting coastal zones and natural resources, and includes discussion of the important interrelations of water, habitat, wildlife, and land use, as well as issues concerning jurisdictional conflicts.

## LAW 6086 Offshore Financial Centers: Use and Abuse

 (3). This course examines both legitimate and illegitimate uses of OFCs with reference to detailed case studies drawn from the local experience related to corruption, drug money laundering, terrorist financing, sanctions and tax evasion.LAW 6573 Patent Law (2-3). This course provides indepth coverage of substantive trade secret law and patent law. In addition, it covers aspects of patent prosecution practice and procedure. Prerequisite: Intellectual Property Law.
LAW 6031 Payment Systems (2-3). This course will survey the uses of different payment mechanisms (negotiable and nonnegotiable instruments, credit cards and electronic funds transfer and wire transfer systems) in both credit and cash transactions. The course will consider allocation of risks for fraud, countermands, defenses on the underlying contract, mistake, timeliness and unauthorized payments. In each case the allocation of risks in connection with different payment mechanisms will be considered, along with whether these allocations should be the same or different for each mechanism. The course will focus on Articles 3 and 4 of the Uniform Commercial Code and, as time permits, consider letters of credit under U.C.C. Article 5 and the International Chamber of Commerce Uniform Customs and Practice. Special emphasis will be given to techniques of statutory analysis, commercial counseling and a rethinking of present rules, especially in the light of the revision of Articles 3 and 4. The impact of federal legislation on the state payments law (U.C.C. Articles 3, 4, and 4A) may also be treated.

LAW 6541 Pension and Employee Benefit Law (2-3). This course will introduce students to the basics of federal
pension law, including the employee benefit provisions of the Internal Revenue Code and the labor law portions of ERISA (the federal statute governing employer-provided plans). The course will provide a basic overview of the tax principles of deferred compensation, and an introduction to the tax requirements for qualified pension plans. It will also cover the large body of federal case law addressing such issues as ERISA preemption of state law and its impact on employer-provided health benefits, age and sex discrimination in pension benefits, and other issues. Prerequisites: Federal Income Tax; Corporate and Partnership Tax.
LAW 6361 Pre-Trial Practice (2-3). This course covers trial preparation from client interview to the courthouse steps. The course considers theory of the case, fact investigation, pleadings, discovery and disclosure (depositions, issues, requests for production), motion practice, settlement conferences and negotiations, final pre-trial preparation, and professionalism values.
LAW 6702 Products Liability (2-3). This course is a survey of the history, growth and development of the law regarding injury to persons and property resulting from defective products. It will examine the various legal theories of fraud, express warranty, implied warranties of fitness and merchantability, negligence, and strict liability.
LAW 7285 Profesión Jurídica Comparada (Comparative Legal Profession) (2-3). This course is designed for students who have a basic knowledge of the Spanish language and want to develop or expand their legal vocabulary. The prerequisite Spanish-language proficiency for admission to the class will be determined by the professor in individual cases. The focus of the course is on effective communication with Spanishspeaking colleagues and clients rather than on grammar or punctuation. Both oral expression and legal writing skills are emphasized through a series of assignments. Students have an opportunity to simulate meetings with clients and negotiations with colleagues in the Spanish language. A portion of class time is devoted to comparative analysis of the legal concepts raised in the assignments.

LAW 6750 Professional Responsibility (3). This course will examine the law of professional responsibility, including professionalism issues and malpractice risk management, with significant emphasis on the rules of ethics governing lawyers and judges. The objective is to give students an appreciation for the challenges they will face as practitioners, and a working knowledge of the principles of professionalism and the ethics rules that they will use in their daily practices.
LAW 6754 Professionalism, Ethics, and the Legal Profession (1-2). To enhance a law student's understanding of the legal profession and of its standards by exposing them to relevant lectures on professionalism, ethics, and the legal profession. Prerequisite: Recommended - Professional Responsibility.
LAW 6260 Public International Law (2-3). This course explores advanced issues of international law. The goal is to understand how international law operates in practice. Special attention will be devoted to the acceptance and application of international law by United States courts. Topics include the process of international dispute resolution, the application of domestic law extraterritorially,
state responsibility to aliens and foreign investors, and sovereign immunity.
LAW 6234 Race and the Law (2-3). This course will consider contemporary theories of law and questions of racial justice, including the relationship between developments in the social sciences on the nature of race, racism, prejudice and discrimination, and the interpretation of constitutional and statutory protections against racial discrimination.
LAW 6420 Real Estate Law (3). This course takes an interdisciplinary and practice-oriented approach to real estate transactions, covering land transfers, mortgage law, and selected topics such a usury and mechanics' liens. Students will study selected tax, environmental and federal securities laws issues in the context of real estate transactions.
LAW 6426 Real Estate Transactions (2-3). This course takes an interdisciplinary and practice-oriented approach to real estate transactions, covering land transfers, mortgage law, and selected topics such as usury and mechanics' liens. Students will study selected tax, environmental and federal securities laws issues in the context of real estate transactions.
LAW 6267 Refugee and Asylum Law (2-3). This course will examine international and domestic refugee and asylum law. Close attention will be paid to the definition of "refugee" in international conventions and under U.S. law, with emphasis on such topics as: what constitutes persecution, what forms of persecution support an asylum claim, and what conduct renders an applicant ineligible for asylum. The course will also analyze overseas refugee processing and procedure for adjudicating asylum claims in the U.S.
LAW 6305 Remedies (3). The course focuses upon the nature and scope of relief that a court may grant a party who has established a substantive right. Topics include judicial remedies such as damages in tort and contract cases, restitution, punitive remedies, declaratory relief and coercive remedies in equity.
LAW 6010 Sales (2-3). This course covers contracts for the sale of goods under Article 2 of the Uniform Commercial Code. Some consideration will also be given to leasing of goods under Article 2A of the Code.
LAW 6051 Secured Transactions (2-3). This course covers the creation, perfection, and enforcement of security interests in personal property under Article 9 of the Uniform Commercial Code, including priorities among conflicting interests in the same property and choice of law problems. Some discussion of bankruptcy law as it affects the interests of secured creditors may also be included.
LAW 6561 Securities Law Enforcement (2-3). Course is designed to the study of federal statutes, case law, and regulations, which are designed to protect investors from fraud. Prerequisites: Securities Regulations, and The Law of Corporate Finance. Corequisite: Business Organizations.
LAW 6560 Securities Regulation (2-3). This course is a comprehensive survey of the statutes and regulations governing the distribution of securities, trading of securities on the stock exchanges and over-the counter markets, the regulation of broker-dealers, and the growing
role of institutional investors. Primary focus is placed upon the Securities Act of 1933 and the Securities Act of 1934, with limited attention to state "Blue Sky" securities legislation. Prerequisite: Business Organizations.
LAW 6936 Seminars (2-3). Seminars provide an opportunity for intensive analysis of legal and policy issues in a specialized area of study, culminating in a major research paper or a series of shorter papers. They require a considerable investment of time by students and faculty, and a corresponding responsibility for thorough preparation and participation by all members of the seminar. Some seminars may also include a final examination.
LAW 7930 Special Topics in Law (2-3). The content of this course varies. It may include topics of current interest or not covered by other curricular offerings. The course may be repeated if there is no duplication of subject matter.

LAW 7844 Sports and Entertainment Law (3). This course will focus on the application of various legal doctrines to sports activities, and the various complex contractual issues facing attorneys representing clients in the entertainment industry. Representative topics include regulation of amateur athletics, public regulation of sports activities, legal relationships and structures in professional sports, legal issues involved in representation of professional athletes, and issues arising in the production, distribution and exploitation of theatrical film and television properties and in the music industry.
LAW 6480 Sports Law (2-3). This course will focus on the application of various legal doctrines to sports activities. Representative topics include regulation of amateur athletics, public regulation of sports activities, legal relationships and structures in professional sports, and legal issues involved in representation of professional athletes.
LAW 7660 Tax Policy (2-3). This course will evaluate topics such as the choice of a tax base (income or consumption), rate structure (flat or progressive), taxable unit (individual or family), and method of government spending (direct or through the tax system via tax expenditures) against the tax policy norms of equity, efficiency, and administrability to determine how well the present tax system satisfies these norms. Prerequisites: Federal Income Tax; Corporate and Partnership Tax.
LAW 6585 Telecommunications Law (2-3). This course introduces the regulation of the telecommunications industry. Once dominated by a single, highly regulated producer (AT\&T), the industry is now among the most dynamic in the nation. The course will analyze and assess rules promulgated by Congress and the Federal Communications Commission that seek to transform existing monopoly markets into competitive industries.
LAW 6473 Toxic and Environmental Tort Litigation (23). This course examines tort litigation, both substantively and procedurally, arising from environmental exposure to toxic substances, with emphasis on the legal theories available (e.g., nuisance, trespass, strict liability, and negligence) and the issues that present unusual challenges in such litigation for both the parties and the legal system (e.g. causation, expert testimony, damages, and statutes of limitations).

LAW 6576 Trademarks and Geographical Indications (2-3). This course will introduce students to the law of trademarks and unfair competition. Trademark law aims to protect against consumer confusion and the appropriation of commercial goodwill. Trademarks can have tremendous value in a variety of industries, ranging from food and agriculture to fashion and entertainment. Students will learn about acquiring, prosecuting, and enforcing trademark rights in the business context. In addition the course will cover the theoretical underpinnings of trademark protection and evaluate current issues related to trademark law domestically and internationally. This includes a consideration of the relationship between trademarks and geographical indications. No technical background is required for this course. Intellectual Property Law is recommended but not required.
LAW 6034 Transnational Commercial Law (1-4). This course offers an overview of three foundational areas in the field of commercial law: sales, payment systems and negotiable instruments. It presents the student with the core doctrines and issues relating to the Uniform Commercial Code in the United States. As such, it complements the basic series of commercial law courses in U.S. law schools. Additionally, the materials introduce the student to the Spanish law in all these same areas. Spanish doctrines and relevant issues are presented in tandem with the U.S. legal materials. Comparing and contrasting the two systems offers the student greater insight into the choices, interests and policies pursued under each respective system of law. Additionally, the course will examine the European Union's proposed regime for unified rules of commercial law across the Continent. Drawing on different sets of both unified and national rules in this area of law, this course presents a truly transnational view of the field of commercial law and its underlying concerns.
LAW 7951 Trial Advocacy Competition (2). Students selected as members of the Board of Advocates Trial Advocacy Group will compete in a regional, national, or international trial advocacy competition and will earn credit for satisfactory completion of their competition duties. Students, working in a team, will typically prepare for and participate in a trial, which typically will include the delivery of an opening statement, the examination of witnesses, the introduction of evidence, and the delivery of a closing statement.
LAW 6363 Trial Advocacy (2-3). The focus of this course is on trial tactics and techniques. All students participate as counsel and perform the assignments. All phases of an actual trial are examined, including direct and crossexamination of witnesses, and opening and closing arguments. Co-requisite: Evidence.
LAW 7200 United States Law I: Methods, Sources, and Structure (2-3). This course introduces graduate students to the United States legal system. It covers fundamental aspects of legal analysis and argumentation, the sources of law, the reading of cases and statutes in the common law tradition, and the structure of the legal system in the United States today. It addresses general approaches to constructing legal arguments, the use of primary and secondary sources in the United States, the development of United States law, the role and function of various institutions in the context of federalism, the legal process,
the legal profession, and legislative and administrative developments.
LAW 7804 United States Law II: Scholarship and Perspectives (2-3). This course introduces graduate law students to scholarly and theoretical techniques and approaches used in the United States to understand law. It covers basic aspects of academic and scholarly writing in law, perspectives on law from different theoretical schools, and the tools that legal academics use in thinking about and writing about law. The course will survey different kinds of academic writing, with emphasis on the law review article. It will also discuss sociological jurisprudence, legal realism, law and economics, and critical legal studies.
LAW 6492 Water Resources Law (2). Water Resources Law will explore water's distinctive character as property that is both public and private, and individual and common. The course will begin with an overview survey of the general legal issues regarding historic water allocation and information regarding current water uses in the United States. First we will study the Riparian system of allocation. We will conclude that study with an examination of water resource issues facing Florida. We will then examine western prior appropriation systems. We will also conclude that study by examining the dispute among users of the Colorado River. We will conclude the course by studying issues related to groundwater and the impact of the Clean Water Act on water resources. Prerequisites: None, although Environmental and Administrative Law is helpful.
LAW 6116 White Collar Crime (2-3). Using the vehicle of federal investigation and prosecution of white-collar crime, this course will explore the interplay of different fields of law and of legal standards and administrative discretion features common to many types of transactional practice. The materials considered will be chosen from the fields of substantive criminal law, criminal procedure, sentencing, administrative law, evidence, corporate law, and professional responsibility. Topics considered will include entity criminal liability, substantive federal crimes (e.g., mail fraud and RICO), grand jury investigations, administrative agency subpoena authority, parallel civil and criminal proceedings, application of the selfincrimination and lawyer-client privileges, federal sentencing guidelines (for individuals and entities) and forfeitures. Considerable attention will be given to Department of Justice policies and strategies utilized by counsel representing witnesses, targets, and defendants. Prerequisite: Criminal Procedure.
LAW 6430 Wills and Trusts (3-4). The intergenerational transfer of wealth in the United States is controlled by both statutory and common law principles. Competing views of the individual's freedom of disposition and state power both to channel and to tax property have led to an interesting and complex array of legal devices and institutions. These include statutory intestacy and elective share provisions, wills, and trusts. Related topics to be addressed will include planning for incapacity, future interests in property, powers of appointment, life insurance, and introductory aspects of trust and estate administration.

LAW 6235 Women and the Law (2-3). The course considers the legal treatment of sex differences in the
construction and legitimization of the social status of women and men. Topics include rape, sexual harassment, incest, battery, sexuality, economic segregation, prostitution, and pornography. Central concerns to be pursued include the desirability of sex-neutral legislation and adjudication, the meaning for women of the legal distinction between the public and private spheres, competing theories of the origins of sex roles, and the differences between and similarities of traditional morality and a feminist critique of power.
LAW 6236 Women and the Law: Comparative and Global Considerations (3). The course will consider the role of law in the lives of women from global and comparative perspectives. Topical coverage will include the role of international law on the lives of women by considering certain UN conventions relating to the status of women, as well as with respect to certain global issues which affect the lives of women in a particular sense (e.g., immigration policies and practices, including asylum and refugee law, and human trafficking). The comparative law component will consider and compare legal approaches to matters relating to women's private and domestic life choices and options, such as laws relating to family law, reproduction, and wage and labor gender-based disparities.
LAW 6705 Worker's Compensation (2-3). This course surveys the statutory no-fault insurance system that displaces tort law in the workplace. Class discussion will center on the scope of coverage and benefits under compensation legislation.

## College of Law

Dean

R. Alexander Acosta

## Associate Deans

Associate Dean, Academic Affairs Tawia B. Ansah
Senior Associate Dean, Clinical Education,
Experiential Learning \&
Engagement
Michelle D. Mason
Associate Dean, International and Graduate Programs
Associate Dean, Faculty Research and Development

Manuel A. Gomez
Joëlle A. Moreno
Associate Dean, Information Resources
and Director, Law Library Teresa C. Stanton
Associate Dean, Student
Services Angelique Ortega Fridman
Interim Associate Dean and Director,
Law Library
Lisa Davis

## Assistant Deans

Assistant Dean, Academic
Support Louis N. Schulz, Jr.
Assistant Dean, Career Planning and Placement

Ana Bierman

## Directors

Director, Legal Skills and Values Program

Marci A. Rosenthal
Co-Director, Legal Skills and Values Program

David D. Walter
Director, Finance and Administration
Danilo Castillo
Director, Admissions and Financial Aid Alma O. Miro
Director, Development
Kenneth Gelok
Director, Law Bridge Tony Santos
Director, Trial Advocacy Program
Registrar
H.T. Smith Donna P. Yff

## Faculty

Acosta, R. Alexander, J.D. (Harvard Law School), Dean
Anglade, M. Michele, J.D. (Harvard Law School), Assistant Professor
Ansah, Tawia B., LL.B. (University of Toronto Faculty of Law), Ph.D. (Columbia University), Professor and Associate Dean for Academic Affairs
Baker, Thomas E., J.D. (University of Florida College of Law), Professor
Carpenter, Eric R., J.D. (University of California), LL.M. (The Judge Advocate General's School), Assistant Professor
Choudhury, Cyra Akila, M.A. (Columbia University), J.D., LL.M. (Georgetown University Law Center), Associate Professor
Esquirol, Jorge L., J.D., S.J.D. (Harvard Law School), Professor and Director of International \& Comparative Law Programs
Fairlie, Megan A., J.D. (Washington and Lee University), LL.M., Ph.D. (law) (National University of Ireland, Galway), Assistant Professor
Fingerhut, H. Scott, J.D. (Emory University School of Law), Assistant Professor, Trial Advocacy Program

Fish, Stanley, M.A., Ph.D. (Yale University), DavidsonKahn Distinguished University Professor of Humanities and Law
Ortega Fridman, Angelique, J.D. (Harvard Law School), Assistant Professor of Legal Skills and Values
Price Foley, Elizabeth, J.D. (University of Tennessee College of Law), LL.M. (Harvard Law School), Professor
Gabilondo, José, J.D. (University of California, Berkeley Boalt Hall School of Law), Associate Professor
Gomez, Juan, J.D. (University of Pennsylvania Law School), Clinical Assistant Professor
Gomez, Manuel A., J.S.M., J.S.D. (Stanford University), J.D. (Universidad, Católica Andrés Bello, Caracas, Venezuela), Assistant Professor
Gundrum, Mary, J.D. (University of Wisconsin Law School), Clinical Assistant Professor
Harper, Stephen K., J.D. (Northeastern University College of Law), Visiting Clinical Assistant Professor
Hayes, Christyno L., J.D. (University of North Carolina School of Law), Assistant Professor
Jalloh, Charles C., LL.B. (McGill University Faculty of Law), M.St. (Oxford University), Associate Professor
Klion, Ila J., J.D. (St. Thomas School of Law), Assistant Professor of Legal Skills and Values
Kotey, Phyllis Diane, J.D. (University of Florida College of Law), M.A. (University of Florida), Clinical Associate Professor
Markham, Jerry W., J.D. (University of Kentucky College of Law), LL.M. (Georgetown University), Professor of Law
Mirow, M. C., J.D. (Cornell Law School), Ph.D. (law) (Cambridge University), Ph.D. (law) (La, Leiden
University), Professor and Associate Dean of International and Graduate Programs
Moreno, Joëlle Anne, J.D. (University of Pennsylvania Law School), Professor and Associate Dean for Research and Faculty Development
Norberg, Scott F., J.D. (University of North Carolina), Professor
OseiTutu, Janewa, J.D. (Queens University School of Law), LL.M. (McGill University), Assistant Professor
Pinkney, Laverne, J.D. (St Thomas University School of Law), Clinical Assistant Professor
Pouncy, Charles R. P., J.D. (Cornell Law School), LL.M. (Temple University School of Law), Associate Professor
Robbins, Kalyani, J.D. (Stanford Law School), LL.M. (Lewis \& Clark Law School), Associate Professor
Rodriguez-Dod, Eloisa, J.D. (University of Miami), M.B.A. (Florida International University), Professor

Román, Ediberto, J.D. (University of Wisconsin Law School), Professor
Rosenthal, Marci A., J.D. (University of Miami School of Law), Director and Associate Professor of Legal Skills and Values
Ruiz, Raul, J.D. (Florida International University), Assistant Professor, Bar Preparation and Academic Support
Schrier, Rosario, J.D. (Notre Dame Law School), Assistant Professor, Legal Skills and Values
Schultz Jr., Louis N., J.D. (New England School of Law), Assistant Dean and Professor, Academic Support
Smith, H.T., J.D. (University of Miami School of Law), Director, Trial Advocacy Program
Stack, John F., M.A., Ph.D. (University of Denver), J.D. (University of Miami School of Law), Professor

Stanton, Teresa C., J.D. (University of Florida College of Law), M.L.I.S. ((University of South Florida), Associate Dean, Information Resources and Director, Law Library
Stone, Kerri L., J.D. (New York University School of Law), Associate Professor
Strickman, Leonard P., J.D. (Yale Law School), Professor and Founding Dean Emeritus
Travis, Hannibal, J.D. (Harvard Law School), Professor
Uribe-Uran, Victor M., M.A., Ph.D. (University of Pittsburgh), J.D. (Titulo de Abogado, Universidad Externado de Colombia, Bogotá), Associate Professor
Walter, David D., J.D., M.A. (University of Iowa College of Law), Co-Director and Associate Professor of Legal Skills and Values
Wasserman, Howard M., J.D. (Northwestern University School of Law), Professor
Weisbord, Noah S., J.D. (McGill University Faculty of Law), LL.M., S.J.D. (Harvard Law School), Associate Professor

# Herbert Wertheim College of Medicine 

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Pedro Greer, Jr.
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Medical and Population Health
Sciences Research
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Obstetrics and Gynecology

## Sergio Gonzalez-Arias

Ophthalmology Manuel Peñalver

Orthopedics
Pedro Lopez
Otolaryngology
John Uribe
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Urology
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Scarlett Aldana
Almi Rodriguez Heidi von Harscher

## Mission Statement

By providing an environment enhanced by diversity, clinical innovation, and research, Florida International University Herbert Wertheim College of Medicine prepares socially accountable, community-based physicians, scientists, and health professionals who are uniquely qualified to transform the health of patients and communities.

## History

Herbert Wertheim College of Medicine (HWCOM) at FIU arose from a community need for access to medical education and a regional need to address a shortage of physicians. Establishing the college formally began July 5, 2004, when the university first proposed the concept to the Board of Regents. The decision was postponed; later that year the Board of Regents was dissolved by the Governor and replaced by the Board of Governors.

The university continued to build its case for a medical school based on the need for greater access to medical education and patient care, and on the need to reduce health disparities in the community. In November 2005,
the Board of Governors heard FIU presentations for the creation of a new Florida medical school. In March 2006, the South Florida community was awarded a public college of medicine at Florida International University in Miami. Founding faculty members were recruited and in February 2008 the Liaison Committee on Medical Education (LCME) conferred preliminary accreditation for the college's Doctor of Medicine degree program. The college accepted its first class of future doctors in fall of 2009. Full accreditation was granted in February 2013, and the first class of students graduated in April 2013.

## Doctor of Medicine (MD) Degree

The Doctor of Medicine (MD) degree program prepares students for advancement into postgraduate study and for the practice of medicine in any medical specialty or primary care area. In addition to the required courses and clerkships, the MD degree program requires demonstrated achievement of general competencies required for beginning a residency program, passing of Step 1 and Step 2 Clinical Knowledge and Clinical Skills of the United States Medical Licensing Examination, consistent display of professional behaviors and values appropriate for the practice of medicine, and recommendation from the Medical Student Evaluation and Promotion Committee and the HWCOM Dean.

The curriculum is divided into four successive periods of study, with foundations in basic medical science, clinical science, clinical skills, professionalism, and social responsibility. Service learning is a major component of the program, occurring through the college's Green Family Foundation NeighborhoodHELP ${ }^{\text {TM }}$ (Health Education Learning Program) and other health care delivery service opportunities. The college has formal affiliations with health care providers in the community, providing settings for supervised clinical practice learning. Among these affiliations are Baptist Health South Florida, Broward Health, Citrus Health Network, Cleveland Clinic Florida, Good Samaritan Medical Center, Jackson Health System (Public Health Trust), Leon Medical Centers, Memorial Healthcare System, Nicklaus Children's Hospital, Mount Sinai Medical Center, Palmetto General Hospital, Miami VA Healthcare System, South Florida Evaluation and Treatment Center, and several ambulatory health care clinics.

For additional information on program requirements for the MD degree, visit the HWCOM website at http://medicine.fiu.edu/education/md/.

## Admission

HWCOM participates in the American Medical College Application Service (AMCAS) application process (see https://www.aamc.org/students/applying/amcas).
Applications verified by AMCAS are the first step in the HWCOM applicant screening process. Following receipt and verification of the AMCAS application and its data, each applicant is invited to complete the HWCOM Secondary Application provided they meet the minimum Medical College Admission Test (MCAT) and Grade Point Average (GPA) requirements (MCAT 25, overall GPA 3.0 and Science/Math GPA of 3.0 for regular admissions; MCAT 35 and overall GPA 3.7 and Science/Math GPA of 3.5 for Early Decision Program). A $\$ 30$ nonrefundable application fee is required with submission of the HWCOM Secondary Application. The HWCOM Secondary

Application provides additional insight into the applicant, focusing on issues such as the candidate's desire to become a physician, commitment to Florida, and interest in FIU. Applicants are invited for an interview based on academic factors and nonacademic factors, such as personal experience in several of the following: clinical/patient care exposure, research, commitment to service, leadership, and other enriching qualities.

After the interview, the completed file is reviewed by the Admissions Committee. The Admissions Committee then votes to determine the admission status of the applicant. HWCOM maintains an active waitlist until the first day of Orientation in early August.

## Coursework Requirements

## Period 1

BMS 6001 Genes, Molecules, and Cells 6
BMS 6015
BMS 6100
BMS 6400
BMS 6500
BMS 6603
BMS 6820
BMS 6826

BMS 6880
BMS 6891
Period 2
BMS 6016
BMS 6064
BMS 6066

BMS 6067
BMS 6071
BMS 6631
BMS 6632
BMS 6633
BMS 6634
BMS 6635
BMS 6636
BMS 6637
BMS 6638
BMS 6643
BMS 6840
BMS 6892

## Period 3

BMS 7810
MDC 6102
MDC 7120
MDC 7180
MDC 7200
MDC 7400
MDC 7600
MDC 7760
MDC 7800
MDC 7830
Period 4
MDC 6103

BMS 6827 Socio-economic and Cultural Aspects of
Clinical Skills I
Structure of the Human Body 5

Shatur 4
Pharmacology
4
Integrated Functions of the Human Body5
Pathology and Infectious Disease 6
Humanism and Medical Jurisprudence
Ethical Foundation of Medicine
Health 1
Clinical Epidemiology and Quantitative
Research
Professional Behavior I
2

Clinical Skills II 8
End of Life Care 1
Evidence-Based Medicine and Complementary and Alternative Medicine 1
System Based Practice 2
Community-Engaged Physician I
Hematopoietic and Lymphoreticular Systems

3
Endocrine System 3
Cardiovascular and Respiratory Systems 6
Gastrointestinal System and Medical Nutrition

4
Musculoskeletal Systems 3
Nervous System and Behavior I 6
Reproductive System 3
Renal System 3
Integumentary System: The Skin 2
Nervous System and Behavior II 3
Professional Behavior II
1

Core Concepts in Medicine 3
Community-Engaged Physician II 1
Family Medicine Clerkship 9
Obstetrics and Gynecology Clerkship 7
Internal Medicine Clerkship 9
Pediatrics Clerkship 7
Surgery Clerkship 9
Radiology Clerkship 2
Neurology Clerkship 5
Psychiatry Clerkship 7
Community-Engaged Physician III 1

MDC 7124
Family Medicine Geriatric Clerkship
MDE 7059 Community Medicine Practicum
MDE 7067 Professional Development and Clinical Medicine Capstone
MDR 7910
MDS 7XXX
MDI 7XXX
MDS 7XXX
MDS 7XXX
MDE 7XXX
MDE 7XXX
Research Scholarship
Clinical Elective 4

## Green Family Foundation NeighborhoodHELP ${ }^{\text {тм }}$

HWCOM, in collaboration with community partners and other FIU colleges, established Green Family Foundation NeighborhoodHELP ${ }^{\text {TM }}$ as a novel component of medical education immersed in local neighborhoods to improve health outcomes and train future members of the health care workforce. Through this service-learning experience, students develop an understanding of the social determinants that impact health, health care access, and health services outcomes, while also addressing the health care needs of household members living in underserved neighborhoods. Throughout the four years of medical school and as members of interprofessional teams that may include FIU nursing, social work, physical/occupational therapy, public health, and law students, medical students apply concepts learned in the classroom during regular visits to these communities, developing individualized and comprehensive plans to improve the health and quality of life of each household member. Students, supervised by interprofessional faculty, assess, respond to, and collaborate with assigned household members to address health issues. The program provides primary and mental health care in fully equipped mobile health centers stationed in the target neighborhoods and makes referrals for other health care services, including mammography and dental care. Through participation in NeighborhoodHELP ${ }^{\text {M }}$, students develop cultural competence by helping to address the complex medical, social, and ethical issues experienced by culturally diverse patients.

## Clinical Services: FIU Health

FIU Health provides contemporary, team-based, quality medical care; services offered include diagnostic, imaging, and primary and specialty care. Managed by the FIU HealthCare Network, FIU Health supports the education and service missions of the university and HWCOM, while incorporating the latest medical treatments, innovations, and technology to provide exemplary health care to the community.

## Research: Biomedical and Clinical

Research universities, and medical schools in particular, perform basic medical research that leads to breakthroughs in detection, diagnosis, treatment, and eradication of disease and other health problems. FIU scientists conduct important disease-related research. One of the objectives of the research program is to foster synergy between teaching, clinical practice, and basic/translational research. FIU medical students are aware of the latest medical developments and work
alongside renowned researchers to develop research skills.

The college's internationally recognized scientists, all with substantial research funding, are developing major research programs in basic, translational, and clinical research in aging, cancer, chronic diseases, environmental science and toxicology, genomic medicine, HIVIAIDS, infectious diseases, and novel therapies for child and adolescent behavioral issues with special relevance to South Florida's population.

## Master in Physician Assistant Studies

The Master in Physician Assistant Studies (MPAS) program is designed to provide a broad, interdisciplinary education that prepares students for collaborative medical practice as physician assistants. By utilizing the expertise of Herbert Wertheim College of Medicine (HWCOM) physician and physician assistant faculty members, core knowledge and information is provided to students.

The 27 -month, 92 -credit curriculum differentiates itself from other graduate programs at FIU by training students to serve South Florida's diverse population through a patient-centered curriculum that emphasizes medical and cultural competence. The educational program occurs in a medical school environment and educates students in basic science and clinical science. The program is divided into two phases, didactic and clinical; the duration of the didactic phase is fifteen months, and the duration of the clinical phase is twelve months. During the second phase of the program, students participate in supervised clinical rotations four to five weeks in length. Students are required to complete supervised clinical experiences in emergency medicine, family medicine, internal medicine, pediatrics, psychiatry, obstetrics and gynecology, and surgery. Students also must complete a medical/surgical elective. Rotation sites may vary in schedule, expectations, and assignments.

## Admission Requirements

The MPAS program adheres to the general admission procedures outlined by the FIU University Graduate School (UGS). Completed applications are evaluated by an Admissions Committee designated by the Program Director, who is appointed by the HWCOM Dean. In addition, applicants must meet the following criteria for admission to the master's program:

1. Hold a Bachelor's degree or its equivalent from a regionally accredited college or university. Baccalaureate degrees must be completed by the spring semester prior to matriculation.
2. Earn overall upper division and upper division science grade point averages (GPAs) of at least 3.0 (on a 4point scale).
3. Complete all prerequisite courses within seven years of the application deadline. All prerequisite courses must be completed by the application deadline (i.e., courses completed after the application deadline will not be acknowledged). Applicants must earn grades of " $C$ " or higher in all prerequisite courses.
4. Submit official Graduate Record Examination (GRE) scores. Scores must be dated within five years of the application deadline. Scores should be sent by the Educational Testing Service directly to the Central Application Service for Physician Assistants, code 0554.
5. Submit three letters of recommendation from physicians, physician assistants, nurse practitioners, professors, or any individual with whom the applicant has worked in a professional or educational environment.
6. For international graduate student applicants whose native language is not English, a total score of 80 on the internet-based Test of English as a Foreign Language (equivalent to a total score of 550 on the paper-based Test of English as a Foreign Language) or 6.5 overall on the International English Language Testing System (IELTS) is required.

## Graduation Requirements

To be awarded a Master in Physician Assistant Studies degree, each student must:

1. Pass each required course/rotation with a grade of "C" (77\%) or higher and maintain an overall GPA of 3.0.
a. Pass summative written and practical examinations.
2. Submit and obtain faculty endorsement of a signature paper/capstone project.
3. Complete the Physician Assistant Clinical Knowledge Rating and Assessment Test (PACKRAT) for selfassessment.
4. Comply with program standards of conduct and guidelines for ethical conduct.
5. Complete the program's Physician Assistant Board Review Course.

## Course Requirements

## Fall Semester 1

PAS $6022 \quad 4$
PAS 6014 Physiology I 3
PAS 6040 Clinical Assessment I 3
PAS 6184 Medical Microbiology and Infectious Disease

## Spring Semester 2

PAS $6031 \quad$ Clinical Skills I 2
PAS 6015 Physiology II 3
PAS $6011 \quad 3$
PAS 6023 Pharmacology in Disease Pathology I 2
PAS 6090 Clinical Application of Evidence-Based
PAS $6041 \quad$ Clinical Assessment II 2
PAS 6016 Integration into Clinical Concepts I 2

## Summer Semester 3

PAS $6012 \quad$ Clinical Medicine II 9
PAS 6026 Pharmacology in Disease Pathology II 2
PAS 6017 Integration into Clinical Concepts II 2

## Fall Semester 4

PAS 6032 Clinical Skills II 1
PAS 6050 The Role of PA in American Health Care3
PAS 6005 Human Behavior 2
PAS 6018 Integration into Clinical Concepts III 2
PAS 6091 Clinical Application of Evidence-Based Practice II

## Clinical Year Rotations

PAS 6103 Internal Medicine Clerkship 6
PAS 6400 Family Medicine Clerkship 8
PAS 6200 Surgery Clerkship 6
PAS 6500 Obstetrics/Gynecology Clerkship 3
PAS $6300 \quad$ Pediatric Clerkship 6

PAS $6600 \quad$ Emergency Medicine Clerkship 4
PAS $6125 \quad$ Psychiatry Clerkship 3
PAS $6185 \quad$ Geriatric Medicine Clerkship 4
PAS 6940 Elective Clinical Clerkship 4

## PhD in Biomedical Sciences

Approved by the Board of Governors of the State University System of Florida in January 2012 and admitting students since August 2012, the PhD in Biomedical Sciences program at Herbert Wertheim College of Medicine (HWCOM) provides a curriculum different than that of other FIU colleges. A distinctive feature of this program is that both graduate students and medical students sit side-by-side in some courses in the introductory basic sciences portion of the medical curriculum, providing graduate students with an appreciation of the medical aspects of modern biosciences. The program equips graduate students with the ability to apply research skills from bench to bedside and to translate fundamental discoveries into new treatments for human diseases.

## Admission Requirements

The PhD in Biomedical Sciences program at HWCOM adheres to the general admission procedures outlined by the FIU University Graduate School (UGS). Completed applications will be evaluated by an Admissions Committee. Each applicant must meet the following minimum requirements to be considered for admission:

1. Hold a Bachelor's degree in a relevant discipline from an accredited college or university.
2. Earn a grade point average (GPA) of at least 3.0 (on a 4-point scale) during the last 60 credits of an accredited undergraduate degree or an earned graduate degree.
3. Submit official transcripts from all colleges or universities attended.
4. Submit official Graduate Record Examination (GRE) scores.
5. Submit a minimum of three letters of recommendation from undergraduate or research advisors. Strong unequivocal letters attesting to the applicant's educational background, motivation, analytical skills, and promise as a research scientist are important considerations.
6. Submit curriculum vitae and a statement of purpose highlighting future goals after obtaining the PhD degree.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the internet-based TOEFL or 6.5 overall on the IELTS is required.

## Degree Requirements

The PhD in Biomedical Sciences requires a minimum of 81 post-baccalaureate credits, of which at least 24 hours are dissertation research. Students are required to maintain a cumulative GPA of 3.0 or higher.

## Coursework Requirements

## Mandatory Courses

GMS 6103 Molecular Microbiology and Infectious Diseases 3
GMS 6220 Molecular Genetics and Cellular Biology 6
GMS $6481 \quad$ Physiology and Immunology 4
GMS 6605 Basic Structure of the Human Body 3-4
GMS $6864 \quad$ Principles of Clinical Epidemiology and Biostatistics

## Additional Required Courses

GMS $6939 \quad$ Graduate Seminar
GMS 6940 Supervised Teaching in Biomedical Science
GMS 6942 Laboratory Rotations
GMS 6961 Qualifying Examination
GMS 6962 Formation of Committee: Appointment of Dissertation Committee: Preliminary Proposal
GMS 6963 Doctoral Dissertation Proposal 3
GMS 6964 Dissertation Proposal Seminar 1
GMS 6979 Research Credits
GMS 7980 Dissertation Research Credits
GMS 7981 Dissertation Defense Seminar
Elective Choices* ( 5 credits minimum)
BME $6545 \quad$ Biosensors and Nanobioelectronics 3
BSC 5459 Advanced Bioinformatics for Biologists 3
CGS 5166 Introduction to Bioinformatics Tools 2
CHM 5305 Graduate Biological Chemistry 3
CHM 6088 Environmental Chemistry of Trace Elements
CHM 6382 Advanced Biological Chemistry 3
GMS $6300 \quad 4$
GMS $6500 \quad$ Basic Pharmacology 4
GMS 6904 Introduction to Scientific Writing 3
*This is not a complete list of possible elective courses. The Dissertation Advisor or the Dissertation Advisory Committee, at their discretion, may suggest potential electives that are described in the Graduate Catalog.

## Laboratory Rotations

Newly matriculating students perform research rotations in a minimum of three different faculty laboratories for four to six weeks each. Students choose faculty laboratories with the consent of those faculty members. The purpose of the rotations is three-fold. First, each rotation period provides the student with an opportunity to evaluate the faculty member and laboratory. Second, the rotation provides the faculty member with an opportunity to evaluate the student. Third, rotations in diverse laboratories expose the student to a variety of methodologies and concepts. The rotation experience is an approved course (GMS 6942) with credit, and students receive a pass or fail grade based on an average of the evaluations of the three participating faculty members. Before beginning a rotation, students should discuss with the faculty member the expectations of the rotation and evaluation procedures. In the event that the student cannot make a decision on a major advisor after three rotations, or if a faculty member will not agree to be the student's supervisor, a fourth rotation is allowed. This requirement is waived if a student is supported by a grant.

## Supervised Teaching in Biomedical Science

Graduate students are required to register for one credit of GMS 6940 (Supervised Teaching) each semester they serve as teaching assistants. This requirement is waived if a student is supported by a grant.

## Graduate Seminar

Graduate students are required to register for one credit of GMS 6939 (Graduate Seminar).

## Research Credits

Graduate students are required to complete at least 10 credits of GMS 6979 (Research Credits) involving research conducted in the PhD advisor's laboratory.

## Qualifying Examination

Students may appear for the qualifying exam soon after completion of mandatory courses. The qualifying exam consists of two parts:

- Part I: The student submits a comprehensive review on a topic chosen by the Dissertation Advisory Committee (DAC).
- Part II: Oral defense of the entire comprehensive review paper submitted by the student.


## Doctoral Dissertation Proposal

After completion of the qualifying examination, a student must submit a doctoral dissertation proposal in the format for an AHA, NIH, or NSF pre-doctoral fellowship application.

## Dissertation Proposal Seminar

A seminar based on the student's proposal is presented and graded by the dissertation committee. The formal admission to PhD candidacy occurs when the student successfully completes required courses and passes the qualifying exam, prepares a formal dissertation proposal, and successfully defends the content of the proposal before his or her advisory committee. Immediately following the proposal defense, the student's dissertation committee votes to admit the student to candidacy, to have the student resubmit the proposal within six months, or to dismiss the student from the PhD program. A student can only resubmit his or her proposal once. The dissertation committee should comprise at least five members, at least three of whom should be HWCOM graduate program faculty and at least one who is not a member of the HWCOM faculty and who holds a graduate faculty appointment.

## Dissertation Research Credits

At least 24 credits of GMS 7980 (Dissertation Research) are to be taken after the student has advanced to candidacy.

## Elective Course Requirement

Students must complete their elective requirements (5credits minimum) before submitting their dissertations.

## Dissertation and Dissertation Defense Seminar

The DAC approves the major goals of a student's research project, monitors progress of student performance, and approves a target date for the dissertation defense. A prerequisite for the dissertation
defense is publication or submission of peer-reviewed papers. It is expected that the student will be first or senior author on at least one of the peer-reviewed publications. The format of the dissertation should follow UGS guidelines. The dissertation defense takes place after the dissertation is submitted in a final form and approved by the DAC. Changes recommended at the time of the defense may be incorporated subsequently. The dissertation should be submitted to the DAC at least four weeks prior to the expected defense date to permit the members adequate opportunity for review. Review of the dissertation by an outside reviewer is encouraged. The defense of the dissertation is governed by the regulations established by the UGS. The dissertation defense includes a public seminar followed by defense of the dissertation to the DAC in closed session. Following the examination, the DAC evaluates the performance in the candidate's absence and votes to pass or fail the candidate. The record of the vote is recorded on the FIU UGS Defense of Dissertation Results form and submitted to the UGS office.

## Certificate in Core Clinical Clerkships

This graduate certificate program provides core clinical clerkship training to third-year medical students from established contractual partnerships with qualified foreign medical schools. During the clinical clerkships, students complete medical preceptorships and experiences in a hospital setting working with faculty members in the clinical care of patients. This involves collecting data and information on patients to gain the clinical skills for decision making in the patient's care and outcome, and to gain an understanding and knowledge of the workings of various aspects of the healthcare system. Students rotate through six core clinical disciplines: internal medicine (12 weeks), family medicine ( 6 weeks), obstetrics and gynecology ( 6 weeks), surgery (12 weeks), psychiatry (6 weeks), and pediatrics ( 6 weeks) for a total of 48 weeks. Students receive medical training under the supervision of faculty members who are licensed and specialized in the respective specialty. Performance is evaluated at the bedside and in the clinical setting. This certificate program is open to non-degree-seeking students only.

## Core Clinical Clerkships Curriculum: 48 Credits

| MDC 7200 | Internal Medicine Clerkship | 12 |
| :--- | :--- | :--- |
| MDC 7120 | Family Medicine Clerkship | 5 |
| MDC 7180 | Obstetrics and Gynecology Clerkship | 6 |
| MDC 7600 | Surgery Clerkship | 12 |
| MDC 7830 | Psychiatry Clerkship | 6 |
| MDC 7400 | Pediatrics Clerkship | 7 |

## Graduate Certificate in Molecular and Biomedical Sciences

The Graduate Certificate in Molecular and Biomedical Sciences seeks to provide academic enhancement and professional development to applicants to health-related professional degree programs. The courses taught in this program will offer a foundation for a better understanding of the courses taught during the first year of medical school. The certificate will strengthen the applicant's biomedical knowledge and enhance his or her professionalism skills to improve his or her future application to medical school or other health-related professional degree programs.

## Admission Requirements

Students applying for the Graduate Certificate in Molecular and Biomedical Sciences must meet the following requirements for admission:

1. Completed graduate certificate application
2. Bachelor's degree
3. US citizenship or permanent resident status

## Required Courses: ( 20 credits)

BMS 6013 Medical Cell Biology and Biochemistry BMS 6004 Medical Molecular Biology 3
BMS 6301 Medical Microbiology and Immunology
BMS 6501 Medical Physiology 3
BMS $6130 \quad$ Pathology and Medical Histology 3
BMS 6003 Medical Genetics 3
GMS $6922 \quad$ Professional Skills in Medical Sciences I1
GMS 6923 Professional Skills in Medical Sciences II

## Course Descriptions

## Definition of Prefixes

BMS-Basic Medical Sciences; GMS-Graduate Medical Sciences; IHS-Interdisciplinary Health Sciences; MDCMedicine Clinical Clerkships; MDE-Medical Electives; MDI-Medical Internships; MDR-Medical Research; MDSMedical Selective; PAS-Physician Assistant
Courses in the College of Medicine numbered BMSxxxx and MDCxxxx are restricted to students enrolled in the College of Medicine.

BMS 6001 Genes, Molecules \& Cells (5-8). The course is designed to introduce the fundamental concepts of cell and molecular biology, biochemistry and medical genetics as they relate to normal and disease processes. The topics will be covered in lectures, small group and whole class discussion and tutorial sessions. Prerequisite: currently enrolled in the College of Medicine.
BMS 6002 Human Structure \& Function (7). This is an introduction to essential concepts of human structure and function with integration of the anatomical and physiological basis of several important clinical skills and procedures. Prerequisite: Enrolled in the College of Medicine.
BMS 6003 Medical Genetics (3). The course covers fundamental principles of medical genetics integrated with biochemistry, cell biology and molecular biology. Prerequisite: Enrollment in the HWCOM Graduate Certificate Program in Molecular and Biomedical Sciences.
BMS 6004 Medical Molecular Biology (3). The course covers fundamental concepts of prokaryotic and eukaryotic molecular biology, as they relate to human health and diseases. Prerequisites: Enrollment in the HWCOM Graduate Certificate Program in Molecular and Biomedical Sciences.
BMS 6013 Medical Cell Biology and Biochemistry (3). The course covers fundamental concepts of cell biology and biochemistry, as they relate to human health and diseases. Prerequisite: Enrollment in HWCOM Graduate Certificate in Molecular and Biomedical Sciences.
BMS 6015 Clinical Skills I (4-6). Clinical Skills I will focus on teaching the knowledge, skills and attitudes needed in
areas such as communication, the physical examination and documentation. These skills are developed and refined using various teaching modalities and later integrated with more advanced clinical skills during the Clinical Medicine II course. Prerequisite: Enrolled in the College of Medicine.
BMS 6016 Clinical Skills II (1-12). Clinical Medicine is a longitudinal "strand" throughout the four-year medical school curriculum. The strand is designed to provide students with the foundations of patient care that will prepare them for their clinical clerkship years. It will also provide them with the tools that will foster a lifetime of clinical competence. Prerequisite: Enrolled in College of Medicine.

BMS 6063 Foundations of Health Care (1). This course will provide the student with a population-based approach to understanding the delivery systems of healthcare. It will provide an understanding of economic, social and environmental forces facing our health care delivery systems today. Prerequisite: Enrolled in the College of Medicine.

BMS 6064 End of Life Care (1). This course teaches the basic concepts associated with end-of-life care for older adults. Emphasis is placed on symptom management, preparation for death, and support to older adults and their families. The goal is to develop knowledge of specific strategies to support end-of-life care planning among older patients, families and healthcare professionals. Prerequisite: Enrolled in the College of Medicine.

BMS 6065 Quality Improvement and Medical Jurisprudence II (1). Quality Improvement in Health Care: Improving the quality of health care in the US is a public health emergency. This course is designed to convey a sense of urgency and instill a commitment to lifelong quality improvement. A broad quality platform will be presented from the viewpoint of relevant stakeholders. Learners will be armed with critical tools to meet QI responsibilities throughout clinical practice.

## Medical Jurisprudence II:

This course incorporates the basics of two professions, Medicine and Law. Physicians meet the law face to face every day, which is why students must be clear as to what purpose the law serves and how it affects medical practice. What are the patient's rights, what are your legal obligations? This course will provide students with a framework for understanding the U.S. legal system's structure and the application of law to the practice of medicine. Prerequisite: Enrolled in the College of Medicine.
BMS 6066 Evidence-Based Medicine and Complementary and Alternative Medicine (1-12). This course is intended for students to acquire and develop both the knowledge and the skills for evidence-based medicine (EBM). The emphasis of the course is on the second, third and four steps of EBM: searching clinical evidence, appraising critically the validity and importance of clinical research evidence, and determining the applicability of evidence into practice. This course content complements the previous activities addressing EBM (BMS 6880) where the students learned how to develop answerable clinical (PICO) questions from patients' problems. In addition, during this course students will use concepts obtained in previous epidemiology courses as
they are applied to help solving clinical problems. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BMS 6067 System Based Practice (1-12). This course provides the student with a fundamental understanding of the U.S. healthcare delivery systems, policies that shapes healthcare, and the Quality and Safety movement. Prerequisite: Enrolled in the College of Medicine.
BMS 6071 Community-Engaged Physician I (5). Community-Engaged Physician I course is part of the Medicine \& Society Strand and includes Green Family Foundation NeighborhoodHELP ${ }^{\text {™ }}$ (NHELP). The fundamental aspects of community assessment and community medicine will be presented while developing skills related to health education, health promotion, appropriate use of screening and diagnostic testing, and disease management. The course aims to give students the skills to work effectively in interprofessional teams and to assess the behavioral, psychosocial, cultural, occupational, and environmental considerations of human health. Students will critically appraise literature, with emphasis on population health and health disparities, and will focus on the evidence for behavioral and communitybased interventions. Prerequisite: Enrolled in the College of Medicine.

BMS 6100 Structure of the Human Body (1-12). This course is designed to introduce first year medical students to essential concepts of the structure of the human body, including early human development, composition of different tissues and organ morphology. Basic concepts of embryology, histology, gross anatomy and neuroanatomy from the microscopic to the organ system level are taught as the foundation for an in-depth understanding of the physiology of the human body and of clinical medicine. Lectures, laboratory sessions, and case presentations will be used to deliver course objectives. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
BMS 6130 Pathology and Medical Histology (3). Introductory course in the study of normal tissues and organs and how these are affected by disease. Prerequisite: Enrollment in the HWCOM Graduate Certificate in Molecular and Biomedical Sciences.
BMS 6300 Microbiology, Infection \& Immunology (3). This course introduces and integrates general principles and examples of microbiology and immunology to provide a foundation for understanding infections, host responses, disease mechanisms and means for prevention and treatment. Prerequisite: currently enrolled in the College of Medicine.

BMS 6301 Medical Microbiology and Immunology (3). The course is designed to introduce the students to the general principles of infectious, host responses and the pathogen's evasion that are relevant for a foundation in clinical medicine. Prerequisite: Enrollment in the HWCOM Graduate Certificate Program in Molecular and Biomedical Sciences.
BMS 6400 Pharmacology (4). This course introduces medical students to the basic principles of pharmacology and to the primary classes of drug therapy including the prototypic agents. The main goal of the medical training (curriculum) is to develop the diagnostic and therapeutic skills (competencies) required by a basic doctor. Safe and
effective prescribing is such a core competency. In addition learning should provide an appropriate framework fostering the ability to assimilate information about new drug development that will occur throughout a professional career (self-directing learning). The Pharmacology teaching is designed with this final goal (to attain a core competency) in mind and reflects the paradigm shift from a process focused education to an outcome oriented education. Prerequisite: currently enrolled in the College of Medicine.
BMS 6500 Integrated Functions of the Human Body (112). The course is designed to introduce first year medical students to essential concepts of physiology and immunology. The goal is to provide the students with a strong foundation relevant to their understanding of pathological conditions and to their future diagnostic and therapeutic decision making. Physiology is taught using an organ system approach, emphasizing the interplay of molecules, cells, tissues, organs and systems to maintain normal function of the human body. Normal and abnormal functions of the immune system are introduced. Integration of immunology with organ system physiology is emphasized. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
BMS 6501 Medical Physiology (3). The course is designed to introduce the students to essential concepts of medical physiology. Prerequisite: Enrollment in the HWCOM Graduate Certificate Program in Molecular and Biomedical Sciences.
BMS 6600 Cellular \& General Pathology (4). Cellular and General Pathology is designed for first year medical students as an introductory course in the study of disease emphasizing the general pathologic concepts and vocabulary as well as the fundamental concepts related to laboratory medicine. Prerequisite: currently enrolled in the College of Medicine.
BMS 6603 Pathology and Infectious Disease (1-12). Pathology and Infectious Disease is an introductory course in the study of disease and the general principles of infectious disease. The Pathology component of the course will emphasize the general pathologic concepts and vocabulary to lay the groundwork that will be useful during the subsequent courses within the organ systems' modules. Areas covered in this course include: cellular adaptations, necrosis, apoptosis, inflammation, repair, hemodynamic disorders, neoplasia, and pathology as it relates to genetic, nutritional / environmental factors, blood vessel disorders as well as an introduction to forensic medicine. In addition, during this course the students will also receive general concepts relating to clinical laboratory medicine, and regulatory organizations allied to the field of medicine and hospital oversight in a set of two, 2 hour lecture series referred to as Fundamentals of Laboratory Medicine. The Infectious Disease component includes an overview of microbes (bacteria, viruses, prions, parasites and fungi) important to human disease, their diseases and disease processes will be presented. Specific topic areas of this component of the course include understanding microbial disease looking into virulence mechanisms, evasion strategies used by pathogens against the antimicrobial immune response and some of the innate antimicrobial mechanisms. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BMS 6631 Hematopoietic and Lymphoreticular Systems (3). This course is designed to provide the fundamental ground knowledge as it relates to the understanding of hematologic diseases, the clinical approach to a patient with a hematologic disease and the initial approach to the use of various chemotherapeutic drugs. Discussions related to: the mechanisms of disease with an understanding of the molecular bases that explain the disease process; the clinical features of the different disorders - genetic or acquired - as well as a description of the morphologic features of these diseases based on the most current available and clinically applicable information will undertaken. Prerequisite: Enrolled in the College of Medicine.
BMS 6632 Endocrine System (3). The Endocrine System course will: (1) Building upon the specific topics discussed in the course Human Structure \& Function, introduce medical students to the abnormal processes and principal therapies of endocrine disorders; (2) Advance their knowledge and comprehension of the aforementioned disorders and therapeutic modalities including the influence and effects of gender, ethnicity, and behavior of patients on specific endocrine diseases. To provide an interactive teaching and learning environment, the course will include 'question \& answer' sessions interspersed during the lectures as well as case discussions. A solid understanding of normal endocrine processes including the anatomy and function of endocrine organs, hormone synthesis, secretion, action and metabolism are required to successfully master this course. Prerequisite: Enrolled in the College of Medicine.
BMS 6633 Cardiovascular and Respiratory Systems (6). The course is an introductory learning opportunity to gain the basic concepts of cardiac and pulmonary medicine. The course will review the cardiopulmonary structures and anatomic and physiologic relationships and their integration to clinical medicine. The course will cover abnormal cardiovascular and pulmonary structures and physiology and the associated mechanisms of the related diseases. The clinical manifestations of derangements of the cardiopulmonary system will be reviewed. The student will be introduced to the diagnostic and therapeutic interventions in cardiopulmonary disease. Case based approach, group discussions, simulations and didactic presentations with some exposure to clinical skill will be used to achieve course objectives. Prerequisite: Enrolled in the College of Medicine.
BMS 6634 Gastrointestinal System and Medical Nutrition (4). This course is designed to introduce second year medical students to the principles of diseases affecting the human body's digestive system. The course will cover conditions affecting the hollow viscera (esophagus, stomach, small intestine and colon) as well as solid organs that are part of the digestive system (liver and pancreas). Clinical cases will be used to introduce students to critical medical thinking and problem-based learning. Integration of anatomy, physiology, immunology and histology will be emphasized. Prerequisite: Enrolled in the College of Medicine.
BMS 6635 Musculoskeletal Systems (1-5). This course provides the medical student the opportunity to learn the normal development, structure, and function of the musculoskeletal system. Common congenital and acquired pathologic conditions and the interpretation of
diagnostic tests and basic treatment options are reviewed. The following areas are emphasized: effects of environment, nutrition, exercise, and aging on bone and joint homeostasis; radiological assessment and correlation with pathoanatomy. The course also provides opportunities to learn and assess application of pathophysiologic reasoning, and clinical, laboratory and radiologic findings to differential diagnosis. Prerequisite: Enrolled in the College of Medicine.
BMS 6636 Nervous System and Behavior I (1-12). The course will provide an integrated, multidisciplinary study of the structure and functional relationships of the central and peripheral nervous systems in both health and disease. The course covers essential concepts in normal neurological function (using neuroanatomy, neurophysiology, neuropharmacology, neuropathology, and clinical neurology). Students learn to diagnose and locate the cause of abnormal neurological function, and identify a patient's symptoms to locate the source of the problem within the nervous system. The format of the course includes lectures, laboratory work, small-group sessions, and a select number of clinical correlates presented through a variety of application exercises. Prerequisite: Enrolled in the College of Medicine.
BMS 6637 Reproductive Systems (3). Reproductive Systems provides an overview of the development of the male and female reproductive systems with a focus on abnormalities of sexual differentiation and function, the physiology of control of the menstrual cycle, conception, infertility, menopause and pregnancy. In addition, the pathophysiology of the male reproductive system will be covered. Prerequisite: Enrolled in the College of Medicine.
BMS 6638 Renal System (1-12). This course is an introduction to the study of the Renal System. It will help the student integrate what they have learned in previous courses (e.g. Anatomy, Physiology, Biochemistry, Genetics, Epidemiology, Histology, and Pharmacology), lead to an understanding of the mechanisms of diseases involving the kidneys. Prerequisite: Enrolled in the College of Medicine.
BMS 6643 Integumentary System: The Skin (1-5). This course provides the medical student the opportunity to learn the normal development, structure, and function of the integumentary system. Common congenital and acquired pathologic conditions and the interpretation of diagnostic tests and basic treatment options are reviewed. The course also provides opportunities to learn and assess application of pathophysiologic reasoning, and clinical, laboratory and radiologic findings to differential diagnosis. Prerequisite: Enrolled in the College of Medicine.
BMS 6820 Humanism and Medical Jurisprudence (112). The course is design to challenge the student to understand the global (east vs. west) interpretation of compassion, empathy and awareness as well as understanding the self. It will provide a broad sense of one's own awareness of the self as brought forth by ones social, religious, economic, family and education experiences. Prerequisite: Enrolled in the College of Medicine.

BMS 6826 Ethical Foundation of Medicine (1). This course gives students a foundation in bioethics and the ethics of medical practice. It begins preparing them to
make daily ethical decisions and respond to the ethical issues, challenges, and dilemmas they will encounter as students and physicians. The course provides historical background on the social and moral foundations of modern medicine. Students review the major medical oaths and codes; analyze the ethical basis of decisionmaking; and work through case studies that exemplify ethics in practice. They discuss the social and cultural factors in patient-doctor interaction. Prerequisite: Enrolled in the College of Medicine.
BMS 6827 Socio-economic and Cultural Aspects of Health (1). This course aims to provide a baseline of empirical knowledge needed to understand and promote health in communities and populations that physicians serve through the lenses of disparities, cultural competency, social determinants, environmental stress, and its concomitant physiological responses. Critical analyses of the evidence will be juxtaposed with practical, clinical applications described by practitioners through clinical cases. Students will identify ethical concerns and consider broader policies in preparation for an ethical and socially responsive approach to medicine. Students will begin to develop collaborative skills to work effectively in with other professions, including nursing, social work, and the health sciences, to address barriers to effective care and maximize outcomes through case-based problem solving. Prerequisite: Currently enrolled in the College of Medicine.

BMS 6840 Nervous System and Behavior II (1-12). The course will present the fundamentals of psychiatry and psychological principles that are the foundation for clinical work in period 3. These principles include psychiatric diagnoses and treatment, cognitive neuroscience, cognitive and emotional development, and principles of psychopharmacology. Learning will take place in an interactive process using Team Based Learning, Problem Based Learning, and some traditional lectures. Independent study and preparation prior to group activities will be integral part of the learning process. Prerequisite: Enrolled in HWCOM.
BMS 6880 Clinical Epidemiology and Quantitative Research (1-12). This course is an introduction to the study of measurement and quantitative methods and of the elements and foundations of epidemiology and research. The main perspective is the use of those methods at clinical settings or to address clinical problems (Clinical Epidemiology) in the practice and research of medicine. Concepts from the sciences of Biostatistics and Clinical Epidemiology will be presented to the student in theory and problem-based scenarios. Prerequisite: Enrolled in the College of Medicine.
BMS 6891 Professional Behavior I (1). Professional Behavior I is a course within Professional Development designed to introduce and teach awareness of certain values, emotions and attitudes, behaviors and selfreflection to the medical student. This course applies the philosophy and general understanding for emotionally preparing the future physician for the many diverse psychological experiences associated with the clinical setting and professional life. Specifically, to have an understanding and awareness of one's behavioral and personal issues, the emotional stress found in practicing medicine, and how these can impact patient care and
health outcomes. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

BMS 6892 Professional Behavior II (1). This course is a continuation of the Period One Professional Behaviors experience. Where the focus of the course during Period One was on "self-awareness," Period Two goes more into depth in the development of self-awareness and the development of the emerging "MD Identity." Class sessions are structured using the same approach with the introduction, history, development and implications of the Values, Emotions and Attitudes (VEA) on medical practice. However, the vignettes are more evidence-based and discussions include reflections of the student's clinical experiences as they relate to the VEA. Additionally, the VEAs presented in the class session are more comprehensive and identify greater implications for the MD. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
BMS 7810 Core Concepts in Medicine (5-7). The major themes of Osler Friday are student-driven inquiry, learning and teaching with integration of the 6 core competencies of medical education. Problem-based learning in small groups followed by large group consultation with specialists will serve as the primary learning format. Individual and pair assignments in critical appraisal, clinical application of statistics, and a group assignment in case development will also support the course learning objectives. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
BMS 8910 Directed Study (1-3). Medical students engaged in individual research under the supervision of the COM faculty. Prerequisite: Enrolled in the College of Medicine.
GMS 6103 Molecular Microbiology and Infectious Diseases (3). This course introduces the general principles of infectious diseases and the host response to infection. Prerequisites: Currently enrolled in the HWCOM PhD program and permission of the course director.

GMS 6220 Molecular Genetics and Cellular Biology (6). The course gives graduate students an introduction to fundamental concepts in biochemistry, cellular and molecular biology, and genetics with an emphasis on medically-relevant themes. Prerequisites: Currently enrolled in the HWCOM PhD program and permission of the course director.

GMS 6300 General Pathology (4). This course introduces the molecular and genetic basis of human diseases while emphasizing the basic pathologic processes and vocabulary. Prerequisites: Currently enrolled in the HWCOM PhD program and permission of the course director.

GMS 6481 Physiology and Immunology (4). This course introduces students to the fundamental concepts of physiology and immunology from a biomedical perspective that will assist in evaluating pathology and therapeutic target options. Prerequisites: Currently enrolled in the HWCOM PhD program and permission of the course director.
GMS 6500 Basic Pharmacology (4). This course is an introduction to the basic principles of pharmacology and provides an overview of drugs from a molecular, cellular, and basic science perspective. Prerequisites: Currently
enrolled in the HWCOM PhD program and permission of the course director.

GMS 6605 Basic Structure of the Human Body (3-4). This course gives graduate students an introduction to basic concepts of human anatomy, including embryology, histology, gross anatomy and neuroanatomy. Prerequisites: Currently enrolled in the HWCOM PhD program and permission of the course director.
GMS 6864 Principles of Clinical Epidemiology and Biostatistics (2). This course provides an introduction to the elements and foundations of epidemiology and biostatistics. Prerequisites: Currently enrolled in the HWCOM PhD program and permission of the course director.
GMS 6904 Introduction to Scientific Writing (3). The introductory course designed to teach the students to design, write, and present scientific papers and grant applications. Prerequisite: HWCOM Graduate School Enrollment.
GMS 6922 Professional Skills in Medical Sciences I (1). The course provides students with a small structured learning environment in which to analyze the relationships between concepts and develop the ability to evaluate and integrate information. Prerequisite: Enrollment in the HWCOM Graduate Certificate Program in Molecular and Biomedical Sciences.

GMS 6923 Professional Skills in Medical Sciences II (1). Provide students with a small structured learning environment in which to analyze the relationships between concepts and develop the ability to evaluate and integrate information. Prerequisite: Enrollment in the HWCOM Graduate Certificate Program in Molecular and Biomedical Sciences.
GMS 6939 Graduate Seminar (1). A weekly seminar/discussion course consisting of research presentations by students, faculty, and visiting scientists in the area of biomedical sciences will form part of a recurring credit. Prerequisite: HWCOM Graduate School Enrollment.

GMS 6940 Supervised Teaching in Biomedical Science (1). Students will assist the faculty members who teach either graduate or medical students. Prerequisite: HWCOM Graduate School Enrollment.
GMS 6942 Laboratory Rotations (1). Laboratory rotations in specific laboratories of the HWCOM graduate program faculty that will eventually lead to the choice of a thesis laboratory. Prerequisite: HWCOM Graduate School Enrollment.
GMS 6961 Qualifying Examination (5). The purpose of the Qualifying Examination is to confirm the readiness of the graduate student to conduct PhD research. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Completion of all mandatory courses.
GMS 6962 Formation of Committee: Appointment of Dissertation Committee: Preliminary Proposal (1). The student submits preliminary research proposal approved by his/her committee. Prerequisite: HWCOM Graduate School Enrollment.

GMS 6963 Doctoral Dissertation Proposal (3). Doctoral Dissertation Proposal written in the style of an AHA, NIH
or NSF predoctoral fellowship application. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Completion of GMS 6961, advisor.
GMS 6964 Dissertation Proposal Seminar (1). After completion of the Qualifying Examination (QE) and Dissertation proposal approval the student must present his proposal to the Dissertation Committee. The student will give a PowerPoint presentation the proposed research to the members of the dissertation committee. The dissertation committee will specifically evaluate the following: (i) Has the student demonstrated the ability to design a feasible project? (ii) Has the student shown a reasonable knowledge of the literature regarding the project? (iii) Has the student presented the proposal (both written and oral) in a scholarly fashion? (iv) Has the student demonstrated competent scientific knowledge with respect to overall fundamental principles and applications in biomedical science? and ( $v$ ) Does the proposed research constitute an acceptable and feasible dissertation project? This will be achieved through an oral question and answer component within the scheduled time of the dissertation proposal exam meeting. The chairman of the dissertation committee will (i) insure that the proposal exam is held to a reasonable length of time; (ii) insure that the student is evaluated fairly and rigorously; and (iii) see that a written evaluation is promptly prepared and sent to the student and to the director of the graduate program. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Completion of GMS 6961, GMS 6963, and permission of the advisor.
GMS 6979 Research Credits (1-10). Research conducted in the PhD advisor's laboratory. May be repeated. Prerequisite: HWCOM Graduate School Enrollment.
GMS 7603 Anatomy of the Musculoskeletal System (2). This course gives Doctor of Physical Therapy (DPT) students a solid working knowledge of the functional anatomy of the back and limbs, including bones, joints, muscles, nerves and blood vessels. This will form the anatomical basis for an in-depth understanding of related pathological conditions, clinical examination and therapeutic interventions. Course objectives will be delivered by lectures and different types of laboratory sessions. Prerequisite: Admission into the Doctor of Physical Therapy Program. Corequisite: GMS 6605.

GMS 7980 Dissertation Research Credits (1-10). Research towards the completion of a doctoral dissertation. May be repeated. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Completion of GMS 6961, GMS 6964 and permission of the major professor.

GMS 7981 Dissertation Defense Seminar (1). Dissertation defense seminar. Prerequisite: HWCOM Graduate School Enrollment. Corequisites: Permission of major professor and graduate committee.
IHS 6116 Interprofessional Health Ethics (1). This online course will introduce graduate students in health sciences and biomedical engineering to ethical issues that emerge in teams which contribute to or support health care delivery, services, promotion, research, and the design, manufacture and marketing of health products (e.g. drugs and devices). In five modules, students will have the opportunity on their own and in interprofessional groups to engage critically with controversial topics in
clinical ethics, research ethics and publichealth/population health, such as assisted reproduction, transplant and regenerative medicine, research integrity and false claims to authorship, the marketing of drugs and medical devices, the treatment of infectious diseases, personal responsibility for health, and social determinants of health. In addition, students will learn the ethical commitments of their own and other health professions to determine where they overlap and where differences in scopes of practice may lead to ethical dilemmas. Prerequisites: Admission to a graduate program in health sciences at FIU or permission of the instructor.
MDC 6102 Community-Engaged Physician II (1-12). The NHELP Course is a longitudinal service learning experience that reinforces the didactic learning that takes place in Medicine and Society Courses, as well as integrates learning from Clinical Medicine, the Organ Systems Courses, and the Clerkships, through situated learning. The 2 credit course in Period 3 and Period 4 (NHELP 3-4) is designed as an active learning course, and will serve as an opportunity for students to reflect on their medical school education and apply what they have learned throughout their medical school education to their Household members in a comprehensive manner. Prerequisite: Enrolled in College of Medicine.

MDC 6103 Community-Engaged Physician III (1-12). The NHELP Course is a longitudinal service learning experience that reinforces the didactic learning that takes place in Medicine and Society Courses, as well as integrates learning from Clinical Medicine, the Organ Systems Courses, and the Clerkships, through situated learning. The 1 credit course in Period 4 (NHELP 4) is designed as an active learning course, and will serve as an opportunity for students to reflect in a comprehensive manner on their medical school education and apply what they have learned throughout their medical education to their Household members. Prerequisite: Enrolled in College of Medicine.
MDC 7120 Family Medicine Clerkship (1-12). Family Medicine is the specialty that focuses on care for the whole person regardless of age, gender, or disease, set within their social and community context. The Period 3 Family Medicine Clerkship is a practical opportunity for students to demonstrate progressive skill development integrating their knowledge of basic and social sciences, clinical skills, professional development, and social accountability. Under the supervision of FIU Family Medicine faculty, students will conduct and document history, physical exam, assessment, management and plan and provide patient education. The course is aimed at preparing students for Period 4 rotations and their future careers as physicians. The syllabus is subject to change at the discretion of the Clerkship Director with 3 days' notice via LMS. The goals of the clerkship are:

1. to help students in their journey towards becoming excellent, effective, autonomous patient-centered physicians,
2. to share the joys and the identity of FM, emphasizing the principles of FM,
3. to encourage students to respect the profession of FM and to encourage and empower those considering or planning on a career in FM.
Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDC 7124 Family Medicine Geriatric Clerkship (2). The class will be divided in 2 groups. Each group will be going to Leon Medical Centers approximately twice a month on Mondays. Students will be assigned a rotation schedule and are expected to attend a meeting at the Leon Medical Centers to meet his/her preceptor prior to the start of the rotation and to confirm the location, date, and other issues specific to the site. At each Center, students will have the opportunity to attend outpatient clinic, wound care, walk-in clinic, physical therapy, and dermatology clinic. During the rotation, students will also attend Geriatric Core lecture series and discussion of clinical cases at the COM. Students are also required to present a brief discussion of a relevant clinical topic during their Geriatric clerkship. This presentation will be delivered to the faculty and other medical students during the geriatric clerkship.
The clerkship will provide students with an experience in the evaluation, diagnosis, and management of geriatric patients in the outpatient setting. Throughout patient clinical experiences, students will be exposed to a wide variety of geriatric patients presenting with acute illnesses, chronic illnesses, evaluation of disabilities and preventive health maintenance visits. Students will participate in clinical evaluations, simulated cases, simulated laboratory scenarios, and didactic lectures. The clerkship emphasizes comprehensive assessment and management of core common geriatric conditions. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDC 7180 Obstetrics and Gynecology Clerkship (6-7). The Obstetrics and Gynecology clerkship gives third-year medical students a 6-week rotation in the core discipline of women's health. The gynecologist and obstetrician are involved in every facet of women's health care maintenance and delivery throughout the patient's lifespan. They provide care from pre-pubertal and early menarche, primary care providers for healthy women, the joy of normal pregnancy and delivery, to the crises of infertility, pregnancy loss, and cancer. Therefore, a general understanding of the field is important to the development of a well-rounded primary care physician. Medical students are exposed to all aspects of the specialty, including ambulatory clinics, hospital inpatient wards, the operating room, emergency room visits and consults, radiology, and the labor and delivery suite. Throughout the rotation, faculty and nurse midwives will serve as instructors to the various fundamentals in women's health. But the most profound learning comes from self-motivation and patient centered learning. Our goal in the rotation is to guide and motivate learning, not just in the disease process, but also providing the tools that are instrumental in the continuously evolving practice of medicine such as patient based population needs, medical economics, treatment modalities, and legislative concerns. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDC 7200 Internal Medicine Clerkship (9-12). Internal Medicine Clerkship occurs for the most part, at Baptist and at Memorial Healthcare Systems in consecutive rotations with a total length of 48 days. This clerkship has two components: ambulatory (30\%) and hospital-based (70\%) and it is designed to provide medical students with a foundation of knowledge, skills and attitudes necessary to approach and care for adult patients in an outpatient and hospital setting. Student's primary work will be under
direct supervision of internal medicine preceptors from the community, the public health system and the academic setting. The Internal Medicine clerkship will emphasize basic assessment and management of core common problems in Internal Medicine, including identifying patient problems, establishing a differential diagnosis and planning an appropriate evaluation and treatment in preparation for an increased independence in management and therapeutics during period four. Clinical judgment and diagnostic reasoning skills will be a focus of this clerkship. There will be opportunities to experience internal medicine specialties with weekly rotations such as cardiology, pulmonary, renal, infectious diseases and gastroenterology. Emergency medicine experiences at the Baptist Health System will give opportunities to learn the new presentation of IM and surgical disorders and the acute presentation of chronic disorders. This rotation will also build experience in mastering procedural skills. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDC 7400 Pediatrics Clerkship (7-9). The Core Pediatric Clerkship will provide students with experiences in the evaluation, diagnosis, and management of pediatric patients. Through both inpatient and outpatient clinical experiences, students will be exposed to a wide variety of pediatric patients presenting with acute illnesses, chronic illnesses, and health maintenance needs. Students will actively participate in clinical cases, simulated cases, simulation laboratory scenarios, and didactic lectures. The clerkship emphasizes the basic skills of assessment and management of common pediatric problems. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDC 7600 Surgery Clerkship (9-12). This clerkship will provide students with experience in the recognition and management of surgical disease and in basic surgical techniques. During this clerkship students will develop understanding of the scientific basis of surgical diseases and disorders. Students will then learn to perform assessments and develop differential diagnoses for these surgical presentations. Students will learn through participating in preoperative care, operative procedures, outpatient surgery clinics and didactic experiences on management of surgical diseases. Students will also learn how to evaluate normal and complicated postoperative recovery with surgical inpatients and outpatients. Upon completion of the surgery clerkship, students will also fully understand norms of professional behavior by working effectively with patients and families as a member of the health care team. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDC 7760 Radiology Clerkship (2-3). The Radiology Clerkship takes place entirely at FIU Campus AHC2. The clerkship is a largely self-directed online study of selected resources and developed PowerPoint presentations together with directed reading of required text and articles. Progress in understanding of the concepts provided will be assessed by frequent MCQ examinations. This clerkship will provide medical students with a basic understanding of the common techniques used in medical imaging, the evidence-based choice of appropriate studies for given clinical symptoms, the potential complications and side effects of such studies and the interpretation of medical imaging studies of common clinical conditions.


#### Abstract

Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.


MDC 7800 Neurology Clerkship (3-5). The Neurology Clerkship takes place at Physician Clinics, Cleveland Clinic Foundation, and Baptist Hospital over six weeks. This clerkship has three components with each constituting approximately 33\%: ambulatory, didactic and hospital-based. This clerkship will provide medical students with experience in general and specialty neurology. Students will learn to diagnose and treat nonemergent neurological disorders in the outpatient setting, as well as neurological emergencies in the inpatient setting. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDC 7830 Psychiatry Clerkship (6-7). The course introduces Period 3 medical students to general and specialty psychiatry and allows students to develop competencies in diagnosing and treating psychiatric disorders. The structure of the clerkship ensures that students receive exposure to different clinical practice settings, including emergency department (ED), inpatient, outpatient, and consultation-liaison services. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7010 Directed Clinical Study (0). Students will follow (shadow) a physician at varied institutions to observe daily activities. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7048 Narrative Medicine Elective (1-12). This elective is designed for individualized study and practice in further pursuit of topics relevant to the humanistic missions of both the Professional Development and Medicine \& Society Strands. Students will design an independent study or practicum experience under the mentorship of Medicine \& Society or Professional Development faculty. This elective will be offered in all months with maximum of 8 students per year. Pioneered by Rita Charon, an internist and professor at Columbia's College of Physicians and Surgeons, Narrative Medicine trains doctors and other caregivers to use careful listening and reflective writing to forge deeper connections with their parents, resulting in better care. Prerequisite: Enrolled in HWCOM.
MDE 7053 Medicine and Society Elective (1-12). The Medicine and Society elective is designed for individualized study and further pursuit of topics relevant to the Medicine and Society's mission preparing to improve health outcomes for underserved communities to cultural and social issues in the delivery of care through the educational objectives on social determinants of health and policy. Students will design an independent study experience under the tutelage of Medicine and Society or other Humanities, Health and Society faculty. Potential projects, include pursuit of a policy initiative in collaboration with Law, cultural competency project, or intensive community-based health initiative. The Medicine and Society elective will be offered in all months with maximum of 6 students per year. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7059 Community Medicine Practicum (1-4). The Community Medicine Practicum (CMP) develops student's skills and insights into community level efforts that address the social determinants of health by working with community partners to participate in and develop
community medicine oriented projects within and/or that impact Green Family Foundation (GFF) Neighborhood HELP ${ }^{\text {TM }}$ catchment areas. This is a 1 hour Pass/Fail credit course with process evaluations based in the concept of service learning. The primary criterion for Community Medicine Practicum projects is that they are completed with a community partner approved by the Division of Policy and Community Development. Group projects are encouraged and single applications for group projects will be accepted. The 3 basic requirements for students are 1) Completed forms (application/learning plans, progress report and final reflections), 2) Forty documented hours of community contact, and, 3) Roughly 15 hours of advisor/course director contact. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7067 Professional Development and Clinical Medicine Capstone (1-5). Professional Development: The Professional Development Capstone is explicitly designed to address anticipated expectations of Professionalism in the first few months of residency and beyond. Additionally, the Capstone in Professional Development is intended to serve as a review of relevant topics for Internship and the introduction of specific practical topics not otherwise covered in the curriculum.
The Capstone is divided into learning modules:

1. Achieving successful residency experience
2. Self and personal growth for life
3. Thriving in the business of medicine and personal business affairs
4. Practice Management
5. Home Health Care
6. Occupational Medicine

Clinical Medicine: The Clinical Medicine Capstone or Transition to Residency is a required course, lasting approximately two weeks immediately prior to graduation and will be taught in a large groups as well as small groups/workshop format. Since students will be embarking on different career paths, after graduation there will be choices of several sessions to attend, based on individual interests as well as topics which are of relevance to all. Attendance is mandatory and will be tracked, with attendance at $\mathrm{XXX} \%$ of sessions being required for a passing grade. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7092 Teaching Skills Elective (1-12). This is a nonclinical elective offered for two weeks, designed to help student improve their teaching and/or curricular development skills through self-directed, experiential learning and mentor feedback and engagement in authentic work. Upon successful completion of this elective, the student will be able to apply principles of educational theory to create learning and/or assessment experiences. Prerequisite: Enrolled in HWCOM.
MDE 7100 Community Medicine Elective (1-12). This intensive ambulatory block will serve as a community based primary care experience. Students will be assigned a community based public clinic. Under the supervision of community based FIU faculty, the student will assume a level of independence appropriate to a fourth year student. Students will practice communication, diagnosis skills, clinical reasoning, management of common ambulatory clinical scenarios, and patient education and negotiation, and receive feedback. The class will be a one month block at a single site, or split in two rotations blocks of two
weeks each. Experiences may include any of the specialties (e.g. family medicine, internal medicine, pediatrics, obstetrics and gynecology, psychiatry, psychology) found at these clinics. Two weeks rotations are possible in areas like Palliative Care, Hospice, Community Mental Health, Sports Medicine, Rural Medicine, Indian Health Service Medicine, International Medicine, and Complementary and Alternative Medicine. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7102 Public Health Elective (1-12). This elective will introduce students to the practice of Public Health for physicians. Students will be placed for a one month internship at the Miami-Dade County Health Department or comparable practice site, and assigned a mentor (MD/PhD or MD/MPH). Experiences and activities will be tailored to individual student interests within the structure of the elective. Students will be evaluated by their site preceptor. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7103 Community Medicine (1-12). This intensive ambulatory block will serve as a community based primary care experience. Students will be assigned a community based public clinic. Under the supervision of community based FIU faculty, the student will assume a level of independence appropriate to a fourth year student. Students will practice communication, diagnosis skills, clinical reasoning, management of common ambulatory clinical scenarios, and patient education and negotiation, and receive feedback. The class will be a one month block at a single site, or split in two rotations blocks of two weeks each. Experiences may include any of the specialties (e.g. family medicine, internal medicine, pediatrics, obstetrics and gynecology, psychiatry, psychology) found at these clinics. Two weeks rotations are possible in areas like Palliative Care, Hospice, Community Mental Health, Sports Medicine, Rural Medicine, Indian Health Service Medicine, International Medicine, and Complementary and Alternative Medicine. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7120 Family Medicine Elective (1-12). Medical Students assigned to the outpatient department are supervised by one or two of 11 board-certified internists. The rotation is particularly appropriate to those considering a career in primary care medicine.
Students follow the patients of their assigned physicians, observing and performing history-taking and physical examination. Together with their attending physicians, students formulate diagnostic and therapeutic plans. Physical examination procedures and outpatient management techniques are emphasized. Students are expected to attend all departmental rounds and activities and are assigned selected readings from textbooks and journals.
Medical students interested in inpatient internal medicine are assigned to the Internal Medicine Clinical Teaching Unit where they follow inpatient internal medicine patients and become involved with the hospital consultation service. The rotation is particularly appropriate for students interested in a career in general internal medicine.
Students perform medical histories and physical examinations under the supervision of the attending
physician and formulate diagnostic and therapeutic plans. They are expected to participate in all hospital-related rounds and activities, and follow selected readings. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7140 Geriatric Medicine Elective (1-12). Medical students in Geriatric Medicine to include exposure to inpatient services on older person admitted to Sunrise Health and Rehabilitation Center, a skilled nursing facility also in Sunrise and outpatient geriatric assessment at the Cleveland Clinic Florida outpatient department. The curriculum incorporates recommendations made by the American Geriatrics Society, the American College of Physicians, and the Society of General Internal Medicine. The rotation focuses on comprehensive care of the frail and older persons with chronic problems and with acute exacerbations of those problems and usually affecting their functional status. There are also permanent residents of the nursing home that will need health maintenance and evaluation during their rotation. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7161 Obstetrics and Gynecology Elective (1-12). The fourth year clinical electives in the Department of Obstetrics and Gynecology offer the student the opportunity to enhance his/her skills in outpatient diagnosis and management. The student is expected to attend according to the schedule agreed upon with the supervisor, including call duty, rounds, etc. Students with specific learning objectives for their experience should arrange a time to meet with the supervisor to discuss them. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7162 Gynecologic Oncology Elective (1-12). This four week elective is intended for students who have already completed the basic core clerkship in OB/GYN and are interested in enhancing their exposure to the subspecialty of Gynecologic Oncology. The student will be provided experience in the inpatient and outpatient management of patients with pre-malignant and malignant conditions of the genital tract. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7166 Gynecologic Surgery Elective (1-12). This four week course will introduce the student to gynecologic care in the adult female, ranging from routine care to the evaluation and surgical treatment of complex gynecologic conditions. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7180 Perinatology/Maternal Fetal Medicine Elective (1-12). This is a four week clerkship offered in Period 4 which will allow the student to experience the full range of maternal-fetal medicine and to familiarize the student with the diagnosis and management of pregnant patients who have obstetrical, medical or surgical complications. The student will receive experience in ultrasound, genetics and genetic counseling and the management of high-risk obstetrical patients. Students will follow patients on the inpatient antepartum service and participate in the care of high-risk obstetrical patients admitted to the hospital. This course is designed to familiarize students with the diagnosis and management of pregnant patients with obstetrical, medical and surgical complications. Students will have an opportunity to follow patients on the inpatient antepartum service and to
participate in the care of high risk obstetrical patients admitted for labor and delivery. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7201 Advanced Internal Medicine (1-12). The Advanced Internal Medicine rotation is designed to allow fourth year students the opportunity to participate with increased responsibility in the care of patients admitted to the internal medicine/hospitalist service and work closely with the IM-Hospitalist physicians at the respective site. This rotation has a length of 4 weeks and there will be call every fourth night. Students will provide longitudinal care for IM patients assigned to them at the time of consultation from emergency room to patient's discharge and/or transfer. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7204 Hospitalist Service Elective (1-12). The Hospitalist rotation is designed to allow fourth year students the opportunity to participate with increased responsibility in the care of patients admitted to the internal medicine/hospitalist service and work closely with the IM-Hospitalist physicians at the respective site. This rotation has a length of 4 weeks and there will be call every fourth night. Students will provide longitudinal care for IM patients assigned to them at the time of consultation from emergency room to patient's discharge and/or transfer. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7220 Cardiology Elective (1-12). This hospital rotation is offered at MSMC, Baptist Health System, and Cleveland Clinic Florida. The objective is to improve the understanding of the pathophysiology of common cardiovascular diseases, the evaluation of acute and chronic cardiac disorders, appropriate history and physical exam, indications for invasive and non-invasive studies, EKG interpretation, differential diagnosis and first line treatment of prevalent cardiovascular disorders. Emphasis will be placed on prevention. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7245 Pulmonology Elective (1-12). This rotation is intended to prepare students to obtain necessary patient care skills to effectively care for common cardiopulmonary disorders, in a consultation service with some office experience. Depending on the site, students will be part of a team with fellows and residents or will be under the direct supervision of a pulmonary specialist. Objectives include skills in radiological interpretation, and pulmonary function tests interpretation. Prerequisite: Enrolled in HWCOM.
MDE 7250 Dermatology Elective (1-12). This elective course is designed to give the student exposure to clinical dermatology including the diagnosis and management of common skin diseases seen in general practice. Most of the teaching and learning will be accomplished by daily patient care activities at the Greater Miami Skin and laser Center (Mount Sinai Medical Center). To that end, the majority of the time the student will be shadowing faculty members at the clinic. Upon completion of this elective, the student will know the clinical features of the most commonly encountered skin diseases and will be familiar with the modalities available for their management. This elective will be useful to students planning a career in a primary care specialty or dermatology. Prerequisite: Enrolled in College of Medicine.

MDE 7260 Endocrinology Elective (1-12). Students will see patients in the adult out-patient setting as well as inpatient consultation service. Patient seen in consultation will be followed until the consultation is signed off. There will be topic presentations during the week and case discussions. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7270 Gastroenterology/Hepatology Elective (112). This course will consist of a four week rotation which will include inpatient and outpatient gastroenterology and hepatology. Throughout the rotation students will be assuming primary responsibility of patients under the supervision of gastroenterology attendings. The experience will also allow for participation in varied endoscopic procedures such as esophageal manometry, upper and lower endoscopy. During the each week students will participate in pathology and radiology conferences geared to gastroenterology and hepatology cases. The course will concentrate in teaching students how to interpret clinical information and develop therapeutic decision making. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7280 Hematology-Oncology Elective (1-12). This rotation is intended to prepare students to learn a basic approach to evaluation, diagnosis, staging and treatment of patients with blood diseases and cancer, students will improve physical diagnosis skills focused on recognition of disorders, recognition of complications of disease and therapeutic issues. Students will learn concepts of palliative care, end of life and hospice care. The rotation is mainly in patient-consult service with some outpatient exposure. Consults come from medical and surgical services. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7291 Multidisciplinary Oncology Clinical Elective (1-12). The goal of this elective is to introduce the student to the multidisciplinary management of patients with cancer. The program includes the evaluation and management of patients with hematologic malignancies and the disciplines of medical oncology, surgical oncology, and gynecologic oncology. The full spectrum of care also includes programs in cancer survivorship and palliative care. The experience will include outpatient clinics, inpatient rounds/consults, surgery and exposure to clinical trials and clinical research. The students will attend and present at weekly multidisciplinary tumor conferences, attend monthly cancer committees, and participate in monthly journal clubs. The opportunity to participate in clinical research will be made available to interested students. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7301 Allergy and Clinical Immunology Elective (1-12). Students actively participate in all outpatient clinics to ensure a broad and comprehensive experience. Where pertinent to our training goals, students will also have the opportunity to evaluate inpatients. There will be no night call or weekend call. Emphasis will be placed on historytaking and the physical examination. Students will develop basic skills in the evaluation of and interpretation of immunological studies performed on blood specimens, pertinent imaging studies, pulmonary function testing and allergy skin testing. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.

MDE 7310 Rheumatology Elective (1-12). This four week rotation will include office and hospital consultation is offered at the private practice of doctors that is affiliated with the Baptist Health System, and Cleveland Clinic Florida. The objective is to improve the understanding of the pathophysiology, clinical presentation, differential diagnosis and treatment of common rheumatologic disorders including the evaluation of soft tissue rheumatism, acute and chronic arthritis, autoimmune connective tissue disorders, and indications for technique of arthrocentesis and tendon injections. Students will also learn the interpretation of the most common laboratory tests used in rheumatic conditions. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7320 Infectious Disease Elective (1-12). This four week elective rotation is intended to prepare students to obtain under direct supervision of an infectious disease faculty the necessary diagnostic and therapeutic skills to effectively care for in patients with infectious disorders from the surgical, transplant, intensive care, OB/GYN, hematologic/oncologic and general medicine services, in a Community Hospital (Baptist Health System). Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7328 Clinical Virology Elective (1-12). This rotation is an in-patient and out-patient two week course at Jackson North Medical Center and a laboratory experience at the State of Florida Department of Health virology testing laboratory. The inpatient experience will focus on the opportunistic infections requiring hospitalization as a consequence of advanced HIV Disease. The out-patient experience will focus on the diagnosis and treatment of patients with common viral diseases, primarily Hepatitis B, Hepatitis C, Herpes simplex-type II and HIV. The State of Florida Department of Health Virology lab will allow students to see how virologic tests are performed for influenza using molecular techniques as well as other virologic serologic testing for viral and bacterial pathogens. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7340 Intensive Care Unit Elective (1-12). This rotation is intended to prepare students to obtain necessary diagnostic and therapeutic skills to effectively care for patients diagnosed with critical medical disorders. The student will work under direct the supervision of the ICU attending in the case of the Baptist Health System or as a member of a teaching team under the supervision of the attending, pulmonary/critical care fellow and IM residents. Students will assist in the admission, evaluation, and management of patients admitted to the Medical Intensive Care Unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7350 Nephrology Elective (1-12). This may be offered as a 2 week or 4 week elective. It offers students the opportunity to learn about the diseases of the kidney and become more skilled in their management. Students will participate in the care of patients with medical renal disease that are seen in the office and also on the renal consult service. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7400 Pediatric Hospitalist Services Elective (112). Medical students will examine patients admitted to the Inpatient Hospitalist Services, write daily entries into the medical record, develop plans for care, enter orders into
the medical record, make daily rounds on all patients, assist and observe the management of patients admitted to the hospitalist service. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows of the Hospitalist Service. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7401 Inpatient Pediatrics Elective (1-12). Taking a history and performing the physical exam remain the basic tools of the physician. Developing a differential and working diagnosis are the next essential steps. Finally, the plan for further work-up and treatment culminate the skills which are necessary. Miami Children's Hospital has organized a program for medical students to expand their practical knowledge of pediatrics. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7404 Pediatric Ambulatory Services Elective (112). The student, under direct physician supervision, will participate in the diagnosis and treatment plan for emergency and outpatient cases. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7405 Advanced Pediatric Medicine (1-12). Medical students will examine patients admitted to the Inpatient Hospitalist Services, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients admitted to the hospitalist service. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows of the Hospitalist Service. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7420 Pediatric Cardiology Elective (1-12). Medical students will examine patients admitted to the hospital, make daily rounds on all patients on the cardiologist's service, assist and observe the management of cardiac patients in an outpatient setting. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7422 Pediatric Cardiovascular Surgery Elective (1-12). Medical students will examine patients admitted to the Cardiovascular Surgery service, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients in an cardiac intensive care setting. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows of the Cardiovascular Surgery. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7425 Pediatric Pulmonology Elective (1-12). The medical students will develop a close relationship with the Division of Pediatric Pulmonology and the Respiratory Therapy Department. Students will be exposed to the importance and value of pulmonary function testing in the diagnosis and follow-up of acute and chronic pulmonary problems, interpretation of blood gases, and the assessment and management of patients seen in the division. Special emphasis will be placed on the understand by the student of the interpretation of blood gases in the presence of different medical problems and the pathophysiology of pulmonary diseases. Emphasis in clinical aspects of asthma, BPD, Cystic Fibrosis will be
implemented. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7430 Pediatric Endocrinology Elective (1-12). The student, under direct physician supervision, will participate in clinics, inpatient, and private patient care in the area of endocrinology. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7433 Pediatric Gastroenterology Elective (1-12). Medical students and resident will perform routine histories and physical examinations on all gastroenterology patients with emphasis on clinical diagnosis and treatment. They will also participate in endoscopic procedures and will be expected to have an active role in the management of G.I. patients in both inpatient and outpatient settings. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7438 Pediatric Genetics Elective (1-12). The student will participate in the evaluation and management of children with metabolic/genetic disorders of those children suspected of having such disorders. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7440 Pediatric Hematology Elective (1-12). The medical student will evaluate and follow hematology and oncology patients, including both clinic and hospitalized patients, and will attend educational conferences in-house. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7445 Pediatric Nephrology Elective (1-12). Students will participate in the evaluation and management of children with renal diseases. They will do so by performing history and physical examination, evaluating the laboratory data obtained, and formulating a therapeutic plan once all the data is analyzed. A second portion of this elective will consist of the active participation at conferences in which the pathology of the patients will be discussed. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7450 Pediatric Allergy and Clinical Immunology Elective (1-12). The student, under direct supervision, will participate in clinics and private patient care in the area of allergy and immunology. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7454 Pediatric Infectious Disease Elective (1-12). Medical students will examine patients in the outpatient infectious disease setting and all patients admitted to the Pediatric Infectious Diseases team, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7456 Pediatric Rheumatology Elective (1-12). Students, under direct supervision, will participate in the evaluation and management of patients with rheumatologic disorders. During this rotation, students will be exposed to the wide spectrum of rheumatologic disorders of infancy, childhood and adolescence, from Systemic Lupus Erthematosus and Juvenile Arthritis to the still ill-defined Vasculitis. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7460 Pediatric Neonatology Elective (1-12). Medical students will examine patients admitted to the Pediatric Neonatology Unit, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients in an neonatal intensive care setting. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, and residents of the Neonatology Unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7462 Pediatric Intensive Care Elective (1-12). Medical students will examine patients admitted to the Pediatric Intensive Care Unit, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients in an intensive care setting. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows of the Pediatric Intensive Care Unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7470 Pediatric Neurology Elective (1-12). The medical student will perform histories and physical examinations on patients with neurological problems, develop diagnostic and treatment plans, and discuss them in detail with a faculty member. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7490 Pediatric Surgery Elective (1-12). The goals of this rotation include:

1. Understand the unique anatomic, physiologic, metabolic issues in infants, children, and adolescents with surgical problems.
2. Gain hands-on instruction in the in-patient management of surgical patients in the NICU, PICU, and general units.
3. Develop expertise in the use of the hospital information systems and libraries.
4. Gain hands-on instruction and experience in the conduct of a pre and postoperative surgical clinic. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7492 Advanced Pediatric Surgery (1-12). The Advanced Clerkship in Pediatric Surgery combines inpatient, emergency, and out-patient experiences. The student will be exposed to all necessary competencies including interpersonal skills, professionalism, practice and systems based learning, patient care, and medical knowledge.
The goals of this rotation include:

1. Understand the unique anatomic, physiologic, metabolic issues in infants, children, and adolescents with surgical problems.
2. Gain hands-on instruction in the in-patient management of surgical patients in the NICU, PICU, and general units.
3. Develop expertise in the use of the hospital information systems and libraries.
4. Gain hands-on instruction and experience in the conduct of a pre and postoperative surgical clinic.
Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7494 Pediatric Orthopedic Surgery Elective (112). The section of Orthopedics will present to the fourth year student a comprehensive outline of the spectrum of
orthopedic surgery as practiced in a community hospital. The student will be involved in an intensive inpatient experience and will have increased responsibility, involving primary workup of new patients and writing orders. The student will also perform procedures such as evaluating patients, taking an orthopedic history, and performing a physical examination of the musculoskeletal system. The student should improve his or her ability to manage complex patient presentations, including diagnosing and treating common adult orthopedic problems. The student should develop advanced skills in fracture treatment and cast application. He or she should be involved in joint replacement surgery and management of postoperative adult orthopedic patients. The student will participate in daily care, take night call, write notes, and dictate discharge summaries. The student may be involved in the management of orthopedic trauma and is expected to participate with the orthopedic surgery team in the diagnosis, surgical treatment, and postoperative management of orthopedic trauma patients. The student will participate directly with patients in the emergency department, operating room intensive care unit, and the orthopedic unit. Prerequisite: Enrolled in College of Medicine.
MDE 7497 Pediatric Urology Elective (1-12). Medical students will examine outpatients seen in urology clinics and all patients admitted to the Urology service of Miami Children's Hospital. Students will write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows of the Urology service. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7500 Pediatric Dermatology Elective (1-12). Medical students will observe the diagnosis and treatment of dermatologic problems in the weekly Dermatology Clinic. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7505 Pediatric Emergency Medicine Elective (112). Medical students will examine and evaluate patients presenting to the Pediatric Emergency Medicine. Students are expected to make entries into the electronic medical record, develop plans for care, and enter orders. Students will participate in all academic activities, including simulation training, provided to the Pediatric Emergency Medicine fellows. Students are required to attend the monthly Trauma Services lecture. Students are expected to expand their knowledge of Pediatric Emergency Medicine with a focus on acute airway management, acute evaluation of the pediatric trauma patient, evaluation of the pediatric acute abdomen, fever in children, and the management of minor soft tissue injuries. Skills and knowledge will e acquired through directed readings, patient care, and simulation scenarios. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7531 Anatomic and Clinical Pathology Elective (1-12). This elective will provide an introduction and overview to the practice of pathology and is aimed at the student who may be considering pathology as a career but is as of yet undecided. The student will be exposed to anatomic pathology (surgical, autopsy and cytopathology)
and clinical pathology, (clinical chemistry, hematology, microbiology and transfusion medicine). Molecular pathology will also be touched upon. The student will have access to the entire laboratory but will spend the most time in sign-out sessions and clinical conferences with the attending pathologists and residents. The student will learn pathology but will also experience what a career in pathology is like in a cordial setting surrounded by enthusiastic physicians. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7537 Pediatric Pathology Elective (1-12). This elective will allow the student to become familiar with, observe, and participate in the daily activities in the pediatric pathology department of a large tertiary care Children's Hospital. Students will be exposed to both anatomic pathology and clinical laboratory medicine with emphasis on neonatal and pediatric disease processes. They will also gain an appreciation of performance of laboratory tests and their interpretation, quality control and cost-effectiveness. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7550 Ophthalmology Elective (1-12). The fourth year clinical rotation in ophthalmology will provide students with a more focused and in-depth experience in the evaluation, diagnosis, and management of ophthalmic conditions. Students will spend substantial time in clinic and the operating room in general ophthalmology or their ophthalmologic subspecialty of interest. They will be able to do independent patient work-up with the use of the slit lamp and other diagnostic tests, and then will be expected to interpret and present their findings and suggested clinical management to the attending physician. They will also have the opportunity to perform research in a preferred area of interest.

## Rotation Goals:

1. Take appropriate patient history with respect to ophthalmic conditions.
2. Perform thorough ophthalmologic evaluation including : the 8 point physical exam, proper use of slit lamp for evaluation of the anterior structures of the eye, as well as, other more advanced subspecialty specific examination techniques. Additional emphasis will be placed on the interpretation of more sophisticated subspecialty specific diagnostic modalities, such as ocular coherence tomography (OCT), fluorescein angiography, computerized visual field testing, corneal topography, ocular echography, etc.
3. Learn the diagnosis and management of the most common general ophthalmic, and/or subspecialty ophthalmologic morbidities.
4. Acquire more in depth knowledge of surgical techniques used by the different sub-specialists, also noting the most common complications and how they are managed. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7570 Orthopedic Surgery Elective (1-12). The section of Orthopedics will present to the student a comprehensive outline of the spectrum of orthopedic surgery as practiced in a community hospital. The student will be involved in an intensive in-patient experience and will have significantly increased responsibility, involving primary workup of new patients and writing orders. The student will also perform procedures such as evaluating patients, taking an orthopedic history, and performing a
physical examination of the musculoskeletal system. The student should improve his or her ability to manage complex patient presentations, including diagnosing and treating common adult orthopedic problems. The student should develop advanced skills in fracture treatment and cast application. He or she should be involved in joint replacement surgery and management of postoperative adult orthopedic patients. The student will participate in daily care, take night call, write notes, and dictate discharge summaries. The student may be involved in the management of orthopedic trauma and is expected to participate with the orthopedic surgery team in the diagnosis, surgical treatment, and postoperative management of orthopedic trauma patients. The student will participate directly with patients in the emergency department, operating room intensive care unit, and the orthopedic unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7580 Physical Medicine and Rehabilitation Elective (1-12). This 4 -week elective offers the student experience in the diagnosis and management of patients with a variety of neuro-muscular diagnoses such as stroke, spinal cord injury, traumatic brain injury, and neuro-degenerative disorders such as multiple sclerosis. Students may treat patient with musculo-skeletal disorders such as amputation, total hip arthroplasty, total knee arthroplasty, and multiple trauma victims. They will attend physical, occupational, and speech therapy sessions with their patients to learn the daily process of rehabilitation. They will learn to perform accurate functional assessments of patients, establish a plan of care for those patients, provide accurate estimates of goals of the admission, as well as length of stay. They will learn comprehensive discharge planning for a newly disabled individual, students are encourage to accompany the therapy team into the patient's home to prepare for independent living after hospitalization when the opportunity is available. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.

MDE 7590 Oral and Maxillofacial Surgery Elective (112). This elective is an opportunity for the medical student to expand their knowledge in anatomy and physiology of the oral cavity, maxillofacial region, the neck and their adnexal structures to the extent of being capable of recognizing abnormal findings. The student will also learn about the surgical management of oral and head and neck pathology and the correction of congenital and traumatic deformities. Acute trauma care is a major component of this service. The student will have some responsibility for inpatient care each week and participate in rounds. Students will have the opportunity to perform minor procedures in the hospital clinic, as well as the emergency room. Operating room activity is encouraged. All activities are supervised by the chief resident and full time attendings. Management decisions are made only after being discussed with the resident and attending. The student will participate in the academic program. This will include lectures, conferences and clinical activities in the clinic, inpatient, operating room, outpatient sedation and emergency room settings. The student will advance his/her skills in history taking as well as physical and regional examination. Furthermore, the student will observe and participate in surgical procedures involving oral and maxillofacial pathology, infections, major hard and soft tissue trauma, reconstruction and dento-
craniofacial deformities. The student is also able to participate in on-call activities if he/she desires. Upon completion, the student will have a better understanding of the relationship of the oral cavity, the maxillofacial region and the total patient. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7592 Otolaryngology/ENT Elective (1-12). This clinical elective exposes fourth year medical students to the surgical subspecialty of Otolaryngology-Head and Neck Surgery, also known as Ear, Nose and Throat (ENT). Medical students work directly with resident and attending physicians in the operating room, inpatient setting, and outpatient clinic caring for patients with a variety of medical and surgical diseases affecting the head and neck region. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7600 General Surgery Elective (1-12). The student works directly with general and vascular surgeons. During the rotation, the student is exposed to all phases of patient care, including outpatient clinic, operating room and hospital. Emphasis will be placed on initial assessment, physical examination and preoperative evaluation. When appropriate, the student follows individual patients whose cases are particularly instructive. Supplemental reading for such cases is encouraged. While no formal projects are required, ample opportunity exists for independent projects as dictated by the student's special interests. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7601 Advanced General Surgery (1-12). In this Advanced Clerkship, the student works directly with general and other subspecialty surgeons. During the rotation, the student is exposed to all phases of patient care, including outpatient clinic, operating room and hospital. Emphasis will be placed on initial assessment, physical examination and preoperative evaluation. When appropriate, the student follows individual patients whose cases are particularly instructive. Supplemental reading for such cases is encouraged. While no formal projects are required, ample opportunity exists for independent projects as dictated by the student's special interests. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

## MDE 7604 Global/International Rural Surgery Elective

 (1-12). This four week rotation in Trujillo, Peru (northwest of Lima on Pacific Coast), will provide the student who is already committed to a surgical career, an intense experience functioning at an advanced level under direct supervision of Dr. Richard A. Lynn, Associate Professor of Surgery, and the attending General, Vascular, Thoracic, and Trauma surgeons at Hospital Regional Docente de Trujillo, with whom excellent collegial relationships have already been established with Dr. Lynn, after his last mission trip there. There will be enormous opportunities to experience surgical pathologies not usually seen in Miami, as well as procedures typically not performed regularly (open surgery-without the luxuries of staplers, disposables, etc.). The student will function at the level of an intern (under supervision). For the student electing to participate, it is assumed to be a given as to the dedication, interest, motivation, and desire to acquire as much surgical patient care exposure as possible. This includes preoperative, intra-operative (1st and 2nd assisting in the operating theatre) and postoperative carewith graded responsibility leading to virtual initial independent decision-making (with formal, structured supervision). Prerequisite: Enrolled in the College of Medicine.

MDE 7605 Vascular Surgery Elective (1-12). The goal of the rotation is to provide students with a thorough understanding of the diseases of the peripheral vascular systems - arterial, venous, and lymphatic. Those considering a career in vascular surgery can gauge if the specialty meets their interests and skills while those planning to choose other fields can learn more than enough to know when referral to a vascular surgeon is appropriate. Students will work with our vascular surgeons in the office, hospital wards, operating room, interventional suite, and wound center to learn the about the diagnosis and management of the full spectrum of vascular diseases. They will be exposed to patients with carotid artery disease, aortic and peripheral artery aneurysms, peripheral artery occlusive disease, dialysis access needs, venous thrombosis, varicose veins, and chronic wounds. They will be able to assist in open surgeries and in balloon angioplasty/stent procedures. There will also be opportunities for clinical research if desired. There will be no night or weekend call. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7632 Cardiothoracic Surgery Elective (1-12). The goal is to allow fourth year medical students with a special interest in Cardiothoracic Surgery, the opportunity to become more familiar with the pathophysiology and clinical presentation of the most common cardiothoracic diseases. It is expected that the Medical Student will be part of the Cardiothoracic Surgical team involved in the daily routine including the operating room, the cardiothoracic intensive care unit and floor. Some exposure to catheter based therapy in the hemodynamics room (cath lab) will also be included. The current trend is to have two separate pathways, one for cardiac and one for thoracic. However, because of the short duration on the service both pathways will be integrated. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7640 Bariatric and Minimally Invasive Surgery Elective (1-12). This 4 -week rotation will give the student exposure to surgical treatments for morbid obesity and the use of minimally invasive surgery in a number of conditions affecting the GI tract, abdominal wall, endocrine glands and spine. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7645 Surgical Oncology Elective (1-12). The goal of this elective is to introduce the student to the surgeon's role in the multidisciplinary management of patients with cancer. The program includes the evaluation and management of patients with malignant and benign solid tumors and their surgical management. The full spectrum of care includes medical oncology, radiation oncology and nuclear oncology. The experience will include outpatient clinics, in-patient rounds/consults, surgery and exposure to clinical trials and clinical research. The students will attend and present at weekly multidisciplinary tumor conferences, attend cancer committees, and participate in monthly journal clubs. The opportunity to participate in clinical research will be made available to interested students. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.

MDE 7650 Neurosurgery/Neuroscience Elective (1-12). This one month elective neurosurgical clerkship will assign interested students to faculty neurosurgeons at one of our affiliated facilities. This rotation presents the student the broad-spectrum of neurosurgical conditions and procedures encountered in a tertiary hospital setting. Each student will receive a syllabus at the beginning of the rotation that covers the fundamentals of neurosurgery for undergraduate medical education. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7660 Plastic and Reconstructive Surgery Elective (1-12). The elective rotation in plastic surgery is a four (4) week clerkship designed to expose the student to a wide variety of clinical problems and techniques commonly encountered in the field of plastic surgery. The student will be exposed to all subspecialties in plastic surgery, including general reconstructive surgery, pediatric/craniofacial surgery, hand surgery, and aesthetic surgery. Students will rotate through several offices/hospitals during the rotation and will be expected to participate in pre-and post-operative office visits, hospital visits, and surgeries. The student will gain exposure to both in-patient and out-patient plastic surgery practices. In addition, the student will be expected to master wound closure techniques and other basic plastic surgery technical skills. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7661 Breast Surgery Elective (1-12). This fourth year medical student clinical rotation focuses exclusively on the clinical management of benign and malignant breast diseases. The student will become proficient in taking a history, performing a breast examination, and differential diagnosis in breast patients. There will be direct one-on-one supervision by attending surgeon. The student will learn about the surgical management of breast cancer and the integration of other modalities in its overall management. The student will have some responsibility for inpatient care and will have the opportunity to be first assistant in the operating room. There will be weekly didactic sessions with the attending physician. We will discuss the most important aspects of breast cancer including biology, diagnostics, prevention, and treatment. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7675 Urology Elective (1-12). In this elective, the student will acquire knowledge of Urology and Urologic Anatomy; develop an understanding and ability of how to perform a urologic history and physical exam; interview and present patients; learn proper technique for Foley Catheterization, observe the use of a flexible cystoscope, observe transrectal ultrasound and prostate biopsy; develop an understanding of emergent urologic issues as well as common urologic issues with an emphasis on the acute scrotum, urinary tract infections, urinary stones, incontinence, benign prostatic hyperplasia, erectile dysfunction, hematuria and prostate cancer/PSA testing by both didactic and practice based learning; develop an understanding of common Urologic malignancies and treatments possible; develop an understanding of kidney stones and the treatments possible; develop an understanding of a spectrum of urologic procedures/surgeries by observation and participation; develop an understanding of peri-operative urologic issues of both urologic and non-urologic patients via inpatient
encounters and/or management and participate in their care; and develop an understanding of the role of a Urologist in the care of both male and female patients and when an appropriate referral should be made (emergent or routine). Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7676 Colorectal Surgery Elective (1-12). This 4week rotation will introduce the patient to the diagnosis and management of disorders affecting the colon and rectum including conditions such as Crohn's disease, Ulcerative colitis, familial polyposis, colorectal cancer and disorders of evacuation. Students will work with a team of five staff surgeons and five clinical residents. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7682 Trauma Surgery Elective (1-12). This elective provides the 4th year medical student experience in the evaluation and treatment of the patient with severe trauma from admission in the ER through the postoperative and postoperative periods. The student will be initially involved in the assessment and stabilization of the patient in the Trauma Room in the ER and will then be involved in the preoperative management, intraoperative treatment and postoperative recovery of the patient. Students will be exposed to emergency interpretation of imaging and diagnostic studies, ventilatory management, invasive monitoring procedures and interventional procedures such as chest tube insertion, thoracentesis and paracentesis. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.

MDE 7700 Anesthesiology Elective (1-12). This rotation will allow the student supervised hands-on participation of patients in the preoperative evaluation, creation of anesthesia plan, intravenous line placement, induction of general anesthesia and airway management, monitoring of anesthesia, emergence and postoperative care. The student will also be involved in the placement of regional blocks. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7701 Pediatric Anesthesiology Elective (1-12). This rotation will allow the student supervised hands-on participation in the preoperative evaluation, creation of anesthesia plan, intravenous line placement, induction of general anesthesia and airway management, monitoring of anesthesia, emergence and postoperative care in pediatric patients. The student may also be involved in the placement of regional blocks. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7710 Emergency Medicine Elective (1-12). This rotation is intended to make the student familiar with the wide range of clinical conditions, minor to major which are responsible for the patient seeking care at an Emergency Room. The student will practice skills in the recognition and management of acute life-threatening conditions and exacerbation of serious disease in a strictly supervised setting. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7763 Diagnostic Radiology Elective (1-12). This rotation is intended to give students an introduction to the basics of diagnostic imaging, the appropriate choice of imaging method for given clinical problems and the sideeffects and risks associated with each. Students will become familiar with imaging findings in common clinical condition. The rotation will involve online modules, small
group sessions and 'virtual' and real reading room sessions. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7765 Interventional Radiology Elective (1-12). This rotation is intended to give students an introduction to the basics of Interventional Radiology and see the role of the modality in the management of medical and surgical problems. Students will participate in the workup, treatment and follow-up of patients undergoing interventional radiology procedures. Students will also gain experience in the interpretation of radiologic imaging such as Ultrasound, CT and MRI. Prerequisite: Enrolled in College of Medicine.

MDE 7769 Pediatric Radiology Elective (1-12). This elective may be taken as a 2-week or as a 4-week elective by prior arrangement. The student will spend time in the various reading rooms in Miami Children's Hospital as follows:
Week 1 - Plain films
Week 2 - Ultrasound
Week 3 - Fluoroscopy/procedures/nuclear medicine
Week 4 - Cross-sectional imaging (CT/MRI)
For a 2-week elective:
Week 1 Plain Films/Nuclear Medicine
Week 2 Cross-sectional imaging (CT/MRI/Ultrasound)
Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7780 Radiation Oncology Elective (1-12). This rotation will provide the student with supervised participation in the care of radiation oncology patients. This will include the diagnostic / clinical evaluation of the patient's disease and the development of treatment plans for patients that require radiation therapy in their cancer management. They will be shown different management options and what the most adequate timing for the procedures. The student will participate in the assessment planning and diagnostic work up. They will review basic medical physics, as well as, principals of Oncology, Radiosurgery and Brachytherapy. They will contribute personalized care of cancer management that is practiced at the Innovative Cancer Institute. They will be exposed to state of the art radiation oncology equipment. During the planning phase, they will be shown the use of CT imaging with plain and contrast-enhanced techniques for therapy planning and positioning of the patient for radiation treatment. They will be exposed to the management of the most common tumors seen in our community, including: breast, prostate, lung, GI, skin and head and neck cancer. Our practice includes a large number of benign and malignant tumors of the brain and spine. The acquired knowledge by the graduating class about the radiation oncology field will result in greater understanding of this specialty and hopefully will improve the outcome for the patient and the overall community. Early diagnosis and prevention of cancer will be greatly emphasized. Radiation oncology is a multidisciplinary specialty that requires interaction with multiple other specialties, and this will be emphasized. We will also introduce the student to the relatively new specialty of palliative care and the trend of integrative medicine in the overall care of the patient. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7800 Neurology Elective (1-12). A one month elective neurology clerkship that can be tailored to the
student's needs. In-patient and out-patient experiences will be available in addition to simulations and neuro-anatomy lab. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7820 Pain Management Elective (1-12). Students will rotate in an ambulatory setting at a pain management practice under the direct supervision of the attending. This rotation will provide them with exposure to the evaluation and management of acute and chronic pain including: Upper and lower back pain; Chronic arthritis; Disk disease; Radicular and; neuropathic pain syndromes; Pain associated with malignancy. Students will get an understanding of common procedures used in pain management: Local anesthesia; Joint injections; Epidural injections; Peripheral nerve block; Trigger point injections. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7843 Community Psychiatry Elective (1-12). The course allows Period 4 medical students to refine the skills they acquired in the Period 3 Psychiatry Clerkship through further inpatient, outpatient and emergency psychiatry experiences. These skills include psychiatric interviewing, diagnostic reasoning, and treatment planning. Students will participate in the initial assessment of patients presenting for admission and will follow inpatients throughout their hospital stay. The Elective is 2 weeks or 4 weeks long. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7862 Adult Inpatient Psychiatry Elective (1-12). The course allows Period 4 medical students to refine the skills they acquired in the Period 3 Psychiatry Clerkship through further inpatient and emergency psychiatry experiences. These skills include psychiatric interviewing, diagnostic reasoning, and treatment planning. Students will participate in the initial assessment of patients presenting for admission and will follow inpatients throughout their hospital stay. The Elective is 2 weeks or 4 weeks long. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7871 Child Inpatient Psychiatry Elective (1-12). The course exposes Period 4 medical students to child and adolescent psychiatry in a hospital setting and allows them to refine the skills they acquired in the Period 3 Psychiatry Clerkship through further inpatient and emergency psychiatry experiences. These skills include psychiatric interviewing, diagnostic reasoning, and treatment planning. Students will participate in the initial assessment of patients presenting for admission and will follow inpatients throughout their hospital stay. The Elective is 2 weeks or 4 weeks long. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDE 7880 Forensic Psychiatry Elective (1-12). The course exposes interested Period 4 medical students to the interactions between the psychiatric and legal systems by providing the opportunity to rotate in a forensic psychiatric hospital. Students will learn the clinical, legal and ethical issues at the interface between psychiatry and the law and will refine the skills they acquired in the Period 3 Psychiatry Clerkship through further inpatient and assessment experiences. These skills include psychiatric interviewing, diagnostic reasoning, and treatment planning. Students will participate in the initial assessment of patients presenting for admission and will follow
inpatients throughout their hospital stay. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDE 7883 Geriatric Psychiatry Elective (1-12). The course exposes interested Period 4 medical students to the practice of geriatric psychiatry. Students will refine the skills they acquired in the Period 3 Psychiatry Clerkship through further inpatient and assessment experiences. These skills include psychiatric interviewing, diagnostic reasoning, and treatment planning. Students will participate in the initial assessment of patients presenting for admission and will follow inpatients throughout their hospital stay. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDE 7930 Anatomy Elective (1-12). This four week anatomy elective clerkship will allow students the opportunity to gain a deeper insight into human anatomy and develop the skills and knowledge required for surgical internships and subspecialties. This will allow the students to develop an understanding of the anatomical basis of successful surgical interventions and the risks involved. The student will under the direct supervision of faculty anatomists and clinicians. They will perform dissections of all relevant body regions in groups of 4-6 students. The students will make sure that the Anatomical structures listed in dissection protocol objectives (SLO) are preserved. Moreover, they will assist in the laboratory teaching sessions of the courses "Structure of the Human Body" and "Musculoskeletal Anatomy for Physiotherapy Students". Prerequisite: Enrolled in HWCOM.
MDI 7122 Family Medicine Subinternship (1-12). The rotation is intended to prepare students to provide care for a variety of common presenting problems at the intern level in both the inpatient and outpatient setting. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDI 7200 Internal Medicine Subinternship (1-12). This rotation is intended to prepare students to effectively care for medical conditions commonly encountered during inpatient rotations including ward emergency scenarios. This rotation will provide necessary skills to be successful during their first year of post-graduate education. The subintern will fulfill clinical and academic responsibilities as an integral team member of an inpatient medical service. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDI 7340 ICU Subinternship (1-12). This rotation is intended to prepare students to obtain necessary diagnostic and therapeutic skills to effectively care for patients diagnosed with critical medical disorders. The subintern student will work in a team under the direct supervision of a pulmonary/critical care fellow and a senior resident in the role an intern. Students will assist in the admission, evaluation, and management of patients admitted to the Medical Intensive Care Unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDI 7341 Acute Coronary Care (CCU/CICU) Subinternship (1-12). This rotation is intended to prepare students to obtain necessary diagnostic and therapeutic skills to effectively care for patients diagnosed with critical cardiac disorders. Students will become an integral part of the CICU team consisting of cardiology attending, fellows, internal medicine residents and interns. Students will assist in the admission, evaluation, and management of
patients admitted to the CICU. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDI 7400 Pediatric Medicine Subinternship (1-12). Medical students rotating in the Pediatric Medicine Subinternship will examine patients admitted to the Inpatient Hospitalist Services, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients admitted to the hospitalist service. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows of the Hospitalist Service. The subinternship gives the student increased responsibility for decisions made for the total care of the patient. In general, the student would be expected to function more nearly as an intern than as a third year student. During the subinternship, the student will be exposed to all necessary competencies including interpersonal skills, professionalism, practice and systems based learning, patient care, and medical knowledge. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDI 7463 Pediatric Intensive Care Subinternship (112). Students rotating through the Pediatric Intensive Care Subinternship at Miami Children's Hospital will have a unique opportunity to learn about the pathophysiology, pharmacology, social aspects, and clinical skills found in a world class Pediatric Intensive Care Unit. The faculty, fellows, residents, and staff hope that the student will utilize this experience to further their knowledge of the critical care of children and to see how family centered care in all fields of medicine contribute to an improved overall medical environment. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDI 7480 Pediatric Orthopedic Surgery Subinternship (1-12). The section of Orthopedics will present to the subintern a comprehensive outline of the spectrum of orthopedic surgery as practiced in a community hospital. The subintern will be involved in an intensive in-patient experience and will have significantly increased responsibility, involving primary workup of new patients and writing orders. The subintern will also perform procedures such as evaluating patients, taking an orthopedic history, and performing a physical examination of the musculoskeletal system. The subintern should improve his or her ability to manage complex patient presentations, including diagnosing and treating common adult orthopedic problems. The subintern should develop advanced skills in fracture treatment and cast application. He or she should be involved in joint replacement surgery and management of postoperative adult orthopedic patients. The subintern will participate in daily care, take night call, write notes, and dictate discharge summaries. The subintern may be involved in the management of orthopedic trauma and is expected to participate with the orthopedic surgery team in the diagnosis, surgical treatment, and postoperative management of orthopedic trauma patients. The subintern will participate directly with patients in the emergency department, operating room intensive care unit, and the orthopedic unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDI 7490 Pediatric Surgery Subinternship (1-12). The subinternship, combining in-patient, emergency, and outpatient experiences, gives the student increased
responsibility for decisions made for the total care of the patient. In general, the student would be expected to function more nearly as an intern than as a third year student. During the subinternship, the student will be exposed to all necessary competencies including interpersonal skills, professionalism, practice and systems based learning, patient care, and medical knowledge.
The goals of this rotation include:

1. Understand the unique anatomic, physiologic, metabolic issues in infants, children, and adolescents with surgical problems.
2. Gain hands-on instruction in the in-patient management of surgical patients in the NICU, PICU, and general units.
3. Develop expertise in the use of the hospital information systems and libraries.
4. Gain hands-on instruction and experience in the conduct of a pre and postoperative surgical clinic. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDI 7570 Orthopedic Surgery Subinternship (1-12). The section of Orthopedics will present to the student a comprehensive outline of the spectrum of orthopedic surgery as practiced in a community hospital. The student will be involved in an intensive inpatient experience and will have significantly increased responsibility, involving primary workup of new patients and writing orders. The student will also perform procedures such as evaluating patients, taking an orthopedic history, and performing a physical examination of the musculoskeletal system. The student should improve his or her ability to manage complex patient presentations, including diagnosing and treating common adult orthopedic problems. The student should develop advanced skills in fracture treatment and cast application. He or she should be involved in joint replacement surgery and management of postoperative adult orthopedic patients. The student will participate in daily care, take night call, write notes, and dictate discharge summaries. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.

MDI 7600 General Surgery Subinternship (1-12). This course is designed for students who desire to obtain a greater in-depth experience in general surgery or who are seriously considering surgery as a possible career choice. It serves as exploratory path for a planned career in general surgery or other surgical sub-specialties. In this role, the subintern will have more responsibilities than of a clerkship student. The student will, in general, function as a junior intern and will be given responsibility commensurate with his/her background and ability. The students will examine patients, assist in surgery, participate in post-operative care and will also be encouraged to develop their clinical and technical skills. The student will be expected to participate in all of the educational activities of the Department of Surgery during the course of his/her clerkship. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDI 7620 Cardiothoracic Surgery Subinternship (1-12). The goal is to allow fourth year medical students with a special interest in Cardiothoracic Surgery, the opportunity to become more familiar with the pathophysiology and clinical presentation of the most common cardiothoracic diseases. It is expected that the Medical Student will be part of the Cardiothoracic Surgical team and assume the role of a subintern involved in the daily routine including
the operating room, the cardiothoracic intensive care unit and floor. Some exposure to catheter based therapy in the hemodynamics room (cath lab) will also be included. The current trend is to have two separate pathways, one for cardiac and one for thoracic. However, because of the short duration on the service both pathways will be integrated. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDI 7660 Plastic and Reconstructive Surgery Subinternship (1-12). The subinternship rotation in plastic surgery is a four (4) week clerkship designed to provide the student to with advanced exposure to the clinical problems and techniques commonly encountered in the field of plastic surgery. The student will be exposed to a specific area of interest within the field of plastic surgery. The goal is to prepare the student for an internship/residency in the field of plastic surgery. A student may choose to focus on pediatric plastic surgery, hand surgery, general reconstructive surgery, or aesthetic surgery. Students will rotate through a single setting during the rotation and will develop working relationships with the surgical preceptor. The student is expected to participate in pre-and post-operative office visits, hospital visits, and surgeries. In addition, the student will be expected to master further advance their basic plastic surgery technical skills. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDI 7674 Urology Subinternship (1-12). In this rotation, the student will acquire knowledge of Urology and Urologic Anatomy; develop an understanding and ability of how to perform a urologic history and physical exam; interview and present patients; learn proper technique for Foley Catheterization, observe the use of a flexible cystoscope, observe transrectal ultrasound and prostate biopsy; develop an understanding of emergent urologic issues as well as common urologic issues with an emphasis on the acute scrotum, urinary tract infections, urinary stones, incontinence, benign prostatic hyperplasia, erectile dysfunction, hematuria and prostate cancer/PSA testing by both didactic and practice based learning; develop an understanding of common Urologic malignancies and treatments possible; develop an understanding of kidney stones and the treatments possible; develop an understanding of a spectrum of urologic procedures/surgeries by observation and participation; develop an understanding of peri-operative urologic issues of both urologic and non-urologic patients via inpatient encounters and/or management and participate in their care; and develop an understanding of the role of a Urologist in the care of both male and female patients and when an appropriate referral should be made (emergent or routine). The student will also learn to function as a supervised member of the urologic team, interacting with faculty and resident staff and participating in urologic clinics and in the operating room. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDI 7680 Trauma/Acute Care Surgery Subinternship (1-12). The The Trauma/Acute Care Surgery subinternship is intended to provide the student with in-depth knowledge of patient care as it relates to trauma and non-trauma emergency surgical diseases. The student is expected to function at the level of a junior resident and be on the scene for first-line evaluation and management of patients in the emergency room. In addition, it is expected that the
student maintains close follow-up of the patient's progress on a daily basis. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDR 7060 Medical Ethics and Humanism Elective (112). This elective is designed is designed for individualized study and practice in further pursuit of topics relevant to the humanistic missions of both the Professional Development and Medicine \& Society Strands. Students will design an independent study or practicum experience under the mentorship of Medicine \& Society or Professional Development faculty. This elective will be offered in all months with maximum of 8 students per year. Humanism in medicine is the recognition that both practitioner and patient are human beings. Rather than viewing patients as carriers of diseases or maladies and oneself as a diagnostic machine and distributor of pills, a humanistic practitioner focuses on the shared values of humanity and the shared experiences of being human. This focus provides a framework for improved clinical interactions. There are a number of ways one can be a humanistic practitioner. In this elective we will explore and encourage competence in the one or more of the following areas: bioethics, medical professionalism, shared decision making, narrative medicine, spirituality and medicine, ethics and law (related to medical practice), and the arts and medicine, including the literary arts. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDR 7910 Research Scholarship (1-12). As part of the Florida International University Herbert Wertheim College of Medicine (COM) curriculum, medical students are be required to complete a 9-credit course that provides a focused, first-hand experience in research: the Research Scholarship Course (RSC). This course is expected to develop the student's competencies needed to do research as a lead investigator or as a co-lead investigator (LI and Co-LI)* During the RSC the COM will provide students with the opportunity to be exposed, supported, and guaranteed, within current resources, the completion of a research project in a role that very closely resembles the role of a primary investigator or first author researcher. The student should be a full participant and a crucial element in the generation of (or will fully understand, if an already ongoing project) the research idea (research question or hypothesis), the development of the project proposal, data collection tools, data collection activities, analysis, interpretation, and the writing of a short document summarizing the experience. The potential research projects could encompass different areas that could cover, but are not to be limited to the areas of basic sciences, community-based, and clinical and epidemiological research. Prerequisite: Enrolled in the Herbert College of Medicine.
MDS 7140 Geriatric Medicine Selective (1-12). Medical students in Geriatric Medicine to include exposure to inpatient services on older person admitted to Sunrise Health and Rehabilitation Center, a skilled nursing facility also in Sunrise and outpatient geriatric assessment at the Cleveland Clinic Florida outpatient department. The curriculum incorporates recommendations made by the American Geriatrics Society, the American College of Physicians, and the Society of General Internal Medicine. The rotation focuses on comprehensive care of the frail and older persons with chronic problems and with acute exacerbations of those problems and usually affecting
their functional status. There are also permanent residents of the nursing home that will need health maintenance and evaluation during their rotation. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7160 Obstetrics/Gynecology Selective (1-12). The fourth year clinical electives in the Department of Obstetrics and Gynecology offer the student the opportunity to enhance his/her skills in out-patient diagnosis and management. The student is expected to attend according to the schedule agreed upon with the supervisor, including call duty, rounds, etc. Students with specific learning objectives for their experience should arrange a time to meet with the supervisor to discuss them. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7161 Gynecology Oncology Selective (1-12). This four week selective is intended for students who have already completed the basic core clerkship in OB/GYN and are interested in enhancing their exposure to the subspecialty of Gynecologic Oncology. The student will be provided experience in the inpatient and outpatient management of patients with pre-malignant and malignant conditions of the genital tract. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7163 Gynecology Surgery Selective (1-12). This four week course will introduce the student to gynecologic care in the adult female, ranging from routine care to the evaluation and surgical treatment of complex gynecologic conditions. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS $\mathbf{7 1 8 0}$ Perinatology/Maternal Fetal Medicine Selective (1-12). This is a four week clerkship offered in Period 4 which will allow the student to experience the full range of maternal-fetal medicine and to familiarize the student with the diagnosis and management of pregnant patients who have obstetrical, medical or surgical complications. The student will receive experience in ultrasound, genetics and genetic counseling and the management of high-risk obstetrical patients. Students will follow patients on the inpatient antepartum service and participate in the care of high-risk obstetrical patients admitted to the hospital. This course is designed to familiarize students with the diagnosis and management of pregnant patients with obstetrical, medical and surgical complications. Students will have an opportunity to follow patients on the inpatient ante partum service and to participate in the care of high risk obstetrical patients admitted for labor and delivery. Students will see patients in the High Risk Obstetrical Clinic; Maternal-Fetal Medicine office hours and during obstetrical ultrasound sessions. Attendance at the following conferences is required: FHR tracing and labor management review, high risk obstetrics conference, grand rounds, prenatal neonatology conference and journal club. Students are required to take call on the Labor and Delivery Unit one night per week. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7204 Hospitalist Service Selective (1-12). The Hospitalist rotation is designed to allow fourth year students the opportunity to participate with increased responsibility in the care of patients admitted to the internal medicine/hospitalist service and work closely with the IM-Hospitalist physicians at the respective site. This
rotation has a length of 4 weeks and there will be call every fourth night. Students will provide longitudinal care for IM patients assigned to them at the time of consultation from emergency room to patient's discharge and/or transfer. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7220 Cardiology Selective (1-12). This 4 week hospital rotation is offered at MSMC, Baptist Health System and the Cleveland Clinic. The objective is to improve the understanding of the pathophysiology of common cardiovascular diseases, the evaluation of acute and chronic cardiac disorders, appropriate history and physical exam, indications for invasive and non-invasive studies, EKG interpretation, differential diagnosis and first line treatment of prevalent cardiovascular disorders. Emphasis will be placed on prevention. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS $\mathbf{7 2 4 5}$ Pulmonology Selective (1-12). This rotation is intended to prepare students to obtain necessary patient care skills to effectively care for common cardiopulmonary disorders, in a consultation service with some office experience. Rotation is offered at CCF, MSMC and Baptist Health System. Depending on the site, students will be part of a team with fellows and residents or will be under the direct supervision of a pulmonary specialist. Objectives include skills in radiological interpretation, and pulmonary function tests interpretation. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7270 Gastroenterology/Hepatology Selective (112). This course will consist of a four week rotation which will include inpatient and outpatient gastroenterology and hepatology. Throughout the rotation students will be assuming primary responsibility of patients under the supervision of gastroenterology attendings. The experience will also allow for participation in varied endoscopic procedures such as esophageal manometry, upper and lower endoscopy. During the each week students will participate in pathology and radiology conferences geared to gastroenterology and hepatology cases. The course will concentrate in teaching students how to interpret clinical information and develop therapeutic decision making. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7280 Hematology Oncology Selective (1-12). This rotation is intended to prepare students to learn a basic approach to evaluation, diagnosis, staging and treatment of patients with blood diseases and cancer, students will improve physical diagnosis skills focused on recognition of disorders, recognition of complications of disease and therapeutic issues. Students will learn concepts of palliative care, end of life and hospice care. The rotation is mainly in patient-consult service with some outpatient exposure. Consults come from medical and surgical services. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7320 Infectious Disease Selective (1-12). This 4 week selective rotation is intended to prepare students to obtain under direct supervision of an infectious disease faculty the necessary diagnostic and therapeutic skills to effectively care for in patients with infectious disorders from the surgical, transplant, intensive care, OB/GYN, hematologic/oncologic and general medicine services, in a

Community Hospital (Baptist Health System). Prerequisite Enrolled in the Herbert Wertheim College of Medicine.

MDS 7340 Intensive Care Unit Selective (1-12). This rotation is intended to prepare students to obtain necessary diagnostic and therapeutic skills to effectively care for patients diagnosed with critical medical disorders. The student will work under direct the supervision of the ICU attending in the case of the Baptist Health System or as a member of a teaching team under the supervision of the attending, pulmonary/critical care fellow and IM residents. Students will assist in the admission, evaluation, and management of patients admitted to the Medical Intensive Care Unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7341 CCU/CICU Selective (1-12). This rotation is intended to prepare students to obtain necessary diagnostic and therapeutic skills to effectively care for patients diagnosed with critical cardiac disorders. Students will become an integral part of the CICU team consisting of cardiology attending, fellows, internal medicine residents and interns. Students will assist in the admission, evaluation, and management of patients admitted to the CICU. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7342 Cardiothoracic ICU Selective (1-12). This course provides the 4th year medical student with exposure to the multidisciplinary team approach to both the medical and surgical care of the patients needing surgery for Cardiac problems. The student will have experience of patient management from pre-operative through operative to post-operative management. In addition to experience with cardiothoracic surgery the student will be involved in the care of critically ill patients with cardiothoracic problems. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDS 7350 Nephrology Selective (1-12). This may be offered as a four week selective. It offers students the opportunity to learn about the diseases of the kidney and become more skilled in their management. Students will participate in the care of patients with medical renal disease that are seen in the office and also on the renal consult service. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7400 Pediatric Medicine Selective (1-12). Medical students will examine patients admitted to the Inpatient Hospitalist Services, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients admitted to the hospitalist service. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows of the Hospitalist Service. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7420 Pediatric Cardiology Selective (4). Medical students will examine pediatric patients admitted to the hospital, make daily rounds on all patients on the cardiologist's service, assist and observe the management of cardiac patients in an outpatient setting. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDS 7460 Pediatric Neonatology Selective (1-12). Medical students will examine patients admitted to the

Pediatric Neonatology Unit, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients in a neonatal intensive care setting. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, and residents of the Neonatology Unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7462 Pediatric Intensive Care Selective (1-12). Medical students will examine patients admitted to the Pediatric Intensive Care Unit, write daily entries into the medical record, develop plans for care, enter orders into the medical record, make daily rounds on all patients, assist and observe the management of patients in an intensive care setting. Students will participate in all academic activities, including simulation training and didactic lectures, provided to the students, residents, and fellows of the Pediatric Intensive Care Unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7490 Pediatric Surgery Selective (1-12). The goals of this rotation include:

1. Understand the unique anatomic, physiologic, metabolic issues in infants, children, and adolescents with surgical problems.
2. Gain hands-on instruction in the inpatient management of surgical patients in the NICU, PICU, and general units.
3. Develop expertise in the use of the hospital information systems and libraries.
4. Gain hands-on instruction and experience in the conduct of a pre and postoperative surgical clinic.
Prerequisite: Enrolled in Herbert Wertheim College of Medicine.

MDS 7494 Pediatric Orthopedic Surgery Selective (112). The section of Orthopedics will present to the fourth year student a comprehensive outline of the spectrum of orthopedic surgery as practiced in a community hospital. The student will be involved in an intensive inpatient experience and will have increased responsibility, involving primary workup of new patients and writing orders. The student will also perform procedures such as evaluating patients, taking an orthopedic history, and performing a physical examination of the musculoskeletal system. The student should improve his or her ability to manage complex patient presentations, including diagnosing and treating common adult orthopedic problems. The student should develop advanced skills in fracture treatment and cast application. He or she should be involved in joint replacement surgery and management of postoperative adult orthopedic patients. The student will participate in daily care, take night call, write notes, and dictate discharge summaries. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDS 7500 Pediatric Emergency Medicine Selective (4). Medical students will examine and evaluate patients presenting to the Pediatric Emergency Medicine. Students are expected to make entries into the electronic medical record, develop plans for care, and enter orders. Students will participate in all academic activities, including simulation training, provided to the Pediatric Emergency Medicine fellows. Students are required to attend the monthly Trauma Services lecture. Students are expected to expand their knowledge of Pediatric Emergency

Medicine with a focus on acute airway management, acute evaluation of the pediatric trauma patient, evaluation of the pediatric acute abdomen, fever in children, and the management of minor soft tissue injuries. Skills and knowledge will be acquired through directed readings, patient care, and simulation scenarios. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7530 Pathology Selective (1-12). The primary goal of the pathology rotation is to become familiar with the role of the department of pathology and laboratory medicine within the hospital and to learn to interact with the pathologists, pathology house staff (residents) and laboratory personnel. In addition, students should learn at least some basic concepts in pathology. The pathology department provides and oversees all aspects of laboratory testing (clinical pathology) and provides diagnostic information on tissue specimens (anatomic pathology). The primary activities in which students to our department will participate in include the daily sign-out of biopsies/surgical specimens, review of autopsies, and various intra and interdepartmental conferences (see schedule provided). Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7570 Orthopedic Surgery Selective (1-12). The section of Orthopedics will present to the student a comprehensive outline of the spectrum of orthopedic surgery as practiced in a community hospital. The student will be involved in an intensive in-patient experience and will have significantly increased responsibility, involving primary workup of new patients and writing orders. The student will also perform procedures such as evaluating patients, taking an orthopedic history, and performing a physical examination of the musculoskeletal system. The student should improve his or her ability to manage complex patient presentations, including diagnosing and treating common adult orthopedic problems. The student should develop advanced skills in fracture treatment and cast application. He or she should be involved in joint replacement surgery and management of postoperative adult orthopedic patients. The student will participate in daily care, take night call, write notes, and dictate discharge summaries. The student may be involved in the management of orthopedic trauma and is expected to participate with the orthopedic surgery team in the diagnosis, surgical treatment, and postoperative management of orthopedic trauma patients. The student will participate directly with patients in the emergency department, operating room intensive care unit, and the orthopedic unit. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7580 Physical Medicine and Rehabilitation Selective (1-12). This 4 -week selective offers the student experience in the diagnosis and management of patients with a variety of neuro-muscular diagnoses such as stroke, spinal cord injury, traumatic brain injury, and neuro-degenerative disorders such as multiple sclerosis. Students may treat patient with musculo-skeletal disorders such as amputation, total hip arthroplasty, total knee arthroplasty, and multiple trauma victims. They will attend physical, occupational, and speech therapy sessions with their patients to learn the daily process of rehabilitation. They will learn to perform accurate functional assessments of patients, establish a plan of care for those
patients, provide accurate estimates of goals of the admission, as well as length of stay. They will learn comprehensive discharge planning for a newly disabled individual, students are encourage to accompany the therapy team into the patient's home to prepare for independent living after hospitalization when the opportunity is available. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.

MDS 7600 General Surgery Selective (1-12). The student works directly with general and vascular surgeons. During the rotation, the student is exposed to all phases of patient care, including outpatient clinic, operating room and hospital. Emphasis will be placed on initial assessment, physical examination and preoperative evaluation. When appropriate, the student follows individual patients whose cases are particularly instructive. Supplemental reading for such cases is encouraged. While no formal projects are required, ample opportunity exists for independent projects as dictated by the student's special interests. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7604 Global/International Rural Surgery Selective (1-12). This four week rotation in Trujillo, Peru (northwest of Lima on Pacific Coast), will provide the student who is already committed to a surgical career, an intense experience functioning at an advanced level under direct supervision of Dr. Richard A. Lynn, Associate Professor of Surgery, and the attending General, Vascular, Thoracic, and Trauma surgeons at Hospital Regional Docente de Trujillo, with whom excellent collegial relationships have already been established with Dr. Lynn, after his last mission trip there. There will be enormous opportunities to experience surgical pathologies not usually seen in Miami, as well as procedures typically not performed regularly (open surgery-without the luxuries of staplers, disposables, etc.). The student will function at the level of an intern (under supervision). For the student electing to participate, it is assumed to be a given as to the dedication, interest, motivation, and desire to acquire as much surgical patient care exposure as possible. This includes preoperative, intra-operative (1st and 2nd assisting in the operating theatre) and postoperative care with graded responsibility leading to virtual initial independent decision-making (with formal, structured supervision). Prerequisite: Enrolled in the College of Medicine.

MDS 7605 Vascular Surgery Selective (1-12). The goal of the rotation is to provide students with a thorough understanding of the diseases of the peripheral vascular systems - arterial, venous, and lymphatic. Those considering a career in vascular surgery can gauge if the specialty meets their interests and skills while those planning to choose other fields can learn more than enough to know when referral to a vascular surgeon is appropriate. Students will work with our vascular surgeons in the office, hospital wards, operating room, interventional suite, and wound center to learn the about the diagnosis and management of the full spectrum of vascular diseases. They will be exposed to patients with carotid artery disease, aortic and peripheral artery aneurysms, peripheral artery occlusive disease, dialysis access needs, venous thrombosis, varicose veins, and chronic wounds. They will be able to assist in open surgeries and in balloon angioplasty/stent procedures. There will also be
opportunities for clinical research if desired. There will be no night or weekend call. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7630 Cardiothoracic Surgery Selective (1-12). The goal is to allow fourth year medical students with a special interest in Cardiothoracic Surgery, the opportunity to become more familiar with the pathophysiology and clinical presentation of the most common cardiothoracic diseases. It is expected that the Medical Student will be part of the Cardiothoracic Surgical team involved in the daily routine including the operating room, the cardiothoracic intensive care unit and floor. Some exposure to catheter based therapy in the hemodynamics room (cath lab) will also be included. The current trend is to have two separate pathways, one for cardiac and one for thoracic. However, because of the short duration on the service both pathways will be integrated. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7640 Bariatric and Minimally Invasive Surgery Selective (1-12). This 4-week rotation will give the student exposure to surgical treatments for morbid obesity and the use of minimally invasive surgery in a number of conditions affecting the GI tract, abdominal wall, endocrine glands and spine. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7641 Surgical Oncology Selective (1-12). The goal of this selective is to introduce the student to the surgeon's role in the multidisciplinary management of patients with cancer. The program includes the evaluation and management of patients with malignant and benign solid tumors and their surgical management. The full spectrum of care includes medical oncology, radiation oncology and nuclear oncology. The experience will include outpatient clinics, in-patient rounds/consults, surgery and exposure to clinical trials and clinical research. The students will attend and present at weekly multidisciplinary tumor conferences, attend monthly cancer committees, and participate in monthly journal clubs. The opportunity to participate in clinical research will be made available to interested students. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7650 Neurosurgery/Neuroscience Selective (112). This one month selective neurosurgical clerkship will assign interested students to faculty neurosurgeons at one of our affiliated facilities. This rotation presents the student the broad-spectrum of neurosurgical conditions and procedures encountered in a tertiary hospital setting. Each student will receive a syllabus at the beginning of the rotation that covers the fundamentals of neurosurgery for undergraduate medical education. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS $\mathbf{7 6 6 0}$ Plastic and Reconstructive Surgery Selective (1-12). The selective rotation in plastic surgery is a four (4) week clerkship designed to expose the student to a wide variety of clinical problems and techniques commonly encountered in the field of plastic surgery. The student will be exposed to all subspecialties in plastic surgery, including general reconstructive surgery, pediatric/craniofacial surgery, hand surgery, and aesthetic surgery. Students will rotate through an inpatient setting during the rotation and will be expected to participate in pre-and post-operative office visits, hospital visits, and surgeries. In addition, the student will be
expected to master wound closure techniques and other basic plastic surgery technical skills. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7676 Colorectal Surgery Selective (1-12). This 4week rotation will introduce the patient to the diagnosis and management of disorders affecting the colon and rectum including conditions such as Crohn's disease, Ulcerative colitis, familial polyposis, colorectal cancer and disorders of evacuation. Students will work with a team of five staff surgeons and five clinical residents. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7682 Trauma Surgery Selective (1-12). The members of the division of Trauma and support staff strive to provide selective surgical students with a stimulating and unique learning experience and are committed to offering students the support necessary for them to finish this rotation with a firm understanding of a surgical selective rotation. We begin with the assumption that students participating in the surgical selective rotation, have learned normal anatomy, are familiar with normal physiology, and knows the pathology of the common diseases to be covered in this selective. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7700 Anesthesiology Selective (1-12). This rotation will allow the student supervised hands-on participation of patients in the preoperative evaluation, creation of anesthesia plan, intravenous line placement, induction of general anesthesia and airway management, monitoring of anesthesia, emergence and postoperative care. The student will also be involved in the placement of regional blocks. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7701 Pediatric Anesthesiology Selective (1-12). This rotation will allow the student supervised hands-on participation in the preoperative evaluation, creation of anesthesia plan, intravenous line placement, induction of general anesthesia and airway management, monitoring of anesthesia, emergence and postoperative care in pediatric patients. The student may also be involved in the placement of regional blocks. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.
MDS 7710 Emergency Medicine Selective (1-12). This rotation is intended to make the student familiar with the wide range of clinical conditions, minor to major which are responsible for the patient seeking care at an Emergency Room. The student will practice skills in the recognition and management of acute life-threatening conditions and exacerbation of serious disease in a strictly supervised setting. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7760 Radiology Selective (1-12). This rotation is intended to give students an introduction to the basics of diagnostic imaging, the appropriate choice of imaging method for given clinical problems and the side-effects and risks associated with each. Students will become familiar with imaging findings in common clinical condition. The rotation will involve online modules, small group sessions and 'virtual' and real reading room sessions. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.

MDS 7765 Interventional Radiology Selective (1-12). This rotation is intended to give students an introduction to
the basics of Interventional Radiology and see the role of the modality in the management of medical and surgical problems. Students will participate in the workup, treatment and follow-up of patients undergoing interventional radiology procedures. Students will also gain experience in the interpretation of radiologic imaging such as Ultrasound, CT and MRI. Prerequisite: Enrolled in College of Medicine.

MDS 7780 Radiation Oncology Selective (1-12). This rotation will provide the student with supervised participation in the care of radiation oncology patients. This will include the diagnostic / clinical evaluation of the patient's disease and the development of treatment plans for patients that require radiation therapy in their cancer management. They will be shown different management options and what the most adequate timing for the procedures. The student will participate in the assessment planning and diagnostic work up. They will review basic medical physics, as well as, principals of Oncology, Radiosurgery and Brachytherapy. They will contribute personalized care of cancer management that is practiced at the Innovative Cancer Institute. They will be exposed to state of the art radiation oncology equipment. During the planning phase, they will be shown the use of CT imaging with plain and contrast-enhanced techniques for therapy planning and positioning of the patient for radiation treatment. Prerequisite: Enrolled in Herbert Wertheim College of Medicine.

MDS 7800 Neurology Selective (1-12). A one month selective neurology clerkship that can be tailored to the student's needs. In-patient and out-patient experiences will be available in addition to simulations and neuro-anatomy lab. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
MDS 7860 Adult Inpatient Psychiatry Selective (1-12). The course allows Period 4 medical students to refine the skills they acquired in the Period 3 Psychiatry Clerkship through further inpatient and emergency psychiatry experiences. These skills include psychiatric interviewing, diagnostic reasoning, and treatment planning. Students will participate in the initial assessment of patients presenting for admission and will follow inpatients throughout their hospital stay. Prerequisite: Enrolled in the Herbert Wertheim College of Medicine.
PAS 6005 Human Behavior (2). This is an integrated primary core course, foundational to the principles of human behavior and psychiatry. It will involve an intensive study of the clinical presentation, pathophysiology, and recognition of various diseases and anomalies in the population. The contextual approach to these disciplines will include the interrelationship or prior and current learning incorporating the basic sciences, anatomy and physiology, ancillary diagnostics and medical term. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6011 Clinical Medicine I (3). This course is a systematic review and discussion of the epidemiology, pathophysiology, clinical manifestations, diagnosis and management of the most common diseases in humans. It builds upon the foundation of basic science knowledge and clinical assessment skills. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6012 Clinical Medicine II (3). This course is a systematic review and discussion of the epidemiology,
pathophysiology, clinical manifestations, diagnosis and management of the most common disease in humans. It builds upon the foundation of basic science knowledge and clinical assessment skills. Prerequisite: Enrolled in the Physician Assistant Program.

PAS 6014 Physiology I (3). This is an integrated primary core course, foundational to principles of physiology. It will involve an intensive study of the clinical presentation, pathophysiology, and recognition of various disease and anomalies in the population. The contextual approach to these disciplines will include the interrelationship of prior and current learning incorporating the basic sciences, anatomy and physiology, ancillary diagnostics and medical terminology. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6015 Physiology II (3). This is an integrated primary core course, foundational to the principles of physiology. It will involve an intensive study of the clinical presentation, pathophysiology, and recognition of various diseases and anomalies in the population. The contextual approach to these disciplines will include the interrelationship of prior and current learning incorporating the basic sciences, anatomy and physiology, ancillary diagnostics and medical terminology. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6016 Integration into Clinical Concepts I (2). This is the first in a series of three courses in the didactic year that provide students the opportunity to translate knowledge gained in the concurrent didactic curriculum courses to clinical problems and to clinical decision making. The course is conducted by the faculty facilitators in a small-group discussion format. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6017 Integration into Clinical Concepts II (2). This is the second in a series of three courses in the didactic year that provide students the opportunity to translate knowledge gained in concurrent didactic curriculum courses to clinical problems and to the clinical decision making. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6018 Integration into Clinical Concepts III (2). This is the final course in a series of three didactic year courses that provide students the opportunity to translate knowledge gained in concurrent didactic curriculum courses to clinical problems and clinical decision making. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6022 Gross Anatomy (4). Gross Anatomy for Physician Assistant students is a clinically oriented course in which descriptive and surface anatomy are integrated with embryology. Organization of human anatomy is correlated with diagnostic imagine and pathophysiology. The objective is to provide students with a hands-on experience in the study of the human body, an understanding of relevant aspects of human development and its abnormalities. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6023 Pharmacology in Disease Pathology I (2). These lectures are integrates with the appropriate organ or disease system in which an appreciation of the pathophysiology is helpful for understanding the basis of use of a class of drugs in a particular disease. Prerequisite: Enrolled in the Physician Assistant Program.

PAS 6026 Pharmacology in Disease Pathology II (2). These lectures are integrates with the appropriate organ or disease system in which an appreciation of the pathophysiology is helpful for understanding the basis of use of a class of drugs in a particular disease. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6031 Clinical Skills I (2). This course is the first in a two course sequence designed to provide students with an overview of skills and procedures needed for clinical practices as a PA. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6032 Clinical Skills II (1). This course is the second in a two course sequence designed to provide students with an overview of skills and procedures needed for clinical practice as a PA. Prerequisite: Enrolled in the Physician Assistant Program.

PAS 6033 Clinical Medicine III (3). This course is a systematic review and discussion of the epidemiology, pathophysiology, clinical manifestations, diagnosis and management of the most common diseases in humans. Prerequisite: Enrolled in the Physician Assistant Program.

PAS 6040 Clinical Assessment I (3). Students are introduced to the sequential process and skills involved in history taking and physical examination techniques. It emphasizes the "normal" physical exam assessment, and introduces students to assessment techniques for the most common abnormal physical exam findings. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6041 Clinical Assessment II (2). This course is the second in a two sequence designed to provide students with an overview of skills and procedures needed for clinical practice as a PA. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6050 The Role of PA in American Health Care (3). The first portion covers major aspects of the US health care system. The aim is to give students a broad foundation of knowledge regarding the basic components of the health system and its issues and trends. The second portion presents the key components of the PA profession and examines the scope and the role of the PA in medical practice. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6090 Clinical Application of Evidence-Based Practice I (3). This course provides an introduction to research design and methods including bio statistical analyses that are most commonly encountered within health research. Prerequisite: Enrolled in the Physician Assistant Program.

PAS 6091 Clinical Application of Evidence-Based Practice II (2). Advanced application of research, statistical, and evidence-based medicine concepts presented in Clinical Applications of Evidence-Based Practice II with emphasis on studies assessing therapeutic intervention. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6103 Internal Medicine Clerkship (6). This eight week clinical course focuses on basic medical practice. The student is exposed to the common medical problems encountered on an in-patient and out-patient medical services. Emphasis is placed on the history and physical examination and the process required in the proper work-
up and management of the patient. Prerequisite: Enrolled in the Physician Assistant Program.

PAS 6125 Psychiatry Clerkship (3). This four week clinical course in a psychiatric care setting will allow students to participate in daily rounds and become knowledgeable of the use of psychotropic medications for psychiatric disorders. Group therapy sessions will be a major part of the learning experience. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6184 Medical Microbiology and Infectious Disease (4). Provides skills to integrate topics in basic microbiology and clinical infectious diseases. Lectures and small group case studies will provide students with an understanding of the basic principles of medical microbiology including microbial pathogenesis and clinical infectious diseases. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6185 Geriatric Medicine Clerkship (4). This clinical course provides the opportunity for students to become familiar with common physical and psychological problem encountered by the geriatric patient including cardiac and respiratory insufficiency, urinary tract infection, stroked, and diabetes mellitus. Prerequisite: Enrolled in the Physician Assistant Program.

PAS 6200 Surgery Clerkship (6). The student will be exposed to a variety of clinical problems routinely seen on the surgical service. Emphasis will be placed on the preoperative, intraoperative and postoperative management of the patient. In the operating room the student will practice aseptic techniques, operating room principles, and assisting in surgery. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6300 Pediatric Clerkship (6). This eight week clinical course in pediatric care settings will introduce students to childhood illnesses and normal variations of growth and development. Students will perform histories and physical examinations and manage patients in the newborn nursery, pediatric out-patient clinic and emergency room. Prerequisite: Enrolled in the Physician Assistant Program.

PAS 6400 Family Medicine Clerkship (8). This clinical course introduces the student to the family practice setting where emphasis is placed on the common disease treated by the primary care practitioners in conjunction with other members of the health care team. The student is exposed to rural epidemiology, cultural diversity, and problems that affect delivery of health care team. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6500 Obstetrics/Gynecology Clerkship (3). During this four week clinical rotation the student will participate on the obstetrical service managing pregnancy, labor and delivery and be introduced to pre and postnatal complications. The student will also participate in the management of the common gynecologic problems. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6600 Emergency Medicine Clerkship (4). This required rotation is designed to provide an in-depth exposure to the illnesses and injuries sustained by adults and children that necessitate emergency care. These educational experiences are intended to emphasize interview and examination skills and the performance of techniques and procedures essential to the proper
management of emergency illness and injury. Prerequisite: Enrolled in the Physician Assistant Program.
PAS 6940 Elective Clinical Rotation (3). This four week elective clinical rotation provides practical clinical exposure and knowledge, whether in an area of primary care or specialty medicine. Prerequisite: Enrolled in the Physician Assistant Program.

# Herbert Wertheim College of Medicine 

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Student Affairs
Affiliate Deans
Baptist Health South Florida Barry Katzen
Broward Health
Citrus Health Network, Inc.
Cleveland Clinic Florida
Doctors Hospital
Good Samaritan Medical Center
Homestead Hospital
Jackson North Medical Center Vacant
Jackson South Community Hospital Magdalena Averhoff
Leon Medical Centers
Memorial Healthcare System
Mercy Hospital
Miami Children's Health System
Miami VA Healthcare System
Mount Sinai Medical Center
South Miami Hospital
West Kendall Baptist Hospital

## Departments and Chairs

Anesthesiology
Cellular Biology and Pharmacology

Rafael Mas
Stanley Marks
Pedro Greer, Jr.
Deise Granado-Villar
Vincent DeGennaro
Robert Goldszer Steven Kang
Juan-Carlos Verdeja
S. Howard Wittels

Georg Petroianu

Dermatology
Emergency Medicine and Critical Care
Human and Molecular Genetics
Humanities, Health, and Society
Immunology
Medical and Population Health
Sciences Research
Neuroscience
Obstetrics and Gynecology
Ophthalmology
Orthopedics
Otolaryngology
Pathology
Pediatrics
Psychiatry and Behavioral Health
Radiology
Surgery
Urology
Martin Neal Zaiac
Robert Levine
Jeff Boyd
Pedro Greer, Jr.
Madhavan Nair
Juan Acuña
Sergio Gonzalez-Arias Manuel Peñalver

Pedro Lopez John Uribe
Vijay Zaveri Robert Poppiti
Jefry Biehler
Daniel Castellanos
David Graham
Jaime Rodriguez
Alan Nieder
Directors
Accreditation
Admissions and Recruitment
Assessment
Clinical Faculty Development
Continuing Medical Education
Education Technology
Facilities
Finance and Strategic Initiatives
Financial Assistance
Graduate Certificate Program
Human Resources
IT and Emerging Technology
Leon Center for Geriatric Research and Education
Medical Library
Physician Assistant Studies, Academics Jimmy Santana
Physician Assistant Studies, Clinicals
Project Management
Student Affairs, Operations
Student Counseling and Wellness
Student Programs
Student Records and Registrar
Student Support Services
Sandra Allen
Andria Williams
Rodolfo Bonnin
Suzanne Minor
Sergio Gonzalez-Arias
Leslie Bofill
Jose Rodriguez
Danielle Miller Marissa Miles

Ch. Rao
Natacha Alonso Winnyanne Nelson

## Paulo Chaves

Luda Dolinsky
Stephen Cohen Maria Pineda
Natalie Hernandez Nathaly Desmarais Scarlett Aldana Almi Rodriguez

## Heidi von Harscher

## Faculty

Acuña, Juan, M.D., M.S. (Javeriana University, Colombia), Chair, Medical and Population Health Sciences and Associate Professor
Adams, Nelson, M.D. (Meharry Medical College), Chief of OB/GYN at Jackson North Medical Center, Professor
Agoulnik, Alexander, Ph.D. (Novosibirsk Institute of Cytology \& Genetics, Russia), Professor
Agoulnik, Irina, Ph.D. (Novosibirsk Institute of Cytology \& Genetics, Russia), Associate Professor
Agudelo, Marisela, Ph.D. (University of South Florida, College of Medicine) Assistant Professor
Alfonso, Bianca, M.D. (University of Medicine and Pharmacy Iuliu Hatieganu, Romania), Assistant Professor
Ambrose, Joseph, M.D. (State University of New York, Syracuse), Assistant Professor
Anderson, Frederick, M.D. (University of Pittsburgh School of Medicine), Medical Director and Assistant Professor
Andreu, Aileen, M.D. (Temple University School of Medicine), Assistant Professor

Athauda, Gagani, M.D. (Riga Stradins University, Latvia), Assistant Professor
Atluri, Venkata, Ph.D. (Postgraduate Institute of Medical Education and Research, India), Assistant Professor
Au, Adam, M.D. (University of New England), Assistant Professor
Aziz, Muhammad, MBBS (Dow Medical College Karachi, Pakistan), Assistant Professor
Barengo, Noel, M.D., Ph.D. (University of KuopioFinland), Assistant Professor
Barratt, Diana, M.D., M.P.H. (University of Florida; Harvard University), Associate Professor
Barzaga, Aramys, M.D. (Instituto Superior De Ciencias Medicas De La Habana, Cuba), Assistant Professor
Berkman, Aron, M.D., Ph.D. (Case Western Reserve University), Associate Professor
Berrocal, Yerko, M.D. (Catholic University of Santiago of Guayaqil, Ecuador), Associate Professor
Bichachi, Abraham, M.D. (University of Miami), Assistant Professor
Biehler, Jefry, M.D., M.P.H. (University of Oklahoma), Chair, Pediatric and Assistant Professor
Bonnin, Rodolfo, Ph.D. (University of Missouri), Director, Assessment and Assistant Professor
Boyd, Jeff, Ph.D. (North Carolina State), Chair, Human and Molecular Genetics and Professor
Brewster, Luther, Ph.D. (University of Georgia), Chief of Policy Research and Community Development and Assistant Professor
Brown, David, M.D. (Boston University), Chief of Family Medicine, Humanities, Health and Society and Associate Professor
Bukur, Marco, M.D. (St. George's University, Grenada), Assistant Professor
Caban-Aleman, Carissa, M.D. (University of Puerto Rico, Medical Sciences Campus), Assistant Professor
Camps-Romero, Eduardo, M.D. (Universided Central del Caribe, Bayamon Puerto Rico), Assistant Professor
Carcache, Luis, M.D. (University of Miami), Assistant Professor
Castellano-Sanchez, Amilcar, M.D. (University of Zulia, Venezuela), Associate Professor
Castellanos, Daniel, M.D. (Pontifical Catholic University Mother and Teacher, Dominican Republic), Chair, Psychiatry and Behavioral Health and Professor
Castellanos, Natalie, J.D. (Florida International University), Assistant Professor
Chambers, Jeremy, Ph.D. (Clemson University), Assistant Professor
Charles, Josya-Gony, M.D. (Drexel University), Assistant Professor
Chaves, Paulo, M.D., Ph.D. (Rio de Janeiro Federal University Brazil; Johns Hopkins University), Director Leon Center for Geriatric Research and Education and Associate Professor
Chen, Jian, Ph.D. (Hunan Normal University, China), Instructor
Cherry, Sheldon, M.D. (Columbia University), Associate Dean, Clinical Affairs and Professor
Chousleb, Soni, M.D. (Anahuac University, Mexico), Assistant Professor
Cohen, Stephen, M.D., PA-C (University of Saint Eustatius-Netherlands; University of AlabamaBirmingham), Director, Physicians Assistant Clinical Education and Associate Professor

Conte, Rafael, M.D. (Universidad Central del Este, Dominican Republic), Assistant Professor
Contiguglia, Dorothy, M.D. (Tulane School of Medicine), Assistant Professor
Corredor, Raul, M.D. (Rosario University, Colombia), Assistant Professor
Cuellar, Marta, M.D. (Javeriana University, Colombia), Associate Professor
Dambach, George, Ph.D. (Ohio State University), Associate Dean for Program Development and Special Projects, Professor
Delzell, John, M.D. (University of Missouri, Columbia), Associate Professor
Desmarais, Nathaly, Psy.D. (Nova Southeastern University), Interim Director of Medical Student Counseling and Wellness Center, Assistant Professor
Dolinsky, Luda, M.L.S. (Pratt Institute), Medical Library Director and Medical Librarian
Drusano, Michael, M.D. (University of Kentucky), Assistant Professor
El-Hage, Nazira, Ph.D. (University of Kentucky), Associate Professor
Esposito, Karin, M.D., Ph.D. (University of Miami), Associate Dean for Curriculum and Medical Education, Vice Chair, Psychiatry and Behavioral Health and Professor
Fajardo, Francisco, M.Lis. (Florida State University), Assistant Librarian
Feltman, Douglas (University of North Carolina), Assistant Professor
Florez-White, Mercedes, M.D. (Javeriana University, Columbia), Associate Professor
Fortun, Jenny, Ph.D. (University of Florida), Associate Professor
Foster, Adriana, M.D. (Carol Davila University of Medicine-Romania), Vice Chair, Clinical and Research Programs, Psychiatry and Behavioral Health and Professor
Franco, Jaime, Ph.D. (Loyola University), Assistant Professor
Frank, Sheldon, M.D. (John Hopkins University), Assistant Professor
Garba, Nana, Ph.D., MBBS (Ahmadu Bello University Zaria, Nigeria), Assistant Professor
George, Robert, Ph.D. (University of Washington), Assistant Professor
Gillis, Marin, Ph.D. (University of Calgary, Canada), Professor
Giron, Gladys, M.D. (University of Miami), Assistant Professor
Gomez, Ferdinand, M.S. (Florida International University), Instructor
Gonzalez, Anthony, M.D. (University of Miami), Assistant Professor
Gonzalez, Mario, M.D. (Universidad Central del Este, Dominican Republic), Instructor
Gonzalez-Arias, Sergio, M.D. (University of Zaragoza, Spain), Director, Continuing Medical Education; Chair, Neuroscience and Professor
Gorski, Peter, M.D. (Tufts University), Professor
Graham, David, M.D. (University of Edinburgh, Scotland), Associate Dean, Clinical Medical Education; Chair, Radiology and Professor
Gralnik, Leonard, M.D., Ph.D. (University of Miami), Clerkship Director and Assistant Professor

Gray, Elizabeth, M.D. (Texas Tech University), Assistant Professor
Greer, Pedro, M.D. (Pontifical Catholic University Mother and Teacher, Dominican Republic), Associate Dean for Community Engagement; Chair, Health, Humanities and Society and Professor
Gulec, Seza, M.D. (Ankara University Medical School, Turkey), Professor
Gutierrez, Pete, M.D., M.M.S., PA-C (Universidad Central del Este, Dominican Republic; Nova Southeastern), Associate Dean and Founding Chair, Masters in Physician Assistant Studies and Associate Professor
Hammad, Zeidan, M.D. (Higher Institute of Medical Science, Cuba), Assistant Professor
Herdy Varella, Marcia, M.D. (Rio de Janiero Federal University School of Medicine, Brazil), Assistant Professor
Hernandez, Annellys, M.D. (University of South Florida), Associate Professor
Hernandez, Robert, M.D. (Tulane University) Executive Associate Dean, Student Affairs and Associate Professor
Hernandez Suarez, Yolangel, M.D., M.B.A (Johns Hopkins University; University of Miami), Associate Professor
Herrera-Pino, Jorge, M.D., Ph.D. (University of Alcalá, Spain; Wayne State University), Associate Professor
Holder, Cheryl, M.D. (George Washington University), Associate Professor
Huang, Zaohua, Ph.D. (Kent State), Instructor
Humphrey, Hugh, M.D. (Drexel University), Assistant Professor
Hunter, Thomas, M.D. (Medical University of South Carolina), Assistant Professor
Ilangovan, Kumar, M.D. (Loyola University), Assistant Professor
Inesta Allison, Michael, M.D. (University of Puerto Rico), Assistant Professor
Ioannou, Dimitrios, Ph.D. (University of Kent, UK), Assistant Professor
Jacobs, Moises, M.D. (University of Miami), Associate Professor
Jones, Adrian, JD (State University of New York, Buffalo), Associate Dean, Student Affairs
Kaftanovskaya, Elena, Ph.D. (Russian Academy of Science), Assistant Professor
Kantor, Julie, M.D. (University of Miami), Assistant Professor
Kashan, Sanaz, M.D. (Shadid Beheshti University of Medical Sciences, Iran), Assistant Professor
Kaufman, Daren, M.D. (New York Medical College), Assistant Professor
Kaushik, Ajeet, Ph.D. (Jamia Milia Islamia UniversityIndia), Assistant Professor
Khizroev, Sakhrat, Ph.D. (Carnegie Mellon University), Professor
Krieger, Diane, M.D. (University of California at San Francisco), Associate Professor
Lage, Onelia, M.D. (Universidad Central del Este, Dominican Republic), Associate Professor
Landa-Galindez, Amalia, M.D. (Tulane University), Interim Chief of Medicine, Assistant Clerkship Director and Assistant Professor
LeBlanc, Wiener, M.D. (University of Haiti), Assistant Professor

Lefevre, Frank, M.D. (University of Connecticut), Associate Professor
Lehman, Jody, J.D. (Boston University), Deputy General Counsel and Assistant Professor
Levine, Robert, M.D. (State University of New York, Upstate Medical School), Associate Dean, Graduate Medical Education and Chair, Emergency Medicine and Critical Care and Professor
Levy, Ralph, M.D. (University of Rosario's Medical School, Colombia), Assistant Professor
Ley Ramos, Felix, M.D. (Instituto Superior de Ciencias Medicas de Camaguey, Cuba), Assistant Professor
Llaguna, Omar, M.D. (Ross University-Dominica), Assistant Professor
Lopez, Pedro, M.D. (University of Miami), Chair, Ophthalmology and Professor
Lorke, Dietrich, Ph.D. (University of Hamburg, Germany), Professor
Loughlin, Liana, J.D. (University of Pennsylvania), Assistant Professor
Lozano Leon, Juan, M.D., M.S. (Javeriana University, Colombia; McMaster University), Professor
Lupi, Carla, M.D. (University of California at San Francisco), Associate Dean, Faculty Development and Professor
Madera, Sonia, M.D. (Temple University), Assistant Professor
Markham, Sanford, M.D. (University of Kansas), Executive Associate Dean Emeritus, Student Affairs and Professor
Marranzini Alfaro, Neldes, M.D. (Medical University of the Americas, West Indies), Assistant Professor
Martinez-Mesa, Francisco, Ph.D. (Carlos Albizu University), Assistant Professor
Martinez, Iveris, Ph.D. (Johns Hopkins University), Associate Professor
Martinez Elegalde, Jose, M.D. (Ponce School of Medicine, Puerto Rico), Medical Director of JMH Hospitalist Program and Assistant Professor
Martinez, Rebeca, M.D. (University of Miami), Assistant Professor
Marty, Aileen, M.D. (University of Miami), Professor
Mathee, Kalai, Ph.D. (University of Tennessee),
Professor
McFarlin, Christine, M.D. M.P.H. (Pennsylvania State University; Boston University), Assistant Professor
Milanez, Marcos, M.D. (Escola Paulista De Medicina, Brazil), Assistant Professor
Miller, Raisa, MPH, PA-C (Nova Southeastern University), Instructor
Minor, Suzanne, M.D. (University of Miami), Assistant Professor
Miret, Ana, M.S., PA-C (Miami Dade College, University of Texas Pan American), Instructor
Moas, Raul, M.D. (University of South Florida, College of Medicine), Assistant Professor
Monroy Penuela, Kathy, M.D. (Javeriana University, Columbia), Assistant Professor
Montero-Bernaldez, Juana, M.D. (Salamanca University, Spain), Assistant Professor
Mora, Jorge, M.D., M.P.H. (National University of Colombia; Harvard University), Assistant Professor
Moulik, Sabyasachi, Ph.D. (East Tennessee State), Associate Professor
Muniz, Jose, M.D. (Universidad Ciencias Medicas de la Habana, Cuba), Associate Professor

Murillo, Jorge, M.D. (Central University of Venezuela), Associate Professor
Nair, Madhavan, Ph.D. (Bombay University, India), Associate Dean Biomedical Research and Chair, Immunology and Distinguished Professor
New, Maria, M.D. (University of Pennsylvania), Adjunct Professor
Nieder, Alan, M.D. (New York University), Chair, Urology and Associate Professor
Ning, Autumn, M.D. (St. George's University School of Medicine, Grenada), Assistant Professor
Nisar, Mohammad, M.D. (Universidad Tecnologica de Santiago-Chili), Assistant Professor
Nisonson, Ian, M.D. (Columbia University), Assistant Professor
Nuwayhid, Zaher, M.D. (University of Miami), Assistant Professor
O'Leary, J. Patrick, M.D. (University of Florida), Executive Associate Dean, Clinical Affairs and Professor
Obeso, Vivian, M.D. (University of Miami), Assistant Dean, Curriculum and Medical Education and Associate Professor
Ory, Steven, M.D. (Baylor College of Medicine), Professor
Packianathan, Charles, Ph.D. (University of Madras, India), Instructor
Pedoussaut, Maryse Anne, M.D. (Paul Sabatier University, France), Assistant Professor
Peñalver, Manuel, M.D. (University of Miami), Assistant Dean, Clinical Affairs and Chair, Obstetrics \& Gynecology and Professor
Perez, Gary, MPAS, PA-C (University of Nebraska), Assistant Director, Physician Assistant Clinical Education and Instructor
Perez, Jorge E., M.Lis. (University of South Florida), Assistant Librarian
Perez-Gilbe, Hector, M.Lis. (University of South Florida), Librarian
Perlyn, Chad, M.D., Ph.D. (University of Miami; Oxford University, England), Assistant Professor
Petroianu, Georg, M.D., Ph.D. (Ruprecht Karl University of Heidelberg, Germany), Associate Dean for Clinical Research; Chair, Cellular Biology \& Pharmacology and Professor
Pilakka-Kanthikeel, Sudheesh, Ph.D. (Post Graduate Institute of Medical Education and Research, India), Assistant Professor
Poppiti, Robert, M.D. (University of Miami), Chair, Pathology and Professor
Puente, Ivan, M.D. (University of California at San Francisco), Assistant Professor
Rabaza, Jorge, M.D. (University of Miami), Assistant Professor
Radcliffe-Henry, Erica, M.S., PA-C (Miami Dade College; A.T. Still University), Instructor

Ramella-Roman, Jessica, Ph.D. (Oregon Health Science University), Associate Professor
Ramnath, Rowena, Psy.D. (Carlos Albizu University), Assistant Professor
Rao, ChV, D.V.M., Ph.D. (Andhra Veterinary College, India; Washington State University), Professor
Ravikumaran Nair, Rakesh, M.D. (Cochin University of Science and Technology, India), Instructor
Raymond, Andrea, Ph.D. (Temple University), Assistant Professor

Reid, Edward, M.D. (University of Pennsylvania), Professor
Rock, John, M.D., M.P.H. (Louisiana State University; Harvard University), Senior Vice President for Health Affairs; Dean and Professor
Rodriguez, Jaime, M.D. (Javeriana University, Colombia), Chair, Surgery and Associate Professor
Roldan, Eneida, M.D., MPH, M.B.A. (Ross University; West Indies; University of South Florida; University of Tennessee), CEO FIU Health Care Network and Associate Dean, International Affairs and Associate Professor
Roller, Barbra, Ph.D. (University of Pennsylvania), Assistant Dean for Student Affairs and Assistant Professor
Rosen, Barry, Ph.D. (University of Connecticut), Distinguished Professor
Rothe, Eugenio, M.D. (Pontifical Catholic University Mother and Teacher, Dominican Republic), Professor
Roy, Upal, Ph.D. (Goa University, India), Assistant Professor
Ruiz, Pelaez, Juan, M.D. (Javeriana UniversityColumbia), Associate Professor
Runowicz, Carolyn, M.D. (Jefferson Medical College), Executive Associate Dean, Academic Affairs and Professor
Salom, Emery, M.D. (University of Miami), Assistant Professor
Santana, Jimmy, M.B.A., PA-C (American Intercontinental University; University of Texas-Rio Grand Valley), Director, Physician Assistant Didactic Education and Instructor
Sarkarai Nadar, Venkadesh, Ph.D. (University of Madras, India), Instructor
Schild, Frederick, M.D. (Medical University of South Carolina), Professor
Seetharamaiah, Rupa, M.D. (Mysore Medical College, India), Assistant Professor
Segui, Daniel, M.D. (University of Havana School of Medicine, Cuba), Assistant Professor
Sibley, Margaret, Ph.D. (State University of New York), Assistant Professor
Simpson, Joe Leigh, M.D. (Duke University), Professor
Solman, Susan, D.P.M., R.Ph. (Barry University; NY College of Podiatric Medicine), Associate Professor
Strasser, Sheryl, M.D. (University of Miami), Assistant Professor
Stumbar, Sarah, M.D. (State University New York-Stony Brook), Assistant Professor
Swanson, James, M.D., Ph.D. (Ohio State University), Professor
Tempest, Helen, Ph.D. (Brunel University, London), Assistant Professor
Tershakovec, George, M.D. (University of Miami), Assistant Professor
Thangavel, Samikkannu, Ph.D. (University of Madras, India), Assistant Professor
Toonkel, Rebecca, M.D. (Johns Hopkins University), Assistant Dean, Academic Advising and Assistant Professor
Torres-Salichs, ManueI, M.D. (University of Puerto Rico School of Medicine), Assistant Professor
Torres-Viera, Carlos, M.D. (Central University of Venezuela), Assistant Professor
Tranakas, Nicholas, M.D. (University of Miami), Assistant Professor

Unwalla, Hoshang, Ph.D. (Jawaharlal Nehru University, India), Associate Professor
Urbandt, Jorge, M.D. (University of Buenos Aires, Argentina), Assistant Professor
Uribe, John, M.D. (University of North Carolina), Chair, Orthopedics and Professor
Vargas-Posada, Esperanza, M.D. (Universidad Nacional De Columbia), Assistant Professor
Verdeja, Juan-Carlos, M.D. (University of Miami), Associate Professor
Viamonte, Manuel, M.D. (University of Havana, Cuba), Associate Dean, International Affairs and Professor
Viamonte Ros, Ana, M.D., M.P.H. (University of Miami), Associate Dean, Women in Medicine and Science and Associate Professor
von Harscher, Heidi, Ph.D. (Miami Institute Psychology), Director, Student Support Services and Assistant Professor
Von Schirach, Aida, Pharm.D. (University of Florida), Instructor
Weiler, Tracey, Ph.D. (University of Manitoba, Canada), Assistant Professor
Wells, Alan, Ph.D., MPH (University of Texas), Assistant Professor
Wertheim, Herbert, O.D., D.Sc. (Southern College of Optometry; Florida International University- Honoris Causa), Founding Chairman, Trustee Emeritus, FIU
Whisenant, Ebony, M.D. (Morehouse College), Assistant Professor
Wittels, S. Howard, M.D. (University of Miami), Chair, Anesthesiology, Professor
Yaffa, Jack, M.D. (Virginia Commonwealth University), Associate Professor
Zaiac, Martin, M.D. (University of Wisconsin -Milwaukee), Chair, Dermatology and Associate Professor
Zaveri, Vijay, M.D. (Medical College Baroda, India), Chair, Otolaryngology and Assistant Professor
Zevallos, Juan Carlos, M.D. (Universidad Central del Ecuador) Associate Professor
Zundel, Nathan, M.D. (George Washington University), Professor

In addition to more than 1000 Clinical Faculty members serving as Voluntary Faculty

# Nicole Wertheim College of Nursing and Health Sciences 

Dean
Associate Dean, Academic Affairs
Associate Dean, Administrative Affairs
Assistant Dean, Student
Services
Marguerite Cooke-William

## Chairs and Directors:

Athletic Training
Jennifer Doherty-Restrepo
Communication Sciences and Disorders
Master of Health Services Administration
Nursing, Graduate (Anesthesia)
Nursing, Graduate (DNP)
Nursing, Graduate (MSN)
Nursing, Graduate (PhD)
Nursing, Undergraduate
Nursing, Biscayne Bay Campus
Occupational Therapy
Physical Therapy
Ora Strickland Tami Thomas
Helen Z. Cornely

The Nicole Wertheim College of Nursing and Health Sciences was created in 2006 by the merger of the School of Nursing and the School of Health Sciences. In support of the University's mission as a major urban research institution, the College offers programs of professional study in selected health professions.

The College offers a baccalaureate degree in Nursing. Master's degrees are offered in Athletic Training, Health Services Administration, Occupational Therapy, SpeechLanguage Pathology, and Nursing, The Doctor of Philosophy and the Doctor of Nursing Practice is offered in Nursing and the Doctor of Physical Therapy is offered in Physical Therapy.

Students interested in the academic programs offered by the Nicole Wertheim College of Nursing and Health Sciences are urged to contact the Office of Student Services, (305) 348-7703.

## College Policies

## Background checks and drug screenings

The practicum/field placement sites used by all programs in the Nicole Wertheim College of Nursing and Health Sciences require the disclosure of conviction records for misdemeanors and/or felonies and current screening for drug use. Therefore, students are required to submit to criminal background checks and drug screening tests prior to admission and to the initiation of the clinical education portion of their education. The student will be responsible for the financial cost of such screenings.

Findings in background checks and/or drug screening tests may affect a student's ability to participate in clinical experiences and complete the program, and/or obtain licensure or certification.

## Standard disclaimer on policy/procedure changes

The programs, policies, requirements, and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's and College's various publics and to respond to the mandates of the

Florida Department of Education, Board of Governors, the Legislature, and other regulatory and accrediting agencies. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations. Please refer to the College's website for the most recent information regarding program requirements, policies, and procedures.

## Changes to the Curriculum Requirements

The curricula described in this catalog are continually subject to review in order to respond to the mandates of the Florida Department of Education, Board of Governors, and the Legislature. This is especially true for the programs that are subject to national accreditation requirements. University policy changes in curriculum may be made without advance notice.

Generally, the Nicole Wertheim College of Nursing and Health Sciences makes every effort to minimize the impact of curriculum changes on currently enrolled students by stipulating that students complete the requirements of their degree program in effect at the time of admission or readmission to the program. In the event that this is not possible due to accreditation standards or the deletion of courses, students may be required to complete alternative degree requirements in order to graduate. Students should review their file to ensure that all documentation of changes is noted.

## Master of Health Services Administration

Courses are sequenced to enhance the development of competencies as students progress through the curriculum. Students need to pay attention to course prerequisites and adhere to course sequencing.

## Prerequisites

Demonstrated knowledge and ability in the areas of accounting, quantitative analysis, micro-economic and basic micro-computer skills as approved by the Department.

## Program Total: (48 credits)

| Foundation Courses: $\mathbf{1 2}$ credits of required coursework |  |
| :---: | :---: |
| HSA 5125 | Introduction to Health Policy and Management |
| HSA 6185 | Management and Organization in Health |
|  | Care |
| HAS 6175 | Financial Management of Health |
|  | Systems 3 |
| HSA 6415 | Marketing and Demographic Analysis in Health Care |
|  | (Prereq: HSA 5125 and PHC 6065) |

Health Services Administration Core Courses: 31 credits of required coursework
(must have completed at least 9 hours of foundation coursework)
HSA 6426 Health Law and Legal Aspects of Management 3
HSA 6186 Leadership and Organizational Behavior
HSA 6930 in Health Care Systems $\quad$ Professional Seminar 1
HSA $6759 \quad$ Quality Assessment and Outcome in Health Care 3

| HAS 6187 | Managing Human Resources and |
| :--- | :--- |
|  | Health Professions |

HSA 6197 Design and Management of Health Information Systems3

| HAS 5455 | Ethical Decisions in Health Services |
| :--- | :--- |
|  | Administration |

HSA 6149 Strategic Planning and Marketing of Health Care Services 3
HAS $6205 \quad \begin{aligned} & \text { Hospital and Health Facilities } \\ & \text { Organization }\end{aligned}$
$\begin{array}{ll}\text { HAS } 6215 & \begin{array}{l}\text { HMO and Ambulatory Care } \\ \text { Administration }\end{array}\end{array}$

| HAS 5226 | Management of Long Term Care <br> Systems |
| :--- | :--- |

Integrative Coursework: 5-9 credit hours

| HSA 6717 | Advanced Health Services Management |  |
| :--- | :--- | :--- |
| HSA 6875 | and Research Seminar <br> Administrative Residency I <br> (Prereq: HSA 6930 and Permission of | 2 |
|  | Instructor) |  |
| HSA 6977 | or |  |
|  | Master's Research Project <br> (Prereq: HSA 6930 Permission of <br> Instructor) | $3-6$ |

## Administrative Residency

An administrative residency in a health care organization is offered to all students. Students lacking health services administrative experience are encouraged to complete an administrative residency.

The residency is considered an integral part of the educational process. It is designed to provide practical experience with the theories, concepts, and administrative skills the students acquired academic study. The residency is normally arranged in an agency or institution compatible with the student's area of interest. The student works with an organizational preceptor in the health agency during this period, and the experience is also supervised by a faculty preceptor.

Students must apply for the administrative residency, complete an educational plan, be approved and be placed in an agency by the Residency Coordinator the semester before the residency begins.

For further information regarding residency requirements, reference should be made to the MHSA Administrative Residency Manual, which may be downloaded from the HPM website.

## Athletic Training

Jennifer Doherty-Restrepo, Ph.D., LAT, ATC, Clinical Associate Professor and Program Director
Alicia Montalvo, Ph.D., ATC, LAT, Assistant Professor
Michelle Odai, Ph.D., LAT, ATC, Clinical Assistant Professor and Clinical Education Coordinator
Nicolette Stallworth, MS, LAT, ATC, Visiting Clinical Instructor

## Master of Science in Athletic Training

The Athletic Training Program at Florida International University is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Students will graduate with a Master of Science degree in Athletic Training and be eligible to sit for the Board of Certification (BOC) examination.

The examination tests for knowledge and skill in five major domains:
(1) injury/illness prevention and wellness protection;
(2) clinical evaluation and diagnosis;
(3) immediate and emergency care;
(4) therapeutic intervention; and
(5) organization and professional health and wellbeing.

## Admission Requirements

To be admitted to the professional Master of Science Athletic Training Program, the student must:

1. Hold a bachelor degree from an accredited institution.
2. Have a minimum 3.00 GPA average (based on a 4.0 scale) in the last 60 credits of upper division courses of the bachelor degree.
3. Be admitted to the University Graduate School (apply on-line at www.gradschool.fiu.edu by February $\left.15^{\text {th }}\right)$.
4. Complete the following prerequisite courses with a minimum grade of "C":
a. General Biology and Lab (4 cr.)
b. ^Human Anatomy and Lab (4 cr.)
c. ^Human Physiology and Lab (4 cr.)
d. Physics without Calculus and Lab (4 cr.)
e. Nutrition (3 cr.)
f. Statistics (3 cr.)
g. Introductory Psychology (3 cr.)
h. Kinesiology or Biomechanics (3 cr.)
i. Exercise Physiology ( 3 cr .)
${ }^{\wedge}$ Or, Anatomy and Physiology I and II with Lab for a total of 8 credits
5. Submit the following directly to the Athletic Training Program by February $15^{\text {th }}$ :
a. Three letters of recommendation (one must be from a faculty member)
b. A curriculum vitae/resume
c. A personal statement of professional and educational goals

## Additional Requirements

To remain in the Entry-Level Master of Science Athletic Training Education Program the student must maintain a 3.00 cumulative GPA. To be awarded the Master of Science degree in Athletic Training the student must achieve a $\mathbf{3 . 0 0}$ cumulative GPA.

| Required Courses |  |  |
| :--- | :--- | :--- |
| Semester I (Summer B) - $\mathbf{8}$ Credits |  |  |
| ^ATR 5805 | Clinical Education Seminar in Athletic |  |
|  | Training | 1 |
| ^ATR 5115C | Management of Medical Emergencies | 3 |
| ^ATR 5105C | Principles of Athletic Training with Lab | 4 |

Semester II (Fall) - 11 Credits
$\begin{array}{ll}\text { ^ATR 5217C } & \begin{array}{l}\text { Orthopedic Assessment I - Lower } \\ \text { Extremity with Lab }\end{array}\end{array}$
^ATR 5305C Therapeutic Modalities with Lab 4
^ATR 5815L Clinical Education I 3
Semester III (Spring) - 11 Credits

| ^ATR 5218C | Orthopedic Assessment II - Upper <br> Extremity |
| :--- | :--- |

^ATR 5825L Clinical Education II 3
${ }^{\wedge}$ ATR 5316C Rehabilitation Techniques in Athletic Training with Lab
Semester IV (Summer C) - $\mathbf{1 0}$ Credits
$\begin{array}{ll}\wedge \text { ATR 5219C } & \begin{array}{l}\text { Orthopedic Assessment III - Head, } \\ \text { Spine, and Trunk }\end{array}\end{array}$
${ }^{\wedge}$ ATR 5835L Clinical Education III 3
$\wedge$ ATR 5435 Diseases and Disabilities in the Physically Active
Semester V (Fall) - 9 Credits
^ATR $5517 \quad$ Administration and Professionalism in
Athletic Training 3
${ }^{\wedge}$ ATR 5845L Clinical Education IV 3
^ATR 6620 Research and Evidence-Based Practice
in Athletic Training I
Semester VI (Spring) - 9 Credits
^ATR $6425 \quad$ Pharmacology and Diagnostic Imaging in Athletic Training
^ATR 6855L Clinical Education V 3
^ATR 6621 Research and Evidence-Based Practice
in Athletic Training II
${ }^{\wedge}$ Denotes courses that must be taken in sequence. Course sequence may be modified by the department

## Graduation Requirements

The student must complete the required 58 credits, complete a minimum of 1000 clinical education experience hours, and be in compliance with the University Graduate School graduation requirements.

# Communication Sciences and Disorders 

Monica S. Hough, Chair and Professor<br>Alliete Alfano, Visiting Assistant Professor<br>Alfredo Ardila, Professor<br>Angela Granese, Assistant Professor<br>Jean Mead, Clinical Assistant Professor<br>Mariatereza (Teri) Munoz, Clinical Instructor<br>Eliane Ramos, Clinical Associate Professor

Communication Sciences and Disorders (CSD) is one of the Departments in the Nicole Wertheim College of Nursing and Health Sciences. This CSD Department offers a master's degree program in Speech Language Pathology. Additionally, ten required graduate prerequisite courses are offered for interested applicants who have a bachelor's degree in another discipline via the Graduate Certificate in CSD. The unique focus of the CSD department is one of Cultural and Linguistic Diversity (CLD). The goal of the department is to educate CLD professionals to meet the needs of multicultural populations with communication disorders. Students matriculating in the program will benefit from the infusion of CLD throughout the curriculum. Special emphasis is placed on the provision of services to the bilingual population of the Metropolitan Miami area. Students will take extra coursework that emphasize multilingual/multicultural issues as they apply to language acquisition as well as assessment and intervention of speech and language disorders in adults and children.

Students will also have opportunities to receive clinical education from a variety of clinical settings in the Miami Metropolitan area including hospitals, schools, private practices and community based clinics that will further their experience with multilingual/multicultural populations. They also will be required to engage in research projects with faculty members. A description of the admission requirements and a description of the master's program follow.

## Admission Criteria

Applicants for admission to the master's degree program must meet the current FIU minimum standards for admission to graduate school.

1. A grade point average of 3.0 in the last 60 hours of undergraduate study
2. Bachelor's degree
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
Additionally, the CSD department requires the following for admission to the graduate program:
4. Departmental application
5. FIU Graduate School online application
6. Statement of purpose summarizing skills and interests in the program
7. Two letters of recommendation from persons with knowledge of academic performance
8. Bachelor's degree in Communication Sciences and Disorders or completion of the 10 required prerequisite courses.
9. Students considered for Masters' SLP admission will be invited for an interview and asked to complete a spontaneous writing sample. Accommodations will be made for invited students who are not able to come to campus.

## Requirements for students without a bachelor's degree in Communication Sciences and Disorders

The Department of Communication Sciences and Disorders requires an individual applying for the master's degree to hold a bachelor's degree in communication disorders or its equivalent. An applicant's undergraduate background influences the time necessary to complete the graduate degree, as there are 10 prerequisite courses required for entrance to the graduate program via the Graduate Certificate program in CSD ( 28 credits). The following courses or their equivalents are required in the Graduate Certificate in CSD:

| LIN 5018 | Introduction to Linguistics <br> Introduction to Communication Sciences | 3 |
| :--- | :--- | ---: |
| SPA 5012C | and Disorders |  |
| SPA 5009C | Normal Communication Development <br> and Disorders | 3 |
| SPA 5150C | Acoustics of the Sciences of Speech <br> and Hearing | 3 |
| SPA 5035C | Disorders of Hearing and Audiological <br> Sciences | 3 |
| SPA 5051C | Clinical Observation, Management, and <br> Procedures in Communication Disorders3 |  |
| SPA 5102C | Advanced Human Anatomy and |  |
|  | Physiology of Mechanisms of <br> Communication | 3 |
| SPA 5102L | Laboratory in Advanced Human <br> Anatomy and Physiology of <br> Mechanisms of Communication |  |
| SPA 5113C | Advanced Applied Phonetics | 3 |
| SPA 6322 | Aural Habilitation and Rehabilitation | 3 |

## Master of Science in Speech-Language Pathology

The Master of Science in Speech-Language Pathology consists of 61 graduate hours. Full time enrollment is required. Students will complete six semesters in the program. Student progress will be monitored each semester by departmental faculty.

An overall GPA of 3.0 is required for graduation. A grade of " $B$ " or higher is required for all courses in the program of study. If a student receives a grade of "B-" or below, then that course must be retaken; however, only two courses can be repeated. Any student who earns a grade of "B-" or lower in more than two courses will be terminated from the program.

Clinical practicum hours will be obtained in a variety of community settings. A minimum of 400 clinical clock hours are required for graduation. Passing the PRAXIS examination (162 passing score) is required for degree completion.

The program of study provides students with theoretical and clinical education to develop the competencies needed to practice as a speech-language pathologist.

Upon completion of the master's degree, the graduate will have met all academic and practicum requirements for applying for the Certificate of Clinical Competence awarded by the American Speech-Language-Hearing Association.

The Master of Science in Speech-Language Pathology at Florida International University is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association, 2200 Research Blvd, Rockville, MD 20850, (301) 296-5700. Please feel free to contact the CAA if you have any questions about accreditation.

## Program of Study

## Core Courses in Speech-Language Pathology (52)

Speech: (18)
SPA 5204
SPA 5216
SPA 5225
SPA 5107
SPA 6232 Neuromotor Communication Disorders
SPA 6565 Dysphagia 3

Language: (18)
SPA $5402 \quad$ Language Learning in Preschool Children3

SPA $5403 \quad$| Language Learning in School-Aged |
| :--- |
| Children |

| SPA 6406 | Dual Language Acquisition and |
| :--- | :--- |
|  | Disorders |

SPA $6410 \quad$ Aphasia and Related Disorders 3

SPA 6005 Assessment \& Treatment of the Bilingual Child with Communication Disorders 3
SPA 6479 Communication Disorders and Aging in a Bilingual Society
Practical Courses: (16)
SPA 5553 Differential Diagnosis of Communicative
SPA 5935L Pre-Clinic Seminar
SPA $5500 \quad$ Basic Clinical Practicum 3
SPA 5502 Intermediate Clinical Practicum 3
SPA 6505 Advanced Clinical Practicum** 3
**This clinical practicum must be repeated for a total of 12 credits in clinical practica.

## Research

[Thesis-9 credits]

| SPA 5805 | Research Methodology in |  |
| :--- | :--- | :--- |
|  | Communication Disorders | 3 |
| SPA 6971 | Master's Thesis | 6 |

[Non-Thesis-6 credits]

| SPA 5805 | Research Methodology in |  |
| :--- | :--- | :--- |
|  | Communication Disorders | 3 |
| SPA 6930 | Master's Project | 3 |

Students will enroll in 1 credit of Master's Project per semester in each of their last 3 semesters in the program.

## Electives: (3)

The non-thesis option also mandates the selection of 1 of the following elective courses for an additional 3 credits.

| **SPA 6322 | Aural Habilitation and Rehabilitation <br> Adult Communication Disorders and | 3 |
| :--- | :--- | :--- |
| SPA 6254 | Cognition |  |
| SPA 6559 | Augmentative and Alternative <br> Communication |  |
| SPA 6938 | Topics in Speech Pathology | 3 |

**Students who have not taken this course via the Graduate Certificate or in their undergraduate CSD program at another university will be required to take this course for the elective requirement.

## Nursing

Strickland, Ora, Ph.D., DSc (Hon), RN, FAAN Dean and Professor, Nicole Wertheim College of Nursing and Health Sciences
Blais, Kathleen, Ed.D., RN, Professor Emeritus, Nursing
Brooten, Dorothy, Ph.D., RN, FAAN Professor, Nursing
Brown, Ellen, Ed.D., RN, ARNP Associate Professor, Nursing
Buscemi, Charles, Ph.D., RN, ARNP-BC Assistant Professor, Nursing
De Los Santos, Maria, DNP, RN, MPH, ARNP Clinical Assistant Professor, Nursing
Dlugasch, Lucie, Ph.D., RN, ARNP-BC Clinical Assistant Professor, Nursing
Fenkl, Eric, Ph.D., RN, CNE Assistant Professor, Nursing
Friedemann, Marie-Luise, Ph.D., RN Professor Emeritus, Nursing
Galindo, Ali, MSN, ARNP-FP Clinical Assistant Professor, Nursing
Garrido, Maria, DNP, RN Clinical Assistant Professor, Nursing
Glymph, Derrick C., DNAP, CRNA, Clinical Assistant Professor, Anesthesiology Nursing
Goldin, Deana, DNP, RN, ARNP-BC Clinical Assistant Professor, Nursing
Gonzalez, Juan, Ph.D., CRNA Clinical Associate Professor and Vice-Chair, Anesthesiology Nursing
Gonzalez, Vicente, DNP, CRNA Clinical Assistant Professor, Anesthesiology Nursing
Gordon, Yhovana, Ed.D., DNP, RN, ARNP, FNP-BC Clinical Assistant Professor and Director of Advanced Nursing Programs
Groom, Jeffrey, Ph.D., CRNA Clinical Associate Professor and Chair, Anesthesiology Nursing
Hannan, Jean, Ph.D., RN Assistant Professor, Nursing
Henao, Henry, MSN, RN, ARNP, FNP-BC Clinical Assistant Professor, Nursing and Simulation Center Coordinator, Nicole Wertheim College of Nursing and Health Sciences
Jones, Sandra, Ph.D., RN, ACRN, ARNP, FAAN Associate Professor, Nursing
Little, Daniel, Ph.D., RN, ARNP-BC Clinical Assistant Professor, Nursing
Lobar, Sandra, Ph.D., RN, ARNP-BC Associate Professor, Nursing
Miller, Ann, DNP, CRNA Clinical Associate Professor, Anesthesiology Nursing
Miller, Audrey, Ph.D., RN Visiting Assistant Professor, Nursing
Olafson, Elizabeth, MSN, RN, MSEd. Clinical Assistant Professor and Director of Clinical Education, Nicole Wertheim College of Nursing and Health Sciences
Olenick, Maria, Ph.D., RN Clinical Assistant Professor, Nursing and Chair of Undergraduate Nursing
Parchment, Yvonne, Ed.D., RN, ARNP, CNE Clinical Associate Professor, Nursing
Paul-Ward, Amy, Ph.D., MS OT Associate Professor and Director of Nursing PhD Program
Porter, Luz, Ph.D., RN, ARNP, FAAN Professor Emeritus, Nursing
Sherman, Deborah, Ph.D., ARNP, ACHPN, FAAN (New York University), Professor, Nursing
Simon, Sharon, Ph.D., RN Clinical Assistant Professor, Nursing

Thomas, Tami, Ph.D., RN, CPNP, FAANP, FAAN
Associate Dean and Associate Professor, Nicole Wertheim College of Nursing and Health Sciences
Vera, Racquel, Ph.D., ARNP, PPCNP-BC (Florida International University), Clinical Assistant Professor and MSN-Child Track Leader, Nursing
Wunder, Linda, Ph.D., RN, CRNA, ARNP Clinical Assistant Professor, Anesthesiology Nursing
Youngblut, Jo-Anne, Ph.D., RN, FAAN Professor, Nursing

The Master of Science in Nursing (MSN) program is accredited by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, Suite 530, Washington, DC 20036-1120, (202) 887-8476 and by the Council on Accreditation of Nurse Anesthesia Educational Programs, 222 S. Prospect Ave., Suite 304, Park Ridge, Illinois 60068 (847-692-7050) and is approved by the Florida Board of Nursing (4052 Bald Cypress Way, BIN CO2, Tallahassee, FL 32399, 850-245-4125).

The Nicole Wertheim College of Nursing and Health Sciences also offers a Ph.D. in Nursing and Doctor of Nursing Practice degree, as well as selected continuing education courses.

## Master of Science in Nursing

The College offers a program of study leading to the Master of Science in Nursing (MSN) degree to prepare qualified professional nurses for advanced nursing roles in the care of adults, children, and families. The program offers clinical majors in adult-gerontology nursing (AGN), child health nursing (CHN), family health nursing (FHN), psychiatric health nursing (PHN), and nurse anesthetist (AN), and a track for the Nurse Executive (NE). The design of the program allows for the development of the nurse practitioner role, or the nurse anesthetist role.

Throughout the curriculum, students are guided in the process of self-development to pursue excellence in professional and scholarly endeavors. The program allows flexibility within the basic curricular structure through individualized learning experiences, electives, a thesis, masters paper, or research project, and the opportunity to investigate an area of interest in advanced study.

The curriculum model is structured so that students will complete the program in 6 semesters (2 years) only with credits varying from 6-11 credit hours per semester. Courses are offered online and/or on ground allowing students flexibility.

Graduates are qualified to apply for ARNP licensure in Florida and are prepared to apply for certification as an advanced nurse practitioner in the chosen specialty area of anesthesiology, adult-gerontology, child health, family health, or psychiatric health nursing.

## Program Objectives

The objectives of the MSN program are to prepare graduates as:

1. Leaders and change agents in the delivery of highquality, accessible, culturally competent healthcare in a global society.
2. Professional advanced practice nurses who use communication, collaboration, and synthesis of evidence-based practice, scholarship, and research in the delivery of health care for global health systems.
3. Facilitators in designing inter-professional healthcare teams, who use an understanding of organization and environment, and are able to integrate care services across global health systems.
4. Critical thinkers, who use scientific evidence, patient culture, values, and preferences to investigate clinical problems and translate evidence into safe, cost effective innovative practice that adheres to the ethical tradition of nursing.

## Common Prerequisite Courses and Equivalencies <br> FIU Course(s) Equivalent Course(s) <br> STA 3145 STA X014 <br> CHM 1033/L CHM X033 <br> PCB 2099/L BSC X085C <br> ZOO 3731/L BSC X086C <br> MCB 2000/L MCB X010C <br> DEP 2000 DEP X004 <br> PSY 2012 PSY X012 <br> HUN 2201 HUN X201

Courses which form part of the statewide articulation between the State University System and the Community College System will fulfill the Lower Division Common Prerequisites.

For generic course substitutions/equivalencies for Common Program Prerequisites offered at community colleges, state colleges, or state universities, visit: http://www.flvc.org, See Common Prerequisite Manual.

## Program Policies

Nursing majors are responsible for transportation expenses related to clinical experiences. They are required to carry health and accident insurance. To safeguard the health of clients, nursing students are required to submit proof of immunizations upon entry to into the nursing program. Students must submit proof of basic cardiopulmonary resuscitation (CPR) certification (American Heart Association) prior to entering clinical courses in the nursing major. This CPR certification must cover the period of enrollment in the major.

The College reserves the right to terminate a student from the nursing program for reasons related to the inability to safely carry out professional responsibilities.

## Application Process

Applicants must complete the following steps in order to be considered for admission:
STEP 1 - Submit an application to Nursing CAS (the Centralized Application Service for Nursing Programs)

1. Complete an online application via Nursing CAS http://www.nursingcas.org and pay the appropriate fee to Nursing CAS.
2. Complete the required FIU supplemental application and pay the $\$ 30$ fee.
3. Send official transcripts from ALL SCHOOLS attended (all Associates \& Bachelors degree coursework) to Nursing CAS for upload and verification. EXCEPTION: Foreign transcripts, along with their official evaluations (grades, credits, and GPA in U.S. terms), should be sent directly to the college at the following address: Nicole Wertheim College of Nursing \& Health Sciences, AHC-3, Room 121, 11200 S.W. 8th Street, Miami, FL, 33199.
4. Upload all required supplemental items including three (3) professional nursing references, professional CV, copy of an active Florida RN License, and Personal Statement to Nursing CAS.

## STEP 2 - Professional Interview

1. Following a review of all completed applications a select number of applicants will be offered the opportunity to participate in a panel interview.
2. Interview candidates may be instructed to bring an additional set of official transcripts to their interview appointment.

## Anesthesia Nursing Application Process

Applicants must complete the following steps in order to be considered for admission:

1. Complete two applications as indicated and return to the appropriate offices:
a. Complete a FIU graduate admissions application online available at http:/lgradschool.fiu.edu.
b. Complete an Anesthesiology nursing application and submit all required documentation outlined in the application package - available online at http://cnhs.fiu.edu/anesthesiology.
2. Request an official transcript of records from each college or university attended for undergraduate and graduate work. A transcript must be sent to Florida International University, Office of Graduate Admissions, P.O. Box 659004, Miami, Florida 332659004, and to the Anesthesiology Nursing program as described in the program application package.
3. Applicants to the Anesthesiology Nursing program are reviewed by the program Admissions Committee and selected applicants are invited for interview. The program Admissions Committee makes final recommendations for admission.

NOTE: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's and College's various publics and to respond to the mandates of the Florida Department of Education, Board of Governors, the Legislature, and other regulatory and accrediting agencies. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations. Please refer to the College's website for updated information in nursing.

## Master of Science in Nursing Advanced Adult-Gerontology Nurse Practitioner

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater in a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level.)
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN) formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from Programs without such accreditation will be considered on an individual basis.
6. Completion of all MSN admission paperwork including the NursingCAS application, FIU supplemental application, a written essay, recommendations, and Curriculum Vitae, as well as favorable personal interview with MSN Committee.

## Graduation Requirements

1. Completion of 44 semester credits. Minimum of 36-40 credits in nursing and 3-6 credits of non-nursing electives. The non-nursing electives are restricted to supporting courses for the specialty area.
2. Completion of a thesis ( 6 credits), a master's paper ( 3 credits), or a research project ( 3 credits). Students selecting a master's paper or research project must complete an additional three hours of cognate course(s).
3. Achievement of an overall cumulative GPA of 3.0 or above. See Graduate Catalog in University Graduate School Rules and Regulations for information on Academic Warning, Probation, and Dismissal.
4. Removal of all conditions, deficiencies, and incomplete grades. Credit hours for courses in which the grade is "B-" or below will not count toward satisfying graduate degree requirements.
5. With the exception of thesis courses, students are expected to register for courses with letter grades. Electives may be taken as pass/fail subject to the approval of the advisor.

## Curriculum

MSN Level Course Requirements
Graduate Nursing Core: (9 credits)
NGR 5110 Theories in Nursing
NGR 5131 Culture and Advanced Nursing Practice 3
NGR 5810 Research Methods in Nursing 3
Advanced Practice Nursing Core: ( 10 credits)
NGR 5035C Advanced Client Assessment 3
NGR $5141 \quad$ Pathophysiologic Basis of Advanced Nursing Practice

3
NGR 6172 Pharmacological Concepts in Advanced
NGR $6743 \quad$ Clinical Education Seminar 1
Advanced Adult-Gerontology Nursing: (15 credits)
NGR 6201C Advanced Adult-Gerontology Nursing I 3
NGR 6201L Advanced Adult-Gerontology Nursing Practice I
NGR 6202C Advanced Adult-Gerontology Nursing II 3
NGR 6202L Advanced Adult-Gerontology Nursing Practice II
NGR 6209 Clinical Decision Making in Advanced Adult-Gerontology Nursing

Role Development: (4 credits)
Advanced Practice Nurse
NGR 6700L Role Synthesis in Advanced Adult-
Gerontology Nursing Practice
Elective: (3 credits)

## Master of Science in Nursing Advanced Child Nurse Practitioner

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater in a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level.)
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN) formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from Programs without such accreditation will be considered on an individual basis.
6. Completion of all MSN admission paperwork including the NursingCAS application, FIU supplemental application, a written essay, recommendations, and Curriculum Vitae, as well as favorable personal interview with MSN Committee.

## Graduation Requirements

1. Completion of 44 semester credits. Minimum of 36-40 credits in nursing and 3-6 credits of non-nursing electives. The non-nursing electives are restricted to supporting courses for the specialty area.
2. Completion of a thesis ( 6 credits), a master's paper ( 3 credits), or a research project (3 credits). Students selecting a master's paper or research project must complete an additional three hours of cognate course(s).
3. Achievement of an overall cumulative GPA of 3.0 or above. See Graduate Catalog in University Graduate School Rules and Regulations for information on Academic Warning, Probation, and Dismissal.
4. Removal of all conditions, deficiencies, and incomplete grades. Credit hours for courses in which the grade is "B-" or below will not count toward satisfying graduate degree requirements.
5. With the exception of thesis courses, students are expected to register for courses with letter grades. Electives may be taken as pass/fail subject to the approval of the advisor.

## Curriculum

MSN Level Course Requirements
Graduate Nursing Core: (9 credits)
NGR 5110 Theories in Nursing

| NGR 5131 | Culture and Advanced Nursing Practice | 3 |
| :--- | :--- | :--- |
| NGR 5810 | Research Methods in Nursing | 3 |

Advanced Practice Nursing Core (ACNP): (10 credits)
NGR 5035C Advanced Client Assessment 3
NGR $5141 \quad$ Pathophysiologic Basis of Advanced Nursing Practice

3
NGR 6172 Pharmacological Concepts in Advanced Nursing Practice 3
NGR 6743 Clinical Education Seminar 1
Advanced Child Health Nursing: (15 credits)
NGR 6301C Advanced Child Health Nursing I 3
NGR 6301L Advanced Child Health Nursing Practice
NGR 6302 Advanced Child Health Nursing II 3
NGR 6302L Advanced Child Health Nursing Practice II 3
NGR 6337 Clinical Decision Making in Advanced Child Health Nursing

Role Development: (4 credits)
Advanced Practice Nurse
NGR 6337L Role Synthesis in Advanced Child Health Nursing Practice

4
Elective: (3 credits)

## Master of Science in Nursing Advanced Family Nurse Practitioner

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater in a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level.)
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN) formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from Programs without such accreditation will be considered on an individual basis.
6. Completion of all MSN admission paperwork including the NursingCAS application, FIU supplemental application, a written essay, recommendations, and Curriculum Vitae, as well as favorable personal interview with MSN Committee.

## Graduation Requirements

1. Completion of 48 semester credits. Minimum of $36-40$ credits in nursing and $3-6$ credits of non-nursing electives. The non-nursing electives are restricted to supporting courses for the specialty area.
2. Completion of a thesis ( 6 credits), a master's paper (3 credits), or a research project (3 credits). Students electing a master's paper or research project must
complete an additional three hours of cognate course(s).
3. Achievement of an overall cumulative GPA of 3.0 or above. See Graduate Catalog in University Graduate School Rules and Regulations for information on Academic Warning, Probation, and Dismissal.
4. Removal of all conditions, deficiencies, and incomplete grades. Credit hours for courses in which the grade is "B-" or below will not count toward satisfying graduate degree requirements.
5. With the exception of thesis courses, students are expected to register for courses with letter grades. Electives may be taken as pass/fail subject to the approval of the advisor.

## Curriculum

MSN Level Course Requirements
Graduate Nursing Core: ( 9 credits)
NGR 5110 Theories in Nursing 3
NGR $5131 \quad$ Culture and Advanced Nursing Practice 3
NGR 5810 Research Methods in Nursing 3
Advanced Practice Nursing Core (FNP): (10 credits)
NGR 5035C Advanced Client Assessment 3
NGR $5141 \quad$ Pathophysiologic Basis of Advanced Nursing Practice
NGR 6172 Pharmacological Concepts in Advanced Nursing Practice 3 Clinical Education Seminar 1
Advanced Family Health Nursing: (19 credits)
NGR 6601C Advanced Family Health Nursing I 4
NGR 6601L $\quad \begin{aligned} & \text { Advanced Family Health Nursing } \\ & \\ & \text { Practice I }\end{aligned}$
NGR 6602C Advanced Family Health Nursing II 4
NGR 6602L Advanced Family Health Nursing Practice II
NGR 6748 Clinical Decision Making in Advanced Family Nursing Practice
Role Development: (4 credits)
Advanced Practice Nurse
NGR 6619L Role Synthesis in Advanced Family Health Nursing Practice

## Master of Science in Nursing Advanced Psychiatric Nurse Practitioner

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater in a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level.)
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN)
formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from Programs without such accreditation will be considered on an individual basis.
6. Completion of all MSN admission paperwork including the NursingCAS application, FIU supplemental application, a written essay, recommendations, and Curriculum Vitae, as well as favorable personal interview with MSN Committee.

## Graduation Requirements

1. Completion of 44 semester credits. Minimum of 36-40 credits in nursing and $3-6$ credits of non-nursing electives. The non-nursing electives are restricted to supporting courses for the specialty area.
2. Completion of a thesis ( 6 credits), a master's paper ( 3 credits), or a research project (3 credits). Students electing a master's paper or research project must complete an additional three hours of cognate course(s).
3. Achievement of an overall cumulative GPA of 3.0 or above. See Graduate Catalog in University Graduate School Rules and Regulations for information on Academic Warning, Probation, and Dismissal.
4. Removal of all conditions, deficiencies, and incomplete grades. Credit hours for courses in which the grade is "B-" or below will not count toward satisfying graduate degree requirements.
5. With the exception of thesis courses, students are expected to register for courses with letter grades. Electives may be taken as pass/fail subject to the approval of the advisor.

## Curriculum

MSN Level Course Requirements
Graduate Nursing Core: ( 9 credits)
NGR 5110 Theories in Nursing 3
NGR $5131 \quad$ Culture and Advanced Nursing Practice 3
NGR 5810 Research Methods in Nursing 3
Advanced Practice Nursing Core (APNP): ( 10 credits)
NGR 5035C Advanced Client Assessment 3
NGR $5141 \quad$ Pathophysiologic Basis of Advanced Nursing Practice
NGR 6172 Pharmacological Concepts in Advanced Nursing Practice3

NGR 6743 Clinical Education Seminar 1
Advanced Psychiatric-Mental Health Nursing: (18 credits)
NGR 6503 Advanced Psychiatric-Mental Health Nursing I
NGR 6503L Advanced Psychiatric-Mental Health Nursing Practice I
NGR 6504C Advanced Psychiatric-Mental Health Nursing II
NGR 6504L Advanced Psychiatric-Mental Health Nursing Practice II
NGR 6538 Psychopharmacology for Advanced Practice Nursing
NGR 6560 Advanced Psychiatric Mental Health Clinical Decision Making
Role Development: (4 credits)
Advanced Practice Nurse
NGR 6505L Role Synthesis in Advanced Psychiatric Mental Health Nursing Practice

## Master of Science in Nursing - Nurse Executive Track

Note: A moratorium has been placed on admissions to the Nurse Executive Track.

## Admission Requirements

The applicant must:

1. Have completed a baccalaureate degree in nursing which is accredited by the National League for Nursing Accrediting Commission (NLNAC), or the Commission on Collegiate Nursing Education (CCNE). Applicants with a baccalaureate degree from nursing programs without NLNAC or CCNE accreditation will be considered on an individual basis. RN applicants (with a baccalaureate degree in another field) to the MSN program must have completed a non-nursing baccalaureate degree with a GPA of 3.0 or higher from a nationally accredited college or university.
2. Have evidence of a current RN licensure in Florida.
3. Have completed introductory courses in statistics (3 credits), and basic health assessment (3 credits). RN applicants with an Associate Degree in Nursing and a baccalaureate degree in another field who are applying to the MSN program must have completed a non-nursing baccalaureate degree with a GPA of 3.0 or higher from a nationally accredited college or university. These RN applicants must have completed undergraduate courses with a grade of "C" or higher: 4 credits each of human anatomy \& lab, human physiology \& lab, microbiology \& lab, and survey of chemistry \& lab; and 3 credits each of human growth \& development, statistics, psychology, principles of nutrition, and ethics.
4. Submit evidence of basic computer application (word processing) skills.
5. Have a faculty interview.
6. Provide the following:
a. Statement of philosophy of nursing and professional goals.
b. Letters of reference from: 1) a previous nursing faculty; 2) a current immediate supervisor; and 3) a co-worker.
7. For international students (graduates of foreign nursing schools) only:
a. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) of 550 or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL, 80 on the internet-based TOEFL (iBT) or 6.5 overall on the IELTS.
b. CGFNS certification or Florida RN license.
8. The Florida Board of Nursing and clinical agencies require the disclosure of conviction records for misdemeanors and/or felonies; therefore, this information will be required at the time of application. Applicants are required to submit to criminal background checks and drug testing. Expenses associated with background checks and drug testing (including repeat testing) are the responsibility of the student. Findings may affect a student's ability to be admitted, to participate in clinical experiences and
complete the program, and/or obtain advanced licensure/ certification.

## Degree Requirements

1. Completion of 43 semester credits. Minimum of 36-40 credits in nursing and 3-6 credits of non-nursing electives. The non-nursing electives are restricted to supporting courses for the specialty area.
2. Completion of a thesis ( 6 credits), a master's paper ( 3 credits), or a research project (3 credits). Students electing a master's paper or research project must complete an additional three hours of cognate course(s).
3. Achievement of an overall cumulative GPA of 3.0 or above. See Graduate Catalog in University Graduate School Rules and Regulations for information on Academic Warning, Probation, and Dismissal.
4. Removal of all conditions, deficiencies, and incomplete grades. Credit hours for courses in which the grade is "B-" or below will not count toward satisfying graduate degree requirements.
5. With the exception of thesis courses, students are expected to register for courses with letter grades. Electives may be taken as pass/fail subject to the approval of the advisor.

## Curriculum

## MSN Level Course Requirements

Graduate Nursing Core: ( 9 credits)
NGR 5110 Theories in Nursing 3
NGR 5131 Culture and Advanced Nursing Practice 3
NGR 5810 Research Methods in Nursing 3
Advanced Practice Nursing Core (NE): (9 credits)
NGR 5720C Org Dynamics of Nursing Systems
NGR 6726C Nursing Management and CQI 3
Nurse Executive: (8 credits)
$\begin{array}{lll}\text { NGR 5723C } & \text { Advanced Nursing Administration I } & 4 \\ \text { NGR 6724C } & \text { Advanced Nursing Administration II } & 4\end{array}$
Nursing Administration: (7 credits)
NGR 6712C Advanced Nursing Administration III 4
$\begin{array}{ll}\text { NGR } 6727 & \begin{array}{l}\text { Issues \& Strategies of Nursing } \\ \text { Administration }\end{array}\end{array}$
Nursing Education: (7 credits)
NGR $6710 \quad$ Role Synthesis in Nursing Education 4
NGR 6713 Curriculum Development in Nursing 3
Nurse Executive: (10 credits)
$\begin{array}{ll}\text { NGR 6712L } & \begin{array}{l}\text { Role Synthesis in Nursing } \\ \text { Administration }\end{array}\end{array}$
HSA 6176 Financing and Reimbursement of Health
$\begin{array}{lll} & \text { SHC } 6443 & 3 \\ \text { Ethical Issues } & 3\end{array}$
Research: (6 credits)
Master's Thesis Option
NGR 6970 MSN Thesis I 3
NGR 6971 MSN Thesis II 3
OR
Master's Paper Option
NGR 6970 MSN Thesis I (Research Paper)
Elective
OR
Master's Project Option
NGR 6910C Research Project

Elective

## Combined BSN/MSN for ForeignEducated Physician Track

## Admission Requirements

The Combined BSN/MSN track is a pathway for foreigneducated physicians (FEPs) from culturally diverse backgrounds to:

- obtain the BSN degree
- become Registered Nurses (RNs)
- attain the MSN degree
- become eligible to take the Advanced Registered Nurse Practice (ARNP) national certification exam
The combined BSN/MSN track is an accelerated program that builds upon the knowledge and skills of the social and physical sciences from a prior BS degree. It is comprised of 63 upper division credits and 43-47 graduate credits, totaling 105 to 109 credit hours. Admission to the MSN component is contingent upon meeting the MSN admission requirements.

To be admitted to the BSN/MSN track, students must:

1. Have completed a medical degree from an accredited non-US university;
2. Have transcripts evaluated by Josef Silny \& Associates or by an equivalent transcript evaluation company;
3. Obtain a TOEFL score of 550;
4. Meet nursing entry requirements for computation and reading skills;
5. Meet the admission criteria to be admitted to the University and to the College of Nursing and Health Sciences; and
6. Successfully complete the following nursing prerequisites (with grade of ' $C$ ' or above): statistics, human growth \& development across the life span, human nutrition, anatomy \& physiology, microbiology, chemistry. Transcripts will be evaluated by NWCNHS.
7. The Florida Board of Nursing and clinical agencies require the disclosure of conviction records for misdemeanors and/or felonies; therefore, this information will be required at the time of application. Applicants are required to submit to criminal background checks and drug testing. Expenses associated with background checks and drug testing (including repeat testing) are the responsibility of the student. Findings may affect a student's ability to be admitted, to participate in clinical experiences and complete the program, and/or obtain advanced licensure/ certification.
To advance to the MSN component of this track, (Semesters V-VIII), students must:
8. Have a cumulative GPA of 3.2 or above for Semesters I to IV; and
9. Be licensed as a registered nurse (RN) by the end of Semester V.

## Degree Conferrals

Students enrolled in the MSN component must apply to graduate with the BSN during the $4^{\text {th }}$ week of semester VI ; BSN degree will be posted at the end of semester VI.

Students will graduate with the MSN at the end of semester VIII.

## BSN Stop-out Options

1. Low GPA Stop-out Option: Students with $<3.2$ cumulative GPA for Semesters I to IV will take NUR 4636C (Care of Communities: Community Health Nursing, 4 credits) and NUR 4945L (Senior Clinical Practicum, 4 credits) in Semester V. BSN degree will be awarded at the end of semester V or semester VI depending on availability of NUR 4945L. Students must apply for graduation of the BSN component by the $4^{\text {th }}$ week of the semester they intend to graduate.
2. Failure to Pass NCLEX Stop-out Option: Students not passing NCLEX-RN by the end of Semester V will take NUR 4945L (Senior Clinical Practicum, 4 credits) in Semester VI. BSN degree will be awarded at the end of semester VI. Students must apply for graduation of the BSN component by the $4^{\text {th }}$ week of the semester they intend to graduate.
3. Stop out students will graduate with BSN and will be discontinued from the combined BSN-MSN track.

## Curriculum

## Semester I-18 (15 UG/3 Grad)

NUR 3029 Foundations of Nursing Practice 3
NUR 3029C Foundations of Nursing Practice Laboratory
NUR 3029L Foundations of Nursing Practice Clinical 3
NUR 3066C Health Assessment and Promotion in Nursing Practice
NUR 3119 Professional Nursing: Concepts and Issues
NGR $6172 \quad$ Pharmacological Concepts in Advanced Nursing Practice (MSN Requirement) 3

Semester II - 15 (12 UG/3 Grad)
NUR $3226 \quad$ Nursing Care of Adults I 3
NUR 3226L Nursing Care of Adults I Clinical 3
NUR 3227 Nursing Care of Adults II 3
NUR 3227L Nursing Care of Adults II Clinical 3
NUR 3685L Integrative Nursing Care I 0
NGR 5141 Pathophysiological Basis of Advanced Nursing Practice (MSN Requirement) 3
Semester III - 14 (11 UG/3 Grad)
NUR 3535 Psychosocial Nursing 3
NUR 3535L Psychosocial Nursing Clinical 3
NUR 4686L Integrative Nursing Care II 0
NUR $4286 \quad$ Nursing Care of Older Adults 2
$\begin{array}{ll}\text { NUR } 3821 & \text { Professional Nursing Leadership: } \\ & \text { Concepts and Issues }\end{array}$
NGR $5110 \quad$ Theories in Nursing (MSN Requirement

- Not required for BSN)

Semester IV - 17 (17 UG)
NUR 4455 Care of Families: Childbearing Nursing 3
NUR 4455L Care of Families: Childbearing Nursing
NUR $4355 \quad$ Care of Families: Childrearing Nursing
NUR 4355L Care of Families: Childrearing Nursing Clinical

3

NUR $4667 \quad$ Nursing in Global Health Care Systems - GL

NUR 4940 Senior Clinical Synthesis 2
Low GPA Stop-out Option: Students with <3.2 cumulative GPA for Semesters I to IV will take NUR

4636C (Care of Communities: Community Health Nursing, 4 credits) and NUR 4945L (Senior Clinical Practicum, 4 credits) in Semester V or VI, and end with a BSN degree.

| Semester V - $\mathbf{1 3}$ | (4 UG/9 Grad) |  |
| :--- | :--- | :--- |
| NUR 4636C | Care of Communities: Community |  |
|  | Health Nursing <br> NGR 5131 <br> Culture and Advanced Nursing Practice |  |
|  | (MSN Requirement - Not required for <br> (MSN) | 3 |
| NGR 5035C | Advanced Client Assessment (MSN <br> NGR 5810 | Requirement - Not required for BSN) <br> Research Methods in Nursing (MSN <br> Requirement) |
|  | 3 |  |
|  | 3 |  |

Failure to Pass NCLEX Stop-out Option: Students must pass the NCLEX during semester V. Students not passing the NCLEX-RN by the end of the semester $V$ will take NUR 4945L (Senior Clinical Practicum, 4 credits) in semester VI and will be eligible for a BSN degree at the end of semester VI. (+4 UG credits for Stop Out Students only)

## Semester VI

NGR 6201C, or Advanced Adult-Gerontology, Child, or 6301C, or 6601C Family Health Nursing I
NGR 6201L, or Advanced Adult-Gerontology, Child, or 6301L, or 6601L Family Health Nursing Practice I* 3-4 NGR 5XXX Elective 3

Students must apply for graduation from the BSN by $4^{\text {th }}$ week of semester VI.

## Semester VII

NGR 6202C, or Advanced Adult-Gerontology, Child, or 6302C, or 6602C Family Health Nursing II
NGR 6202L, or Advanced Adult-Gerontology, Child, or 6302L, or 6602L Family Health Nursing Practice II* 3-4
NGR 6910C Research Project 3

## Semester VIII

NGR 6209, or Clinical Decision Making in Advanced 6337, or 6748 Adult-Gerontology, Child or Family Health Nursing

3
NGR 6700L, or Role Synthesis in Advanced Adult6337L, or 6619L Gerontology, Child, or Family Health Nursing Practice*

4
Eligible to take ARNP National Certification Exam after completion of semester VIII.
Students must apply for graduation from MSN at the beginning of semester VIII.
*All students must have a majority of ARNP preceptors in all NP practicum courses.

## Repeating Nursing Courses and Dismissal

A grade of " C " or higher in all NUR courses and a grade of " B " or higher in all NGR courses is necessary for continuing in the combined BSN/MSN track. A course in the BSN/MSN track can be repeated only once. If a student fails the same NUR course twice, or two NUR clinical and/or clinical-related courses, or two NGR courses, he/she will be dismissed from the BSN/MSN for FEP track.

## RN-BSN-MSN

The RN-BSN-MSN requires a minimum of 120 credits for completion of the BSN portion. In addition to 60
transferable lower division credits, the degree requirements include a 24 credit nursing core, a 30 credit clinical proficiency evaluation (completed by equivalency exams), 4 credits of human anatomy \& lab, human physiology \& lab, microbiology \& lab, and survey of chemistry \& lab; and 3 credits each of human growth \& development, statistics, psychology, principles of nutrition, ethics, and intercultural communication. No more than six (6) transferable credits from other nursing baccalaureate programs will be accepted for the BSN portion of the program of study.

Each applicant's educational record is individually evaluated by the nursing unit. To progress through the curriculum, the RN must successfully complete prerequisite, corequisite and required courses for the curriculum plan in effect at the time of admission.

Students must complete the University Core Curriculum, and Equivalency Exams and be admitted to the MSN Program prior to enrollment in Level III courses. Applicants must have a 3.2 cumulative GPA to be admitted to the MSN Program and must meet admission criteria for the FIU Graduate School and MSN Program. Students must be admitted to the MSN program prior to taking Pathophysiological Basis of ANP, Culture \& Advanced Nursing Practice, and Advanced Client Assessment courses.

RNs must have one year clinical nursing experience and obtain professional liability insurance prior to registering for NUR 4636C and/or NUR 4945L.

## Admission Requirements

Degree seeking applicants with fewer than 60 semester hours of transfer credit must satisfy the same admission requirements as beginning freshmen. Visit the information website for this program at http://rn2bsn.fiu.edul for program information.

For admission to the RN-BSN-MSN track a student must:

1. Be licensed by the State of Florida as a Registered Nurse (RN).
2. Have submitted the required applications and official transcripts to FIU and CNHS.
3. Have completed a) Florida mandated Gordon Rule requirements; b) University Core Curriculum requirements; c) University foreign language requirement; and d) nursing major prerequisites with a grade of "C" or higher.
4. Have completed at least 60 transferable credits of academic course work with a cumulative GPA of at least 3.2 from a regionally accredited college or university.
5. Have completed the required Excelsior equivalency examinations with a grade of "C" or better.
6. For international students (graduates of foreign nursing schools) only:
a. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) of 550 or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL, 80 on the internet-based TOEFL (iBT) or 6.5 overall on the IELTS.
b. CGFNS certification on Florida RN licensure.
7. See Generic BSN for program policies related to background checks, immunizations, health requirements, and CPR.

## Advanced Placement of RNs

Advanced placement in both nursing and non-nursing courses is facilitated by earning credits through examination, i.e., challenge or equivalency exams such as CLEP or Excelsior College examinations (PsychiatricMental Health Nursing, Adult Health Nursing, and Maternal-Child Nursing) with a grade of "C" or higher.

RNs who are admitted to the MSN program complete three graduate level courses (Advanced Client Assessment, Pathophysiological Basis of ANP and Culture \& Advanced Nursing Practice) while taking BSN courses. Applicants admitted to the MSN program will substitute graduate nursing practicum credits for NUR 4945L Senior Clinical Practicum. Students who are not admitted to the MSN program will complete NUR 3666 Evidence-Based Nursing and Research in Global Health Care and NUR 4945L Senior Clinical Practicum for the BSN degree.

## Curriculum

## RN Baccalaureate Level Course Requirements:

## (10)

(For RN with BS/BA in another field)

| NUR 3119 | Professional Nursing: Concepts and Issues | 3 |
| :---: | :---: | :---: |
| NUR 3668 | Nursing Leadership in Global Health |  |
|  | Care | 3 |
| NUR 4636C | Care of Families: Community Health |  |
|  | Nursing | 4 |
| Level I: |  |  |
| NUR 3821 | Professional Nursing Leadership: |  |
|  | Concepts and Issues | 3 |
| NUR 3066C | Health Assessment and Promotion in |  |
|  | Nursing Practice | 4 |
| NUR 3226* | Nursing Care of Adults I | 3 |
| NUR 3226L* | Nursing Care of Adults I Clinical | 3 |
| NUR 3227* | Nursing Care of Adults II | 3 |
| NUR 3227L* | Nursing Care of Adults II Clinical | 3 |
| NUR 3535* | Psychosocial Nursing | 3 |
| NUR 3535L* | Psychosocial Nursing Clinical | 3 |
| NUR 4355* | Care of Families: Childrearing Nursing | 3 |
| NUR 4355L* | Care of Families: Childrearing Nursing |  |
|  | Clinical | 3 |
| NUR 4455* | Care of Families: Childbearing Nursing | 3 |
| NUR 4455L* | Care of Families: Childbearing Nursing |  |
|  | Clinical | 3 |

Level II**:
COM 3461 Intercultural/Interracial Communication or GL Elective
NUR 3666 Evidence-Based Nursing and Research in Global Health Care
Level III:
NGR 5141 Pathophysiological Basis of ANP 3
NGR 5131 Culture and Advanced Nursing Practice 3

## Level IV:

NUR 4636C Care of Families: Community Health Nursing

4
NGR 5035C Advanced Client Assessment 3
*E.E. = Equivalency Exam
**Students must apply to the MSN program at this point; Applicants must have a 3.2 GPA to be admitted to the MSN program.
See University catalog/nursing advisor for pre-and-corequisite courses.

## Master of Science in Nursing - Nurse Anesthetist

Note: The degree program for Nurse Anesthetist is transitioning from the MSN to DNP degree. The program will not be accepting new applicants for the MSN.

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater in a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level.)
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN) formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from Programs without such accreditation will be considered on an individual basis.
6. Completion of all admission paperwork including the program application, a written essay, (3) recommendations, and curriculum vitae, as well as personal interview with Anesthesiology Nursing Admission Committee.

## Graduation Requirements

1. Completion of all required courses and clinical experience requirements.
2. Completion of a master's paper (3 credits) or a capstone project (6 credits).
3. Achievement of an overall cumulative GPA of 3.0 or above. See Graduate Catalog in University Graduate School Rules and Regulations for information on Academic Warning, Probation, and Dismissal.
4. Removal of all conditions, deficiencies, and incomplete grades. Credit hours for courses in which the grade is "B-" or below will not count toward satisfying graduate degree requirements.
5. With the exception of thesis courses, students are expected to register for courses with letter grades. Electives may be taken as pass/fail subject to the approval of the advisor.

## Curriculum

MSN Level Course Requirements
Graduate Nursing Core: (9 credits)
NGR 5110 Theories in Nursing


## Ph.D. in Nursing

The Ph.D. in Nursing program is designed to prepare its graduates for leadership roles and research careers in academia, the health care industry, and government and private organizations focused on health care. The program purpose is to develop individuals who will be leaders in generating and applying the science needed to guide nursing practice, and who have the knowledge and skills to direct and guide application of other evidence-based health care findings to improve the health of people from diverse cultures. Students in the program will pursue individualized courses of study under the mentorship of research active faculty. A major program emphasis is the preparation of Ph.D. educated minority nursing leaders
and focused research on health issues for minority and underserved populations. There are two tracks in the PhD in Nursing, MSN to PhD and BSN to PhD.

## Admission Requirements MSN to PhD Track

A prospective student must meet all admission requirements stipulated in the University's Graduate Policies and Procedures. Additional requirements are as follows:

1. A master's degree in nursing from an accredited institution.
2. A master's program grade point average (GPA) of 3.3/4.0 or higher.
3. (Verbal and Quantitative) Graduate Record Examination (GRE) scores. The GRE must have been taken within the last 5 years of the date postmarked on the application. If the GRE was taken prior to 5 years and the combined score is high, call the College's Doctoral Program Office to determine if a waiver is possible.
4. Three letters of recommendation from academic and professional references.
5. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL, 80 on the internetbased TOEFL (iBT) or 6.5 overall on the IELTS.
6. A statement of the applicant's goals for pursuing the PhD degree in nursing. This statement must be typed, double-spaced, in a narrative format of no more than 500 words, using Times New Roman or Arial 12 Font.
7. Current Registered Nurse (RN) licensure or RN licensure with Advanced Registered Nurse Practitioner (ARNP) certification in the State of Florida if applicable. The license must remain current throughout the program. Registered Nurse (RN) licensure in Florida is waived for international students.
8. Current professional liability insurance. The graduate student must maintain liability insurance throughout the program.
9. A satisfactory interview by members of the College's Doctoral Program Admissions Committee. The Committee will examine the credentials of all applicants.

## Admission Requirements BSN to Ph.D. Track

Prospective student must meet all admissions requirements stipulated in the University's Graduate Policies and Procedures. Additional requirements are as follows:

1. An overall undergraduate GPA of 3.3 on a 4.0 scale.
2. Curriculum Vitae
3. Evidence of scholarship in nursing science, for example: Term paper/special project report; research report; published article or manuscript submitted for publication
4. Demonstrated computer proficiency in word processing and electronic library searches
5. Applicants, whose native language is not English, must take the TOEFL (Test of English as a Foreign Language) and obtain a minimum of 80 on the iBT

TOEFL (equivalent to 550 on the paper based version).
6. The Graduate Record Examination (GRE) is required for admissions into the Ph.D. in Nursing Program. The GRE must have been taken within the last 5 years of the date postmarked on the application.
7. Three letters of recommendation from academic and professional references.
8. A statement of the applicant's goals for pursuing the Ph.D. degree in nursing. This statement must be typed, double-spaced, in a narrative format of no more than 500 words, using Times New Roman or Arial 12 Font.
9. Current Registered Nurse ( RN ) licensure in the State of Florida. License must remain current throughout the program.
10. Current professional liability insurance. The graduate student must maintain liability insurance throughout the program.
11. A satisfactory interview by members of the College's Doctoral Program Admissions Committee. The Committee will examine the credentials of all applicants.

## Application Process

Applicants must complete the following steps in order to be considered for admission:

1. Complete two applications as indicated and return to the appropriate offices to avoid unnecessary delay in the review process.
a. Complete a graduate admissions application online available at http://gradschool.fiu.edu.
b. Complete the FIU NWCNHS-PhD Application for Admission via NursingCAS (The Centralized Application Service for Nursing Programs) at https://nursingcas.liaisoncas.com/applicantuxI\#/login.
2. Request an official transcript of records from each college or university attended for undergraduate and graduate work. Transcripts must be sent to both 1) FIU, Office of Graduate Admissions, P.O. Box 659004, Miami, Florida 33265-9004 and 2) uploaded to your NursingCAS profile.
3. Submit the required documents (transcripts, GRE scores, TOEFL scores if applicable, letters of recommendation, statement of goals, RN licensure, liability insurance) for admission evaluation. The application and required documents do not have to be sent to the University Graduate Admissions Office or the College Admissions Office as one package; however, all required documents MUST be received on or before the deadline date.
4. The application file must be complete before the College's Doctoral Program Committee will consider the applicant for admission. The application and supporting documents must be received on or before June 1 for Fall admission. If the application and supporting documents are not received by the appropriate deadline, the application will be considered for admission for the following term.

## General Degree Requirements

1. Achievement of an overall cumulative GPA of 3.0 or above. A cumulative GPA of less than 3.0 will place the student on probation for one semester, and
she/he may be subject to dismissal if the 3.0 GPA requirement is not met after the probationary period.
2. Removal of all conditions, deficiencies, and incomplete grades. With the exception of doctoral dissertation courses, students are expected to register for courses with letter grades. Credit hours for courses in which the grade is "B-" or below will not count toward satisfying graduate degree requirements.
3. Student is expected to complete the dissertation five (5) years from the date of advancement to candidacy (i.e., successful completion of written and oral examinations, favorable recommendation of supervisory/guidance committee, and an approved dissertation proposal.
4. All requirements must be completed within nine years of first enrollment in the doctoral program.

## Curriculum MSN to PhD Track: (60 Credits)

The MSN to PhD track requires completion of 60 credit hours of coursework and dissertation credits. The program can be completed in 4 years of full-time study.

The track requires completion of the following courses: A research sequence (1 course on knowledge development, 2 courses in research methods and design, 2 courses in statistics, and 3 one-credit courses on grantsmanship); research in health care for multicultural, diverse and vulnerable populations; academic, health care and political systems: function, structure, leadership and survival; accessing, managing, and packaging information; and 3 cognate courses in a specific knowledge area.


Research Methods and Design: (9)
NGR $6800 \quad$ Advanced Nursing Research Methods I:
NGR 6801 Advanced Nursing Research Methods II:
NGR 6815 Qualitative Methods 3
PHC $6710 \quad \begin{aligned} & \text { Qualitative Research Methods in Public } \\ & 3\end{aligned}$
Statistics: (6)

Grantsmanship: (6)
NGR 6917 Grantsmanship I 3
NGR 6918 Grantsmanship II 3
Cognate Electives: (6)

Candidacy Examination (3-9)
NGR 7982
Candidacy Examination

Dissertation: (18)
NGR 7980 Dissertation I

## Curriculum BSN to PhD Track (Minimum of 91 credits)

The BSN to PhD track builds on student's general nursing knowledge and skills at the baccalaureate level and provides a course of study for advanced nursing practice at the master's level. The curriculum includes master's level courses designed to prepare students for advanced practice roles and provide the foundation from which students can engage in a program of intellectual inquiry at the doctoral level. If a student in the BSN- PhD track desires specialty certification (e.g., adult nurse practitioner), all required course work and clinical practice must be completed for that clinical specialty. Students will receive the MSN degree upon completion of the first 5 semesters of full time study described in the program progression plan. The program can be completed in $41 / 2-$ 5 years of full-time study or 6-7 years of part-time study.

The BSN- PhD in Nursing track requires a minimum of 91 credits, including 6 credits of MSN core, 9 credits of APN (Advanced Practice Nursing) core; 12-16 credits of nursing specialty; 4 credits of role development; 12 credits of core knowledge (scientific inquiry \& nursing science, cultural competence in research), 6 credits of statistics, 9 credits of advanced research methods, 6 credits of grantsmanship, 6 credits of cognate electives, and a minimum of 18 credit hours of dissertation.

| MSN Core: (6) |  |  |
| :--- | :--- | :--- |
| NGR 5604 | Culture and Advanced Nursing Practice | 3 |
| NGR 5810 | Research Methods in Nursing | 3 |
| APN Core: (9) |  |  |
| NGR 5035C | Advanced Client Assessment | 3 |
| NGR 5141 | Pathophysiological Basis of ANP | 3 |
| NGR 6192 | Pharmacological Concepts in ANP | 3 |

Clinical Nursing Specialty/EDU/ADM: (12)
AHN/CHN/FNP/PMHN/ADM clinical track courses. Note: Family Nurse Practitioner (FNP) and Nurse Anesthesia tracks require greater than 12 clinical track credits to meet accreditation and certification requirements for clinical contact hours.
Role Development: (4)

| NGR 6700L | Role Synthesis in Advanced Adult- <br> Gerontology Nursing Practice <br> or | 4 |
| :--- | :--- | :--- |
| NGR 6337L | Role Synthesis in Advanced Child <br> Health Nursing Practice | 4 |
|  | or | 4 |
| NGR 6505L | Role Synthesis in Advanced Psychiatric- <br> NGR 6619L | Mental Health Nursing Practice <br> or | | Role Synthesis in Advanced Family |
| :--- |
| Health Nursing Practice |$\quad 4$

Core Knowledge: (12)
NGR 6123 Knowledge Development in Nursing Science

3
NGR 7736 Academic, Health Care, and Political Systems: Function, Structure, Leadership, and Survival Research in Health Care for Multicultural, Diverse, and Vulnerable Populations

NGR 7873 Accessing, Managing and Packaging Information

Statistics: (6)
PHC 6091
Biostatistics 2
PHC $7719 \quad$ Quantitative Multivariate Analysis in Health Sciences Research (or equivalent by advisement)
*Has a pre-requisite of introductory statistics
Research Methods and Design: (9)
NGR 6800 Advanced Nursing Research Methods I 3
NGR 6801 Advanced Nursing Research Methods II 3
NGR 6815 Qualitative Methods 3
Grantsmanship: (6)
NGR 6917 Grantsmanship I
NGR 6918 Grantsmanship II
Cognate Electives: (6)
(Electives by advisement)
Candidacy Examination (3-9)
NGR 7982 Candidacy Examination
Dissertation (18)
NGR 7980 Dissertation I

## Examinations

A student must successfully complete the following written examination and oral defenses in partial fulfillment of requirements for the Ph.D. degree in Nursing:

1. Candidacy Examination: The purpose of the Candidacy Examination is to demonstrate the student's ability to 1) synthesize knowledge in the student's research (substantive and methods) and cognate areas; 2) visualize the long-term development of a program of research in the defined area; and 3) place the planned Dissertation research in the context of that program of research and the area of knowledge. Upon successfully passing the written and oral Candidacy Examination and completing all required coursework, the student is admitted to Dissertation Candidacy. The Candidacy Examination is held after completion of course work requirements as represented in the student's Plan of Study, and prior to the Defense of the Dissertation Proposal.
2. Dissertation Proposal Defense: The proposal defense must be completed after the student has identified the major substantive and methodological issues of the research problem and the proposal is written in excellent form. The Proposal should consist of:
a) An introduction to research problem, with a statement of the research question or hypothesis;
b) A review of relevant literature sufficient to provide context for the research problem as well as a review of literature focused on the specific question to be examined;
c) A description of the research methods to be utilized in answering the research question, including a complete definition of the data to be collected and extant data bases that could be used; and
d) A list of references.

The proposal oral defense must be successfully completed and approved by the Dissertation Committee prior to the defense of the dissertation.
3. Dissertation Defense: All Committee members must preliminarily approve the Dissertation document before the student can apply for Dissertation Defense. By their signatures, Committee members certify that the Dissertation is ready for Defense.

The student should consult with his/her Chairperson on the format and the time parameters of the oral Defense. After the Committee determines that the Defense was successful, the student should obtain signatures of all Committee members on the required form. Students should become familiar with the Nicole Wertheim College of Nursing and Health Sciences Ph.D. in Nursing Policies and Procedures at http://cnhs.fiu.edul and the University Graduate School's regulations and deadlines at http://gradschool.fiu.edu.

## Doctor of Nursing Practice

The Doctorate of Nursing Practice (DNP) is a program of graduate doctoral study for the registered nurse with specialty preparation in advanced practice nursing. The DNP program of study includes or builds upon the clinical specialization to include study of: advanced specialty practice; systematic practice and program outcome evaluation; application of health information resources; development of safe, equitable, and cost effective health policy; innovation, implementation and evaluation of care delivery models; leadership development in health care delivery and clinical expertise for advanced nursing practice and education. The goals of the DNP program are to prepare nurses for leadership roles in a specialized area of advanced practice nursing with an emphasis on: philosophical, ethical, and scientific principles that provide the foundation for leadership in professional nursing care; continued acquisition of knowledge and clinical skills in an area of advanced practice specialization; and leadership and clinical expertise in healthcare delivery, evaluation, quality improvement and advanced practice nursing education. The DNP is offered as a MSN-to-DNP track or as a Dual Degree MSN + DNP option for adult-gerontology nursing, child health nursing, family health nursing, psychiatric health nursing, and nurse anesthetist; and as a clinical major for BSN-to-DNP for Nurse Anesthetist. The clinical major for BSN-to-DNP nurse practitioner roles may be offered at future date.

## Admission Requirements (MSN-to-DNP track)

Admission to the DNP Program is competitive and is based on evaluations of the applicant's abilities, past performance, recommendations and match of FIU's DNP Program goals with the applicant's professional practice goals. In addition to the general FIU graduate admission requirements, applicants to the DNP Program must meet the following requirements:

1. Completed Master's degree or Post Master's Certificate in Advanced Practice Nursing specialty role (e.g. ANP, PNP, FNP, CRNA, CNM, CNS, etc.) from an accredited institution with minimum cumulative GPA of 3.25 ;
2. Official GRE scores (within past 5 years);

NOTE: There is no minimum GRE score recommended for this program
3. Current licensure with no restrictions as an ARNP in your state of residence;
4. Proof of Advanced Practice Specialty Certification;
5. Completion CNHS DNP Program Application;
6. Essay ( 500 words) addressing desired focus and areas of interest for practice in DNP program;
7. Three (3) professional recommendations describing the applicant's ability to be successful in a DNP program;
8. Curriculum Vitae;
9. Successful personal Interview with DNP admissions committee;

## Degree Requirements (MSN-to-DNP track)

The Doctorate of Nursing Practice requires completion of a minimum of 36 credits (beyond a Master of Science in Nursing) and a Capstone Project. DNP students will be expected to progress in their plan of study and demonstrate satisfactory attainment of course objectives and terminal program competencies. All course work must be completed with a minimum grade of "B" or "Pass" for non-letter grade courses. Clinical performance in residency must be evaluated at a satisfactory level and completed with a grade of "Pass." The Capstone Project must be approved by the DNP Project Committee. A successful public presentation and defense of the DNP Capstone Project is also required.

## Doctoral Nursing Practice Core ( $\mathbf{3 6}$ credits)

| NGR 7121 | Scientific and Theoretical Foundations <br> for Advanced Nursing Practice | 3 |
| :--- | :--- | :--- |
| NGR 7769 | Patient Safety and Quality Improvement <br> in Healthcare | 3 |
| NGR 7891 | Healthcare Finance and Economics in |  |
|  | Advanced Clinical Practice | 3 |
| NGR 7871 | Health Informatics | 3 |
| NGR 7854 | Analytical Methods for Evidence-Based |  |
|  | Clinical Practice |  |
| NGR 7892L | Health Policy Practicum (60 Clinical |  |
|  | hours) | 3 |
| NGR 7733 | Organizational Dynamics of Health |  |
|  | Systems | 3 |
| NGR 7853 | Translational Research | 3 |
| NGR 7940C | DNP Project I | 4 |
| NGR 7941C | DNP Project II | 4 |
| NGR 7942C | DNP Project III | 4 |

## Admission Requirements (BSN-to-DNP Nurse Anesthetist)

Admission to the BSN-to-DNP Nurse Anesthetist is competitive and is based on evaluations of the applicant's abilities, past performance, recommendations and match of FIU's DNP program goals with the applicant's professional practice goals. In addition to the general FIU graduate admission requirements, applicants to the DNPNA Program must meet the following requirements:

1. Successful completion of all the admission requirements for graduate education at Florida International University, the Nicole Wertheim College of Nursing and Health Sciences, and the Department of Nurse Anesthetist Practice (DNAP).
2. Baccalaureate degree in Nursing (BSN) from a National League for Nursing Accrediting Commission (NLNAC) or the Commission on Collegiate Nursing Education (CCNE) accredited nursing program and from a regionally accredited institution.
3. Cumulative undergraduate GPA of 3.0 or greater in a 4.0 scale and a minimum GPA of 3.0 for upper division coursework (UG 60).
4. Official GRE scores (Verbal, Quantitative, and Analytical); NOTE: There is no minimum GRE score recommended for this program.
5. Current State of Florida RN license. Out of state students must obtain a license to practice in Florida prior to admission.
6. Completion NWCHNS DNAP Program Application.
7. Essay ( 500 words)
8. Three professional recommendations.
9. Curriculum Vitae.
10. Successful personal interview with DNAP admissions committee.

## Degree Requirements (BSN-to-DNP Nurse Anesthetist)

The Doctorate of Nursing Practice - Nurse Anesthetist requires the completion of all required courses and clinical experience requirements and a Capstone Project. DNPNA students will be expected to progress in their plan of study and demonstrate satisfactory attainment of course objectives and terminal program competencies. All course work must be completed with a minimum grade of " $B$ " or "Pass" for non-letter grade courses. Clinical performance in residency must be evaluated at a satisfactory level and completed with a minimum letter grade of "B." The Capstone Project must be approved by the DNP Project Committee. A successful public presentation and defense of the DNP Capstone Project is also required.

## Doctoral Nursing Practice Core ( $\mathbf{3 6}$ credits)

NGR $7121 \quad$ Scientific and Theoretical Foundations for Advanced Nursing Practice

3
NGR $7769 \quad$ Patient Safety and Quality Improvement in Healthcare
NGR 7891 Healthcare Finance and Economics in Advanced Clinical Practice 3 Health Informatics 3
$\begin{array}{ll}\text { NGR 7871 } & \text { Health Informatics } \\ \text { NGR } 7854 & \text { Analytical Methods for Evidence-Based }\end{array}$ Clinical Practice 3
NGR 7892L Health Policy Practicum (60 Clinical hours)
NGR $7733 \quad$ Organizational Dynamics of Health Systems

3
NGR 7853 Translational Research 3
NGR 7940C DNP Project I 4
NGR 7941C DNP Project II 4
NGR 7942C DNP Project III 4
Advanced Practice Nursing Core: ( 15 credits)
NGR 5035C Advanced Client Assessment 3
NGR $5141 \quad$ Pathophysiologic Basis of Advanced Nursing Practice

3
NGR $6172 \quad$ Pharmacological Concepts in Advanced Nursing Practice 3
NGR 5604 Culture and Advanced Nursing Practice 3
NGR $5810 \quad$ Research Methods in Nursing 3
Nurse Anesthetist: ( $\mathbf{5 0}$ credits)
NGR $6421 \quad$ Principles of Anesthesiology Nursing I 2
NGR $6400 \quad$ Chemistry and Physics of
NGR 6493 Anesthesiology Nursing
$\begin{array}{lll}\text { NGR } 6460 & \text { Pharmacology of Anesthesiology } \\ & \text { Nursing I }\end{array}$

| NGR 6431L | Anesthesiology Nursing Clinical Residency I | 1 |
| :---: | :---: | :---: |
| NGR 6422 | Principles of Anesthesiology Nursing II | 2 |
| NGR 6404 | Advanced Bioscience for |  |
|  | Anesthesiology Nursing I | 3 |
| NGR 6461 | Pharmacology of Anesthesiology |  |
|  | Nursing II | 2 |
| NGR 6490 | Regional Anesthesia | 2 |
| NGR 6432L | Anesthesiology Nursing Clinical |  |
|  | Residency II | 2 |
| NGR 6423 | Principles of Anesthesiology Nursing III | 2 |
| NGR 6433L | Anesthesiology Nursing Clinical |  |
|  | Residency III | 3 |
| NGR 6424 | Principles of Anesthesiology Nursing IV | 3 |
| NGR 6405 | Advanced Bioscience for |  |
|  | Anesthesiology Nursing II | 3 |
| NGR 6434L | Anesthesiology Nursing Clinical |  |
|  | Residency IV | 4 |
| NGR 6435L | Anesthesiology Nursing Clinical |  |
|  | Residency V | 4 |
| NGR 6436L | Anesthesiology Nursing Clinical |  |
|  | Residency VI | 4 |
| NGR 6437L | Anesthesiology Nursing Clinical |  |
|  | Residency VII | 4 |
| NGR 6492 | Professional Aspects of Anesthesiology |  |
|  | Nursing I | 2 |
| NGR 6491 | Advanced Anesthesiology Nursing |  |
|  | Seminar | 3 |

NOTE: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's and College's various publics and to respond to the mandates of the Florida Department of Education, Board of Governors, the Legislature, and other regulatory and accrediting agencies. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations. Please refer to the College's website for updated information in nursing.
The Florida Board of Nursing and clinical agencies require the disclosure of conviction records for misdemeanors and/or felonies; therefore, this information will be required at the time of application. Applicants are required to submit to criminal background checks and drug testing. Expenses associated with background checks and drug testing (including repeat testing) are the responsibility of the student. Findings may affect a student's ability to participate in clinical experiences and complete the program, and/or obtain advanced licensure/ certification.

## M.S.N. in Advanced Adult-Gerontology Nurse Practitioner/Doctor of Nursing Practice Combined Degree Program

The combined Advanced Adult-Gerontology Nurse Practitioner Master of Science - Doctor of Nursing Practice (MSN-DNP) is a program of graduate doctoral study for registered nurses. The MSN-DNP program of study builds upon the initial clinical training of entry level nurses prepared at the baccalaureate level. This program will include the study of: advanced specialty practice; systematic practice and program outcome evaluation; application of health information resources; development of safe, equitable, and cost effective health policy; innovation, implementation and evaluation of care delivery
models; leadership development in healthcare delivery and clinical expertise for advanced nursing practice education. Graduates of this program will be eligibility for certification as an Adult-Gerontology Nurse Practitioner. The goals of the MSN-DNP program are to prepare nurses for leadership roles in a specialized area of advanced nursing practice with an emphasis on: philosophical, ethical, and scientific principles that provide the foundation for leadership in professional nursing care; continued acquisition of knowledge and clinical skills in an area of advanced practice specialization; and leadership and clinical expertise in healthcare delivery, evaluation, quality improvement and advanced practice nursing education.

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater on a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level.)
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN) formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from Programs without such accreditation will be considered on an individual basis.
6. Completion of all admission paperwork including the NursingCAS application, a written essay, Recommendations, and Curriculum Vitae, as well as favorable personal interview with the MSN Admission Committee.
7. Essay (500 words) addressing desired focus and areas of interest for practice in MSN-DNP program.
8. Three (3) professional recommendations describing ability to be successful in a MSN-DNP program.
9. Curriculum Vitae.
10. Successful personal Interview with MSN-DNP admissions committee.
11. Satisfactory Graduate Record Exam (GRE) score.

## Curriculum

Year 1: Fall Semester 1
NGR 7121 Scientific and Theoretical Foundations
NGR $5141 \quad$ Por Advanced Nursing Practice Nursing Practice
NGR $5810 \quad$ Research Methods in Nursing 3
Year 1: Spring Semester 2
NGR $6172 \quad$ Pharmacological Concepts in Advanced Nursing Practice
NGR 7769 Patient Safety and Quality Improvement in Healthcare
NGR $7854 \quad$ Analytical Methods for Evidence-Based Clinical Practice

| Year 1: Summer Semester 3 |  |
| :--- | :--- |
| NGR 5035C | Advanced Client Assessment |
| NGR 7853 | Translational Research |
| NGR 5064C | Diagnostic and Therapeutics in <br>  <br> Advanced Nursing Practice |
| NGR 6743 | Advanced Practice Nursing Clinical |
|  | Education Seminar |

Year 2: Fall Semester 4
NGR 6201C Advanced Adult-Gerontology Nursing I 3
NGR 6201L Advanced Adult-Gerontology Nursing Practice I

3
NGR $5131 \quad$ Culture and Advanced Nursing Practice 3
Year 2: Spring Semester 5
NGR 6202C Advanced Adult-Gerontology Nursing II 3
NGR 6202L Advanced Adult-Gerontology Nursing Practice II
NGR $7871 \quad$ Healthcare Informatics
Year 2: Summer Semester 6
NGR 6700L Role Synthesis in Advanced AdultGerontology Nursing Practice
NGR 6209 Clinical Decision Making in Advanced Adult-Gerontology Nursing
Year 3: Fall Semester 7
NGR 7733 Organizational Dynamics of Health Systems
NGR 7891 Healthcare Finance and Economics in Advanced Clinical Practice
NGR 7892L Health Policy Practicum
Year 3: Fall Semester 8
NGR 7940C DNP Project I
Year 3: Summer Semester 9
NGR 7941C DNP Project II
Year 4: Fall Semester 10
NGR 7942C DNP Project III

## M.S.N. in Advanced Child Nurse Practitioner/Doctor of Nursing Practice Combined Degree Program

The combined Advanced Child Health Nurse Practitioner Master of Science -Doctor of Nursing Practice (MSN-DNP) is a program of graduate doctoral study for registered nurses. The MSN-DNP program of study builds upon the initial clinical training of entry level nurses prepared at the baccalaureate level. This program will include the study of: advanced specialty practice; systematic practice and program outcome evaluation; application of health information resources; development of safe, equitable, and cost effective health policy; innovation, implementation and evaluation of care delivery models; leadership development in healthcare delivery and clinical expertise for advanced nursing practice education. Graduates of this program will be eligibility for certification as a Pediatric Nurse Practitioner. The goals of the MSNDNP program are to prepare nurses for leadership roles in a specialized area of advanced nursing practice with an emphasis on: philosophical, ethical, and scientific principles that provide the foundation for leadership in professional nursing care; continued acquisition of knowledge and clinical skills in an area of advanced practice specialization; and leadership and clinical
expertise in healthcare delivery, evaluation, quality improvement and advanced practice nursing education.

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater on a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level).
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN) formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from Programs without such accreditation will be considered on an individual basis.
6. Completion of all admission paperwork including the NursingCAS application, a written essay, Recommendations, and Curriculum Vitae, as well as favorable personal interview with the MSN Admission Committee.
7. Essay (500 words) addressing desired focus and areas of interest for practice in MSN-DNP program.
8. Three (3) professional recommendations describing ability to be successful in a MSN-DNP program.
9. Curriculum Vitae.
10. Successful personal Interview with MSN-DNP admissions committee.
11. Satisfactory Graduate Record Exam (GRE) score.

## Curriculum

Year 1: Fall Semester 1
NGR 7121 Scientific and Theoretical Foundations for Advanced Nursing Practice
NGR 6172 Pharmacological Concepts in Advanced Nursing Practice
NGR $5810 \quad$ Research Methods in Nursing 3
Year 1: Spring Semester 2
NGR $7769 \quad$ Patient Safety and Quality Improvement in Healthcare
NGR $7854 \quad$ Analytical Methods for Evidence-Based Clinical Practice3

NGR $5141 \quad$ Pathophysiologic Basis of Advanced Nursing Practice

Year 1: Summer Semester 3
NGR 5035C Advanced Client Assessment 3
NGR 7853 Translational Research 3
NGR 5064C $\begin{array}{ll}\text { Diagnostic and Therapeutics in } \\ \text { Advanced Nursing Practice }\end{array}$
NGR 6743 Advanced Practice Nursing Clinical Education Seminar

Year 2: Fall Semester 4
NGR 6301C Advanced Child Health Nursing I 3
NGR 6301L Advanced Child Health Nursing Practice I

| NGR 7871 | Healthcare Informatics | 3 |
| :--- | :--- | ---: |
| Year 2: Spring | Semester 5 |  |
| NGR 6302C | Advanced Child Health Nursing II | 3 |
| NGR 6302L | Advanced Child Health Nursing Practice |  |
|  | II | 3 |
| NGR 5131 | Culture and Advanced Nursing Practice | 3 |

Year 2: Summer Semester 6
NGR 6337L Role Synthesis in Advanced Child Health Nursing Practice

4
NGR 6337 Clinical Decision Making in Advanced Child Health Nursing
Year 3: Fall Semester 7
NGR 7733 Organizational Dynamics of Health Systems
NGR 7891 Healthcare Finance and Economics in Advanced Clinical Practice
NGR 7892L Health Policy Practicum
Year 3: Fall Semester 8
NGR 7940C DNP Project I
Year 3: Summer Semester 9
NGR 7941C DNP Project II
Year 4: Fall Semester 10
NGR 7942C DNP Project III

## M.S.N. in Advanced Family Nurse Practitioner/Doctor of Nursing Practice Combined Degree Program

The combined Advanced Family Health Nurse Practitioner Master of Science - Doctor of Nursing Practice (MSNDNP) is a program of graduate doctoral study for registered nurses. The MSN-DNP program of study builds upon the initial clinical training of entry level nurses prepared at the baccalaureate level. This program will include the study of: advanced specialty practice; systematic practice and program outcome evaluation; application of health information resources; development of safe, equitable, and cost effective health policy; innovation, implementation and evaluation of care delivery models; leadership development in healthcare delivery and clinical expertise for advanced nursing practice education. Graduates of this program will be eligibility for certification as a Family Nurse Practitioner. The goals of the MSN-DNP program are to prepare nurses for leadership roles in a specialized area of advanced nursing practice with an emphasis on: philosophical, ethical, and scientific principles that provide the foundation for leadership in professional nursing care; continued acquisition of knowledge and clinical skills in an area of advanced practice specialization; and leadership and clinical expertise in healthcare delivery, evaluation, quality improvement and advanced practice nursing education.

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater on a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level.)
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN) formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from Programs without such accreditation will be considered on an individual basis.
6. Completion of all admission paperwork including the NursingCAS application, a written essay, Recommendations, and Curriculum Vitae, as well as favorable personal interview with the MSN Admission Committee.
7. Essay ( 500 words) addressing desired focus and areas of interest for practice in MSN-DNP program.
8. Three (3) professional recommendations describing ability to be successful in a MSN-DNP program.
9. Curriculum Vitae.
10. Successful personal Interview with MSN-DNP admissions committee.
11. Satisfactory Graduate Record Exam (GRE) score.

## Curriculum

Year 1: Fall Semester 1
NGR 7121 Scientific and Theoretical Foundations for Advanced Nursing Practice
NGR 5810 Research Methods in Nursing 3
NGR $6172 \quad$ Pharmacological Concepts in Advanced Nursing Practice
Year 1: Spring Semester 2

| NGR 5141 | Pathophysiologic Basis of Advanced |  |
| :--- | :--- | :--- |
|  | Nursing Practice |  |
| NGR 7769 | Patient Safety and Quality Improvement <br> in Healthcare |  |
| NGR 7854 | Analytical Methods for Evidence-Based <br> Clinical Practice | 3 |

Year 1: Summer Semester 3
NGR 5035C Advanced Client Assessment 3
NGR 7853 Translational Research 3
NGR 5064C $\begin{aligned} & \text { Diagnostic and Therapeutics in } \\ & \text { Advanced Nursing Practice }\end{aligned}$
NGR 6743 Advanced Practice Nursing Clinical Education Seminar

Year 2: Fall Semester 4
NGR 6601C Advanced Family Health Nursing I 4

NGR 6601L $\quad$| Advanced Family Health Nursing |
| :--- |
|  |
| Practice I |

NGR 7871 Healthcare Informatics 3
Year 2: Spring Semester 5
NGR 6602C Advanced Family Health Nursing II 4
NGR 6602L Advanced Family Health Nursing Practice II
NGR $5131 \quad$ Culture and Advanced Nursing Practice 3
Year 2: Summer Semester 6
NGR 6619L Role Synthesis in Advanced Family Health Nursing Practice

4
NGR 6748 Clinical Decision Making in Advanced Family Nursing Practice

## Year 3: Fall Semester 7

| NGR 7733 | Organizational Dynamics of Health <br> Systems | 3 |
| :--- | :--- | :--- |
| NGR 7891 | Healthcare Finance and Economics in <br> NGR 7892L | Advanced Clinical Practice <br> Health Policy Practicum |
|  | 3 |  |

Year 3: Fall Semester 8
NGR 7940C DNP Project I
Year 3: Summer Semester 9
NGR 7941C DNP Project II
Year 4: Fall Semester 10
NGR 7942C DNP Project III

## M.S.N. in Advanced Psychiatric and Nurse Practitioner/Doctor of Nursing Practice Combined Degree Program

The combined Advanced Psychiatric \& Mental Health Nurse Practitioner Master of Science - Doctor of Nursing Practice (MSN-DNP) is a program of graduate doctoral study for registered nurses. The MSN-DNP program of study builds upon the initial clinical training of entry level nurses prepared at the baccalaureate level. This program will include the study of: advanced specialty practice; systematic practice and program outcome evaluation; application of health information resources; development of safe, equitable, and cost effective health policy; innovation, implementation and evaluation of care delivery models; leadership development in healthcare delivery and clinical expertise for advanced nursing practice education. Graduates of this program will be eligibility for certification as a Psychiatric \& Mental Health Nurse Practitioner. The goals of the MSN-DNP program are to prepare nurses for leadership roles in a specialized area of advanced nursing practice with an emphasis on: philosophical, ethical, and scientific principles that provide the foundation for leadership in professional nursing care; continued acquisition of knowledge and clinical skills in an area of advanced practice specialization; and leadership and clinical expertise in healthcare delivery, evaluation, quality improvement and advanced practice nursing education.

## Admission Requirements

1. Successful completion of all the admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences.
2. Cumulative undergraduate GPA of 3.0 or greater on a 4.0 scale (CUM GPA is a calculation inclusive of all academic coursework including courses at the community college level.)
3. UG 60 GPA of 3.0 or greater in Bachelor of Nursing upper division coursework.
4. Current State of Florida RN license. Out-of-state students must obtain a license to practice in Florida prior to admission.
5. Baccalaureate degree in Nursing (BSN) from a program accredited by the Commission on Collegiate Nursing Education (CCNE) or by the Accreditation Commission for Education in Nursing (ACEN) formerly known as the National League for Nursing Accrediting Commission (NLNAC). Applicants from

Programs without such accreditation will be considered on an individual basis.
6. Completion of all admission paperwork including the NursingCAS application, a written essay, Recommendations, and Curriculum Vitae, as well as favorable personal interview with the MSN Admission Committee.
7. Essay ( 500 words) addressing desired focus and areas of interest for practice in MSN-DNP program.
8. Three (3) professional recommendations describing ability to be successful in a MSN-DNP program.
9. Curriculum Vitae.
10. Successful personal Interview with MSN-DNP admissions committee.
11. Satisfactory Graduate Record Exam (GRE) score.

## Curriculum

Year 1: Fall Semester 1
NGR $7121 \quad$ Scientific and Theoretical Foundations for Advanced Nursing Practice

3
NGR $5141 \quad$ Pathophysiologic Basis of Advanced Nursing Practice
NGR 5810 Research Methods in Nursing 3
Year 1: Spring Semester 2
NGR $6172 \quad$ Pharmacological Concepts in Advanced Nursing Practice
NGR $7769 \quad$ Patient Safety and Quality Improvement in Healthcare

3
NGR $7854 \quad$ Analytical Methods for Evidence-Based Clinical Practice 3

Year 1: Summer Semester 3
NGR 5035C Advanced Client Assessment 3
NGR 7853 Translational Research 3
NGR 6538 Psychopharmacology for Advanced Practice Nursing
NGR 6743 Advanced Practice Nursing Clinical Education Seminar
Year 2: Fall Semester 4
NGR 6503 Advanced Psychiatric-Mental Health Nursing I
NGR 6503L Advanced Psychiatric-Mental Health Nursing Practice I
NGR $5131 \quad$ Culture and Advanced Nursing Practice
3
Year 2: Spring Semester 5

| NGR 6504C | Advanced Psychiatric-Mental Health |
| :--- | :--- |
|  | Nursing II |

NGR 6504L Advanced Psychiatric-Mental Health Nursing Practice II 3

NGR $7871 \quad 3$
Year 2: Summer Semester 6
NGR 6505L Role Synthesis in Advanced PsychiatricMental Health Nursing Practice
NGR 6560 Advanced Psychiatric Mental Health Clinical Decision Making
Year 3: Fall Semester 7
NGR 7733 Organizational Dynamics of Health Systems

3
NGR 7891 Healthcare Finance and Economics in Advanced Clinical Practice
NGR 7892L Health Policy Practicum 3
Year 3: Fall Semester 8
NGR 7940C DNP Project I
4

## Year 3: Summer Semester 9

NGR 7941C DNP Project II
Year 4: Fall Semester 10
NGR 7942C DNP Project III

## Nurse Anesthetist-Master of Science in Nursing/Doctor of Nursing Practice Combined Degree Program

## Note: The degree program for Nurse Anesthetist is transitioning from the MSN to DNP degree. The program will not be accepting new applicants for the MSN.

The combined Nurse Anesthetist Master of Science in Nursing - Doctor of Nursing Practice (MSN-DNP) degree is a plan of doctoral study for registered nurses seeking preparation in an advanced clinical specialty as a nurse anesthetist. The combined MSN-DNP degree builds upon the initial clinical education and experience of registered nurses prepared at the baccalaureate level. The MSNDNP curriculum plan is intended to prepare entry-level nurse anesthetists in the foundations of anesthesiology nursing and provides additional knowledge and skills in leadership, education, and the application of evidencebased clinical practice. Over the years, requirements for the profession of nursing have evolved, consistent with changing needs of the healthcare environment. Transforming healthcare delivery recognizes the critical need for clinicians to design, evaluate, and continuously improve the context within which care is delivered. Advanced practice nurses prepared at the doctoral level with a blend of clinical, organizational, economic, and leadership skills will significantly impact healthcare outcomes. The goals of the MSN-DNP program are to prepare nurses for leadership roles in advanced nursing practice with an emphasis on: philosophical, ethical, and scientific principles that provide the foundation for leadership in professional nursing; knowledge and clinical skills in advanced practice specialization; and leadership and clinical expertise in healthcare delivery, evaluation, quality improvement and advanced practice nursing education.

## Admission Requirements

1. Complete and satisfy all admission requirements for graduate education at Florida International University and the Nicole Wertheim College of Nursing and Health Sciences, including the timely submission of all required applicants, transcripts, and documentation materials.
2. Have completed a baccalaureate degree in nursing, with a GPA of 3.0 or higher from a regionally accredited college or university. The baccalaureate nursing program must be accredited by the National League for Nursing Accrediting Commission (NLNAC) or the Commission on Collegiate Nursing Education (CCNE). Applicants with a baccalaureate degree from nursing programs without NLNAC or CCNE accreditation may be considered on an individual basis. RN applicants who have a non-nursing baccalaureate degree, completed with a GPA of 3.0 or higher, from a nationally accredited college or university may be eligible for admission through the BSN-MSN bridge option which requires the
completion of 7 credits of BSN coursework (NUR 3821 and NUR 4636C) simultaneous with enrollment in the MSN or MSN-DNP plan of study.
3. Submit documentation of a current and unrestricted RN licensure in Florida, and current certifications in Basic Cardiac Life Support (BCLS), Advanced Cardiac Life Support (ACLS), and Pediatric Advanced Life Support (PALS). If admitted, certifications must remain current through December of the first year of enrollment. CCRN certification as a Critical Care nurse is recommended.
4. Have complete a minimum of one year of full time clinical nursing experience as an RN in a critical care unit prior to the application deadline. Critical care experience must be obtained in a critical care unit in a hospital within the United States, its territories or a US military hospital outside of the United States.
5. Submit official Verbal, Quantitative, and Analytical scores from the Graduate Record Exam (GRE). Exceptionally qualified applicants with a GPA of less than 3.0, with competitive GRE scores may be considered for admission on an individual basis.
6. Complete the Nurse Anesthetist program application form which includes a current curriculum vitae, three letters of professional reference, documentation of critical care experience, essay statement of professional goals, and documentation of other nonuniversity professional education, clinical experience, or certifications.
7. Satisfy admissions eligibility based upon review of the above materials by the Admissions Committee who will recommend qualified applicants to attend the Nurse Anesthetist program applicant information and interview session.
8. For international applicants (graduates of foreign nursing schools) only: International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL, 80 on the internet-based TOEFL (iBT) or 6.5 overall on the IELTS.
9. Applicants for admission from another anesthesiology nursing program are considered on a case by case basis. Applicants who are dismissed from another program due to academic misconduct, clinical negligence, or substance abuse will not be considered for admission. A Letter of Good Standing must be provided at the time of application from the prior program director. No clinical anesthesiology coursework will be considered for transfer credit. For non-anesthesiology courses, University policies limit the transfer of no more than 6 credits of equivalent transfer coursework.
10. The Florida Board of Nursing and clinical agencies require the disclosure of criminal conviction records for misdemeanors and/or felonies; therefore, this information will be required at the time of application. Applicants are required to submit to criminal background checks and drug testing. Expenses associated with background checks and drug testing (including repeat testing) are the responsibility of the student. Findings may affect a student's ability to be admitted, to participate in clinical experiences and
complete the program, and/or obtain advanced licensure/certification.
11. This is a competitive, limited admission program and completion of all admission requirements alone, is not a guarantee of admission. Additional or changes in admission requirements may be made in compliance with licensure, certification, or accreditation requirements.

\section*{Curriculum MSN - DNP Combined Degree Anesthesiology Nursing <br> MSN Required Curriculum Graduate Nursing Course (12) <br> | NGR 5110 | Theories in Nursing | 3 |
| :--- | :--- | :--- |
| NGR 5131 | Culture and Advanced Nursing Practice | 3 |
| NGR 5810 | Research Methods in Nursing | 3 |
| NGR 6970 | Master's Thesis I | 3 |}

Advanced Practice Nursing Core (AN): (9 credits)
$\begin{array}{ll}\text { NGR 5035C } & \text { Advanced Client Assessment } \\ \text { NGR 5141 } & \text { Pathophysiologic Basis of Advanced }\end{array}$
NGR $5141 \quad$ Nursing Practice 3

NGR $6172 \quad$ Pharmacological Concepts in Advanced Nursing Practice

Nurse Anesthetist: ( 50 credits)

| NGR 6421 | Principles of Anesthesiology Nursing I | 2 |
| :--- | :--- | :--- |
| NGR 6422 | Principles of Anesthesiology Nursing II | 2 |
| NGR 6423 | Principles of Anesthesiology Nursing III | 2 |
| NGR 6424 | Principles of Anesthesiology Nursing IV | 3 |
| NGR 6493 | Technology in Anesthesiology Nursing I | 2 |
| NGR 6490 | Regional Anesthesia | 2 |
| NGR 6460 | Pharmacology of Anesthesiology |  |
|  | Nursing I |  |
| NGR 6461 | Pharmacology of Anesthesiology |  |
|  | Nursing II | 2 |
| NGR 6400 | Chemistry and Physics of |  |
|  | Anesthesiology Nursing | 3 |


| NGR 6404 | Advanced Bioscience for |
| :--- | :--- |
| Anesthesiology Nursing I |  |

$\begin{array}{ll}\text { NGR } 6405 & \text { Advanced Bioscience for } \\ & \text { Anesthesiology Nursing II }\end{array}$
NGR $6492 \quad$ Professional Aspects of Anesthesiology

NGR 6491 | Advanced Anesthesiology Nursing |
| :--- |
| Seminar |

NGR 6431L | Anesthesiology Nursing Clinical |  |
| :--- | :--- |
|  | Residency I |

NGR 6432L | Anesthesiology Nursing Clinical |
| :--- |
| Residency II |

| NGR 6433L | Anesthesiology Nursing Clinical <br> Residency III |
| :--- | :--- |


| NGR 6434L | Anesthesiology Nursing Clinical <br> Residency IV |
| :--- | :--- |


| NGR 6435L | Anesthesiology Nursing Clinical <br> Residency V |
| :--- | :--- |

NGR 6436L | Anesthesiology Nursing Clinical |
| :--- |
| Residency VI |

| NGR 6437L | Anesthesiology Nursing Clinical <br> Residency VII |
| :--- | :--- | :--- |

## DNP Required Curriculum (36 credits)

| NGR 7121 | Scientific and Theoretical Foundations <br> for Advanced Nursing Practice |  |
| :--- | :--- | :--- |
|  | Pat 7760 |  |

NGR 7769 Patient Safety and Quality Improvement in Healthcare

NGR 7891 Healthcare Finance and Economics in Advanced Clinical Practice 3
NGR $7871 \quad 3$
NGR $7854 \quad$ Analytical Methods for Evidence-Based Clinical Practice 3
Health Policy Practicum (60 Clinical hours)

3
NGR 7733 Organizational Dynamics of Health Systems
NGR 7853 Translational Research 3
NGR 7940C DNP Capstone Project I - Identification \& Proposal 4
NGR 7941C DNP Project II 4
NGR 7942C DNP Project III 4

## Occupational Therapy

Lynne Richard, Ph.D., OT/L, Interim Chair and Assistant Professor
Alma Abdel-Moty, Dr. OT, OTR/L, Clinical Associate
Professor and Academic Fieldwork Coordinator
Hector Huerta, OTD, OTRIL, Clinical Assistant Professor
Amy Paul-Ward, Ph.D., MSOT, Associate Professor
Ana Rodriguez, MSOT, OTR/L, Visiting Clinical Instructor
Jaclyn Schwartz, Ph.D., OTRIL, Assistant Professor
Ingris Treminio, OTD, OTRIL, Visiting Clinical Assistant Professor
Pey-Shan Wen, Ph.D., OTR/L, Assistant Professor

## Master of Science in Occupational Therapy

## Mission

The mission of Florida International University's Occupational Therapy Department is to establish excellence in occupational therapy education, research and scholarly activities as well as to prepare culturally knowledgeable entry level practitioners who will provide evidence-based occupational therapy services to a locally and globally diverse community. The Department's mission reflects the College's mission: to teach, conduct research, and serve the community. The College prepares diverse health care professionals as providers and leaders in the delivery of high quality, accessible, culturally competent care within a highly technological and global environment. The College promotes, expands and validates scientific knowledge and evidence-based practice through interdisciplinary research. The Department's mission is in concert with the University's mission: to meet the educational and support needs of a diverse student population and provide opportunities for minority and non-traditional students.

## Vision

The vision of the Occupational Therapy Department is to be locally and globally recognized for quality occupational therapy education, community engagement, research, and scholarly activity.

## About The Profession

Occupational Therapy (OT) is a health profession which prepares practitioners to help people across the lifespan to participate in the things they want and need to do through the therapeutic use of everyday activities (American Occupational Therapy Association).

Occupational therapists assess individuals' abilities to carry out tasks and activities necessary to enable function for productive living. Working collaboratively with clients, considering their personal goals, lifestyles, and environments, the therapists develop intervention programs designed to help develop/restore the greatest possible functional capacity. During the treatment or rehabilitation process, the clients actively engage in directed programs of purposeful, meaningful activities designed to increase their levels of functioning. Occupational therapists work collaboratively with individuals, families, other health professionals, and health and community agency personnel. A successful therapist must be able to work with others, look at the totality of
human performance, think creatively, problem solve, and direct the actions of others. Occupational therapists serve a wide variety of individuals in all age ranges and work in settings such as community agencies, sheltered workshops, hospitals, schools, skilled nursing facilities, rehabilitation centers, and home health. There is an increasing demand for occupational therapists and excellent opportunities exist for career advancement. Additional information regarding careers in occupational therapy can be requested from the American Occupational Therapy Association Inc. at 4720 Montgomery Lane, Suite 200, Bethesda, Maryland, 20814-3449, at www.aota.org, or by calling (301) 652-2682 or (800) 377-8555 (TDD Telecommunication Device for the Deaf).

The program is a seven semester, 80 credit, and fulltime program leading to a Master of Science in Occupational Therapy degree.

## Program Accreditation

The Occupational Therapy Professional MS Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 208243449. ACOTE's telephone number C/O AOTA is (301) 652-2682, www.acoteonline.org.

## Certification and Licensure

The entry-level Professional Master of Science in Occupational Therapy program is accredited by ACOTE. Graduates of the program are eligible to sit for the national certification examination for occupational therapists administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR).

Most states require licensure to practice; however, it is usually based on the results of the NBCOT Certification Examination. A felony conviction may affect a graduate's ability to sit for the NBCOT Certification Examination or attain state licensure. Students should be aware that it is difficult (or impossible) to obtain a license if they have ever been convicted, plead guilty or nolo contendere to a felony violation.

## Background Checks and Drug Screenings

All incoming students, as part of the admission process, must comply with the Nicole Wertheim College of Nursing and Health Sciences [NWCNHS] policy for health and immunization screening and background check.

The health and immunization screening includes the following requirements:

- Immunization and /or titers of:
- Varicella, Rubeola and Rubella, Mumps or MMR vaccine
- Tetanus Toxoid booster; diphtheria; pertussis, or ADACEL vaccine
- Hepatitis B Vaccine (3 doses)
- PPD- 2 step-if 1st time taker
- Medical history and Physical Exam
- CPR/BLS - for health care providers from AHA
- Proof of major medical health insurance coverage
- 7 year employment verification
- Pass a drug screening

Florida International University- Nicole Wertheim College of Nursing and Health Sciences utilizes American Data Bank as the background clearing house, and for tracking student immunization records.

The background check includes social security number search (residency history, state and year SSN issued), criminal search (7 years), sex offender search, federal criminal search, and healthcare exclusion list.

## Advising

Group advising sessions are held on a regular basis during the semester; the dates are posted on the department website, http://cnhs.fiu.edu/ot/admission-and-advising/advising/index.html. If you have specific questions related to your application, the OT advisor will answer them during the session. All applicants who live in Miami- Fort Lauderdale area are expected to attend an advising session. Students who live outside the area can call the OT department at (305) 348-6068 or (305) 3482922 and ask to speak with an advisor or Graduate Coordinator.
NOTE: The programs, policies, requirements, and regulations listed in this catalog are continually reviewed in order to serve the needs of the University's and College's various policies and to respond to the mandates of the Florida Department of Education, Board of Governors, the Legislature, and other regulatory and accrediting agencies. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations. Please refer to http://cnhs.fiu.edu/ot/ for latest information on the OT program, policies, and procedures.

## The Professional Master of Science

The Professional Master of Science in Occupational Therapy program is designed for students who hold a baccalaureate degree from a regionally accredited college or university. Through a combination of academic and fieldwork education the MSOT program of study prepares students for entry-level practice as a generalist practitioner.

## Application Process and Deadlines

The application and admission process is composed of two parts:

1. The OT program uses the Occupational Therapy Centralized Application Service (OTCAS) for application to our program. An applicant must create an OTCAS account at: https://portal.otcas.org/. All application materials are completed through the OTCAS system. All official transcripts should be sent directly to OTCAS to verify your academic records. All application materials must be received by the application deadline in order to be considered. Our website: ot.fiu.edu provides full details and the deadline date.
2. All Applicants must also apply to the FIU Graduate School by the application deadline. A link to the University Graduate School application is available on the OTCAS site. Graduate Record Exam (GRE) scores and official transcripts must also be sent to the FIU Graduate School. For more information: http://gradschool.fiu.edu.

## Admission Requirements

Admission to the Professional Master of Science in Occupational Therapy is highly competitive and admits students for the fall semester of each academic year. The department selects students based on their record of academic excellence, outstanding personal qualities and achievements.

To be admitted to the Professional Master's degree program students must:

1. Have taken the Graduate Record Exam (GRE) within the last five years. GRE scores must be received by University Graduate School (GRE School Code 5206) by the application deadline.
2. Hold a bachelor degree from a regionally accredited college or university.
3. Have a minimum of 3.0 GPA average based on a 4.0 scale in upper division courses of the bachelor degree.
4. Complete the following prerequisite courses prior to the start of the fall admission term with a minimum grade of "C": a). Abnormal Psychology; b) Human Growth \& Development; c) Biology with Lab; d) Statistics; and e) Medical Terminology. Required cumulative GPA for all prerequisite courses is 3.0 on a 4.0 scale.
5. A grade of " $B$ " or above must be earned in the following 4 courses: a) Anatomy and Anatomy Lab; b) Pathology; c) Physiology; and d) Neuroscience. Three of the 4 courses must be completed prior to the OT Department Application submission deadline.
6. Complete the OTCAS application. Provide 3 letters of reference, a personal essay of professional and educational goals, work experience, activities, accomplishments and recognitions. These documents are submitted directly with your application. Admission is competitive and meeting the minimum requirements for admission does not guarantee admission into the program.
7. Meet admissions requirements of the OT department and the University Graduate School.
8. International students must have a Bachelor's degree equivalent of a US baccalaureate degree from an institution recognized in their own country as preparing students for graduate level study. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL, 80 on the internetbased TOEFL (iBT) or 6.5 overall on the IELTS.
9. A departmental interview may be required.

## Prerequisites for the Professional MS degree

1. Biology and lab
2. Human Physiology (3 credits) or Anatomy/Physiology I and II with labs (students who have completed Anatomy/Physiology I and II with labs have met the prerequisites for Biology and Physiology, but not Anatomy)6-8 3. Abnormal Psychology 3
3. Human Growth and Development 3
4. Statistics 3
5. Human Anatomy with lab ${ }^{1}$ 4
6. Pathology 3
7. Medical Terminology 1-3
8. Neuroscience ${ }^{1}$

3
${ }^{1}$ These courses must be numbered 3000 or above.

## Required Courses for Professional Master in OT: (80 credits)

$\begin{array}{ll}\text { Professional Master's Course Sequence* } \\ \text { OTH } 5011 & \text { Theories \& Practice of O.T. }\end{array}$
OTH $5162 \quad$ Adaptation of Human Occupation 2
OTH 5162L Adaptation of Human Occupation Lab 1
OTH 5202 $\begin{array}{ll}\text { Occupational Development: Infancy } \\ & \text { Throughout Adolescence }\end{array}$
$\begin{array}{lll}\text { OTH 5202L } & \begin{array}{l}\text { Occupational Development: Infancy } \\ \text { Through Adolescence Lab }\end{array} \\ & 1\end{array}$
$\begin{array}{ll}\text { OTH } 5760 & \begin{array}{l}\text { Current Research in Occupational } \\ \text { Therapy }\end{array}\end{array}$
OTH 5921L Integrative Seminar I 2
OTH 5203 Occupational Development: Adulthood and Aging 3
OTH $5414 \quad$ Analysis \& Adaptation Human Motion 3
OTH 5414L $\quad \begin{array}{ll}\text { Analysis \& Adaptation Human Motion } \\ & \text { Lab }\end{array}$
OTH $5524 \quad$ Adaptation of Human Occupation and
OTH 5524L Adaptation of Human Occupation and Environment for Neuromotor Disorders I Lab

1
OTH 6772 $\begin{array}{ll} & \text { Evidence Based Practice and Critical } \\ & \text { Appraisal }\end{array}$
OTH 5922L Integrative Seminar II 2
OTH 5430 Adaptation of Human Occupation and Environment for Musculoskeletal Disorders I
OTH 5430L Adaptation of Human Occupation and Environment for Musculoskeletal Disorders I Lab1

| OTH 6281 | Cultural, Global, and Environmental |
| :--- | :--- | :--- |
|  | Issues in Occupational Therapy |

OTH 5301 Adaptation of Human Occupation and Environment for Psychosocial Practice I 2
OTH 5301L Adaptation of Human Occupation and Environment for Psychosocial Practice I Lab
OTH 6972 Master's Project 3
OTH 6706 Occupational Therapy Management 3
OTH 6923L Integrative Seminar III 2

OTH 6431 Adaptation of Human Occupation and Environment for Musculoskeletal Disorders II
OTH 6431L Adaptation of Human Occupation and Environment for Musculoskeletal Disorders II Lab 1
OTH 5438 Adaptation of Human Occupation and Environment for Neuromotor Disorders II
OTH 5438L Adaptation of Human Occupation and Environment for Neuromotor Disorders II Lab
OTH 5843C Adaptation of Human Occupation and Environment for Psychosocial Practice II3
OTH 5725 Infusing Occupation into Community Based Practice3
OTH 6973 Master's Project ..... 3
OTH 6950L Integrative Seminar IV ..... 2
OT Elective
Level II Fieldwork I ..... 6

Level II Fieldwork I 6

OTH 5846 Level II Fieldwork II
*Some courses may be offered Online; Curriculum and sequence may be changed by department

## Academic Standing

Good Standing: To achieve and maintain a classification of good standing, the student must maintain a G.P.A. of 3.0.

## Physical Therapy

Mark Rossi, Ph.D., P.T., Associate Professor and Chair
Erasmo Alvarez, D.P.T., P.T., Clinical Assistant Professor
Helen Z. Cornely, Ed.D., P.T., Associate Professor and Associate Dean, Nicole Wertheim College of Nursing and Health Sciences
Leonard Elbaum, Ed.D., P.T., Associate Professor
Inae Gadotti, Ph.D., P.T., Associate Professor
Laura McPherson, D.P.T., Ph.D., P.T., Assistant Professor
Teresa Muñecas, D.P.T., P.T., Clinical Assistant
Professor and Director of Clinical Education
Marilys Randolph, Ph.D., P.T., Associate Professor
Lisa Roberts, D.P.T., Clinical Assistant Professor
Edgar Vieira, Ph.D., P.T., Associate Professor

## About the Department

The Department of Physical Therapy is part of the Nicole Wertheim College of Nursing and Health Sciences.

The mission of the Department of Physical Therapy at Florida International University is to contribute to the health of the global community. Our student centered program will prepare an ethnically, racially and culturally diverse group of students to be caring and competent Doctors of Physical Therapy. The department will foster critical thinking, scholarship and leadership through the conduct of an evidenced based curriculum and dissemination of basic and clinical research related to populations who have, or are at risk for developing movement problems. Faculty and students will be engaged in community activity that is aligned with our research and teaching.

The curriculum is accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE), and has been since its inception in 1975.
The department occupies over 6,000 square feet of offices and laboratories on the Modesto A. Maidique Campus of FIU. The departmental inventory includes the full range of clinical equipment used by practicing physical therapists, and is continually updating equipment to support faculty and student research projects. The Human Performance Laboratory contains state-of-the art biomechanics equipment to measure many aspects of human movement.

There are 11 full-time faculty members, and numerous adjunct faculty.
The clinical and research interests of the faculty range from pediatrics to geriatrics, and from neuroscience to biomechanics.
The faculty prides itself on its intellectual, cultural, racial, and ethnic diversity. There are approximately 160 students in the department.

## Academic Program

The department offers a three-year, 113-credit program leading to Doctor of Physical Therapy (DPT) degree.

The DPT program is rigorous, and is recommended only for highly motivated students with proven records of success as undergraduates. Admission to the program is limited to approximately 55 students per year.

Upon completion of this program, students will be eligible to apply for licensure as a Physical Therapist
anywhere in the United States and several other jurisdictions.

## Minimum Admission Requirements

1. A Bachelor's degree from an accredited institution.
2. A GPA of 3.0 in the last 60 hours of the undergraduate coursework, overall undergraduate coursework, and prerequisite coursework.
3. GRE scores
4. A minimum of 60 hours of observation and/or work experience with physical therapists.
5. Three letters of recommendation two of which must be from a physical therapist.
6. Completion of the following prerequisites courses:

## Courses

Chemistry with Lab 8
Developmental Psychology 3
General Biology with Lab
Human Anatomy with Lab
Human Physiology with Lab 4
Physics with Lab 8
Psychology 3
Statistics 3

## Additional Items:

1. Essay which explains why you want to become a physical therapist and why you are interested in attending FIU.
2. A curriculum vitae/resume.
3. Admission into FIU as a graduate student.

## Application and Admission Processes

Applying for admission to the DPT program is via the Physical Therapist Centralized Application Service (PTCAS) at the below address.
http://wwww.ptcas.org/Floridalnternational.html.
The applicant also needs to complete a Supplemental Graduate School Online Form at https://intra.fiu.edu/Facts/PTCAS.

Admission to the program is highly competitive. The Department selects students based primarily on their record of academic performance, although evidence of non-academic outstanding personal qualities is also considered.

## Timelines

Final application deadline is mid-January to begin the program the following Fall semester.

Qualified applicants will be invited for an interview.

## Early Admission

We will review applicants on a monthly basis beginning in September prior to the January deadline. Well qualified students who apply within this time frame will be invited to campus for an early interview. Successful candidates will be offered early admission contingent on completing all admission requirements. Go to the department's website for a full description of the admissions process and prerequisite courses http://cnhs.fiu.edu/pt/index.html.

## Program of Studies

## Fall Semester 1: (16 credits)

PHT 5174 Analysis of Movement and Function 3
PHT 5174L Analysis of Movement and Function Lab 1
GMS $6605 \quad$ Basic Structure of the Human Body 3-4
GMS 7603 Anatomy of the Musculoskeletal System 2

| PHT 5523 | Dimensions of Professional Practice Seminar I |
| :---: | :---: |
| PHT 5070 | Principles of Diagnostic Imaging |
| PHT 5244C | Principles of Therapeutic Exercise |
| Spring Semester 1: (14 credits) |  |
| PHT 5303 | Principles of Pathophysiology in Physical Therapy |
| PHT 5180 | Musculoskeletal Diagnosis and Management I |
| PHT 5180L | Musculoskeletal Diagnosis and Management I Lab |
| PHT 5205 | Clinical Skills |
| PHT 5205L | Clinical Skills Lab |
| PHT 6353 | Principles of Diagnostics and |
|  | Pharmacology in Physical Therapy |
| Summer Semester 1: (12 credits) |  |
| PHT 5027 | Clinical Education Seminar |
| PHT 6165C | Applied Clinical Neuroanatomy |
| PHT 5181 | Musculoskeletal Diagnosis and Management II |
| PHT 5181L | Musculoskeletal Diagnosis and |
|  | Management II Lab |
| PHT 6341 | Diagnosis and Management of Disease |
| PHT 6341L | Diagnosis and Management of Disease |
|  | Lab |

Fall Semester 2: (11 Credits)

| PHT 5182 | Musc |  |
| :---: | :---: | :---: |
|  | Management III | 3 |
| PHT 5182L | Musculoskeletal Diagnosis and |  |
|  | Management III Lab | 1 |
| PHT 6125 | Clinical Biomechanics | 3 |
| PHT 5805 | Clinical Internship I (8 weeks) | 4 |

Spring Semester 2: (14 credits)
PHT $6127 \quad \begin{aligned} & \text { Advanced Pathologic Movement } \\ & \\ & \text { Analysis }\end{aligned}$

| PHT 6164 | Neurological Diagnosis and |
| :--- | :--- |
|  | Management II |


| PHT 6164L | Neurological Diagnosis and |
| :--- | :--- | :--- |
|  | Management II Lab |


| PHT 6381 | Diagnosis and Management of <br> Cardiopulmonary Systems |  |
| :--- | :--- | :--- |


| PHT 6381L | Diagnosis and Management of <br> Cardiopulmonary Systems Lab | 1 |
| :--- | :--- | :--- |

PHT 6970 DPT Project 1 3

Summer Semester 2: (13 credits)

| PHT 5373 | Advanced Therapy Assessment of the Elderly | 3 |
| :---: | :---: | :---: |
| PHT 6169 | Neurological Diagnosis and |  |
|  | Management III | 3 |
| PHT 6169L | Neurological Diagnosis and |  |
|  | Management III Lab | 1 |
| PHT 6625 | Advanced Physical Therapy Clinical |  |
|  | Research Methodologies and Design | 3 |
| PHT 6970 | DPT Project 2 |  |

Fall Semester 3: (14 credits)

| PHT 5505C | Physical Therapy Constructs of Health <br> and Wellness | 3 |
| :--- | :--- | :--- |
| PHT 6009 | Differential Diagnosis in Physical |  |
|  | Therapy | 3 |
| PHT 6817 | Clinical Internship II | 5 |
| PHT 6970 | DPT Project 3 | 3 |

## Certificate Programs

## Professional Certificate in FamilyFocused Health Care Across Cultures

The objective of the certificate is to educate health care practitioners in the use of an international perspective through attitude, thinking processes and practice skills in their approach to health care either locally with ethnic group or abroad. This program responds to the demand for cultural expertise in the local community and worldwide. This program include possibilities for a semester of study abroad. With the exception of the practicum, all courses are entirely web-based. This certificate program is open to non-degree-seeking students only.

## Admissions

Students must have previously earned a Bachelor's degree in a health of health-related profession. They must be admitted to the certificate program by the Director for the Graduate Nursing Program who will serve as the advisor. Students will apply directly to the College of Nursing and Health Sciences. They also must complete the online graduate certificate application available at http://gradschool.fiu.edu. Transcripts and previous work are reviewed by the Director for the Graduate Nursing Program at the College of Nursing and Health Sciences who develops a program of study.

## Curriculum

Introduction Seminar: (3 weeks)
NGR $5138 \quad$ Cultural Immersion for International Health Care

## International Health Core

NGR 5131 Culture and Advanced Nursing Practice 3
NGR 4610C Family Theory and Nursing Intervention Across Cultures
NGR 5134C Interdisciplinary Health Care Across Cultures
Practicum: (3 weeks)
NGR $5632 \quad$ Practicum in International FamilyFocused Nursing

## Graduate Certificate in Communication Sciences and Disorders

The Graduate Certificate in CSD provides graduate level instruction in the basic processes of speech, language, and hearing, speech and language development, and speech and language production that are required for the identification, prevention, and management of speech, language, swallowing, and cognitive-communication disorders. Students applying to the Graduate Certificate in CSD must already have completed a bachelor's degree, which may be in any discipline. This certificate program is open to non-degree-seeking students only. The Graduate Certificate in CSD prepares students with bachelor's degrees in other discipline areas with the required coursework to be eligible for application to the Master's program in Speech-Language Pathology (SLP) in the Department of Communication Sciences and Disorders. Individuals with a bachelor's degree and the completed Graduate Certificate in CSD may be eligible to apply for
state licensure to become a speech-language pathology assistant. However, the Master's degree in SpeechLanguage Pathology is the only entry level degree to become a practicing licensed and certified SpeechLanguage Pathologist. Completion of the coursework in the Graduate Certificate in CSD or its equivalent is required for eligibility for application into the Master's program in SLP. The Graduate Certificate in CSD consists of 28 required credits ( 10 courses) of specified graduate coursework.

## Admission Requirements

A student already holding a BA or BS degree who has a minimum 3.0 cumulative GPA is eligible to apply for the Graduate Certificate program in CSD. A minimum grade of " C " or better is required for all certificate courses. For any courses in the Graduate Certificate program in CSD that are eligible for transfer to the Master's program in SLP (see Graduate course catalog), a minimum grade of " B " is required.

## Required Courses

The Graduate Certificate program in CSD consists of 28 required credits (10 courses) of specified graduate coursework.

SPA 5113C | Advanced Applied Phonetics |
| :--- | :--- |
| or |

LIN 5206 Phonetics 3
SPA 5012C Introduction to Communication Sciences
$\begin{array}{ll}\text { SPA 5102C } & \begin{array}{l}\text { Advanced Human Anatomy and } \\ \text { Physiology of Mechanisms of } \\ \text { Communication }\end{array}\end{array}$
$\begin{array}{lll}\text { SPA 5102L } & \begin{array}{l}\text { Advanced Human Anatomy and } \\ \text { Physiology of Mechanisms of } \\ \text { Communication Laboratory }\end{array} & 1\end{array}$
SPA 5009C $\begin{aligned} & \text { Normal Communication Development } \\ & \text { and Disorders }\end{aligned}$
SPA 5150C $\begin{aligned} & \text { Acoustics of the Sciences of Speech } \\ & \text { and Hearing }\end{aligned}$
SPA 5051C Clinical Observations, Management, and Procedures in Communication Disorders
SPA 5035C Disorders of Hearing and Audiological Sciences
SPA 6322 Aural Habilitation and Rehabilitation 3
This course is a required course in the Master's program in SLP at FIU. Students who complete this course through the Graduate Certificate in CSD or who complete the course at another university will be exempt from taking the course in the Master's program.
LIN 5018 Introduction to Linguistics

## Additional Requirements

To remain in the Graduate Certificate program in CSD, students must maintain a minimum 3.0 cumulative GPA in the graduate certificate coursework. To be awarded the Graduate Certificate in CSD, the student must achieve a minimum 3.0 GPA in the certificate and complete all of the courses in the Certificate at FIU. Students in the Graduate Certificate in CSD are required to be continuously enrolled in at least two courses per semester (except when taking the last course in the certificate program). Furthermore, all
students are required to complete the certificate within four continuous semesters, which includes summer semesters.

## Graduate Certificate in Culturally Competent Nursing Education

This certificate provides a unique combination of courses to prepare the graduate in the pedagogical competencies essential to teach nursing in an increasingly complex health care environment. This certificate program is open to degree-seeking students only. The technologically enhanced plan of study builds on advanced professional nursing competencies and emphasizes the use of a variety of assessment, instructional, curricular development and evaluate strategies that facilitate learning in culturally diverse populations. The goals of this certificate are to:

- Prepare nurse faculty with the knowledge, skills, and structured experiences to enhance classroom and clinical teaching and learning.
- Prepare nurse educators from diverse backgrounds who can teach nursing students to provide culturally competent care for diverse communities.
- Provide nurse educators with expertise in teaching technologically enhanced curricula and in facilities that enhance learning.
- Prepare nursing faculty and advanced practice nurses for professional certification as a Nurse Educator.


## Admission Requirements

1. Completed FIU Graduate Admissions online application at www.gradschool.fiu.edu, (305) 3487442.
2. Completed Graduate Nursing certificate application within College of Nursing and Health Sciences.
3. A student must be enrolled in or have completed a Master of Science in Nursing (MSN) degree with a clinical nursing specialty from a NLNAC or CCNE accredited program.
4. Graduate grade point average of 3.0 or higher.
5. Graduate courses (3 credits each) completed or in progress: nursing theory, research, advanced client assessment, advanced pathophysiology, and advanced pharmacology.*
6. Current RN license in Florida.

Other requirements apply. Please contact the graduate nursing office for more detailed information.
*Students lacking required courses must take them prior to registering for the Nursing Education Certificate specialty courses.

## Required Credits

Total of 15 credits

## Curriculum

NGR $6713 \quad$ Curriculum Development in Nursing 3
NGR 6715 Instructional Technology in Nursing and Health Sciences
NGR 6714C Clinical Teaching Strategies for Nursing 3
NGR 6708C Classroom Teaching Strategies for Nursing

3
NGR 6718

## Part-Time Study

Part-time study is available and can be accomplished at the student's own pace but must be completed within the University's time requirement of six years. Please contact the graduate nursing office for more information.

## Graduate Certificate in Gerontology

The objective of the certificate is to provide graduate students and qualified practitioners in the field of aging with a range of gerontological courses leading to a specialization in gerontology to supplement their chosen disciplines. Through provision of an in-depth understanding of the bio-socio-psychological nature of the aging process, and the relation of political and economic resources, the program's long range objective is to increase the knowledge and sensitivity of professionals in this area, and thereby improve the service delivery system for the increasingly large population of elderly Floridians. This certificate program is open to both degree- and nondegree seeking students.

## Admission

Students must have a bachelor's degree and be admitted to the program by the Program Coordinator who will serve as their faculty advisor.

| Program of Study: (18) |  |  |
| :--- | :--- | :--- |
| SOW 5641 | Understanding the Process of Aging | 3 |
| NGR 5250 | Physical Change and Healthy Aging | 3 |
| HSA 5226 | Management of Long Term Care |  |
|  | Systems | 3 |

The balance of four courses to be selected from the following areas of concentration. Students who have not had direct practice with older people will be required to select an Individual Study course which will include 225 hours of practicum experience.

| Long Term Care Administration |  |
| :---: | :---: |
| HSA 5225 | Long Term Care Management I |
| HSA 5226 | Management in Long Term Care |
| HSA 5227 | Long Term Care Management II |
| HSA 5454 | Ethical Decision Making in Health Services Administration |
| HSA 5816 | Practicum in Long Term Care Management |
| Aging and Rehabilitation |  |
| OTH 5600 | Study of Gerontology as Related to Occupational Therapy |
| OTH 5613 | Interdisciplinary Approach to Aging |
| OTH 5630 | Occupational Therapy Assessment of the Elderly |
| OTH 5764 | Research (topic selected in Geriatric Clinical Specialty) |
| OTH 5905 | Independent Study (variable credit) |
| PHT 6238 | Motor Development: Adult Through Geriatrics |
| PHT 6239 | Adult Congenital Handicapping Conditions |
| Psychology of Aging |  |
| DEP 5404 | Proseminar in Psychology of Adulthood and Aging |
| DEP 6438 | Gerontological Assessment |
| DEP 6465 | Psychology of Culture and Aging |

Aging and Rehabilitation

| DEP 6446 | Cognitive Processes of Aging |
| :---: | :---: |
| Social Work Practice with Older Persons |  |
| SOW 5605 | Medical Social Work |
| SOW 5845C | Counseling the Elderly |
| SOW 5905 | Individual Study |
| SOW 6245 | Social Welfare Policy and Services for the Elderly ${ }^{1}$ |
| SOW 6247 | Housing and Environmental Needs |
| SOW 6359 | Social Work Treatment with Families of Elderly ${ }^{1}$ |
| SOW 6646 | Social Work Practice with Elderly ${ }^{1}$ |
| SOW 6647 | Advocacy in Social Work Practice |
| SOW 6649 | Social Work Practice in Long Term Care and the Elderly |

${ }^{1}$ Open only to students with MSW degree or students in Master's degree program in Social Work.

## Education

ADE 5195 Designing Education and HRD Programs for Disadvantaged Adults

## Criminal Justice

CCJ $6935 \quad$ Special Topics: Crime and the Elderly

## Graduate Certificate in Occupation Based Injuries

The Certificate is fully online and seeks to provide graduate level instruction in the prevention and management of occupation-based injuries across the lifespan. Occupation-based is defined as the active or "doing" process when one is engaged in a goal-directed activity. For example, the occupation of an infant is play, where the occupation of a school-age child is that of a student. This certificate program is open to both degreeand non-degree seeking students.

The Certificate requires the completion of the following 18 fully online graduate credits.
PHC 6355 Occupational Health and Safety 3
PHC 6589 Health Promotion in Institutional Settings

OTH 5195
OTH 5407 Theoretical Perspectives of Pain 3
OTH 6937 ADA Workplace Accommodations of
Persons with Disabilities
Or equivalent courses as approved by the advisor.

## Nurse Executive Certificate Program

Students who are not seeking the Master of Science in Nursing (MSN) degree, but who still seek professional preparation for a nursing management career are candidates for the Nurse Executive Certificate Program. The purpose of the certificate program is to enhance the knowledge and skills of the first line nursing supervisory staff. These courses can also be applied toward a Nurse Executive graduate (MSN) degree. Eligible candidates for admission to the program must have a baccalaureate degree in nursing. This certificate program is open to non-degree-seeking students only.

## Curriculum

NGR 5720C Organizational Dynamics of Nursing Systems

NGR 6726C Nursing Management/CQI 3
NGR 5723C Advanced Nursing Administration I 4
NGR 6724C Advanced Nursing Administration II
4

## Post-Master's Nurse Practitioner Certificate Program

This Post-Master's Nurse Practitioner Certificate Program is built upon a recent Master's degree in nursing. Transcripts of previous work are reviewed by the Graduate Nursing Program Director and a program of study is developed. The Certificate program includes the clinical specialty courses (AHN, CHN, PMHN, or FHN), the role development course, and core courses not covered by transcripts of previous work. This certificate program is open to non-degree-seeking students only.

## Admission Requirements

1. A Master of Science in Nursing (MSN) degree from an NLNAC accredited program.
2. A graduate (MSN) grade point average (GPA) of 3.0 or above.
3. Graduate courses in nursing theory ( 3 credits) and research (3 credits).
4. State of Florida RN licensure. A photocopy of the license must be submitted along with student's application to the Post Master's Nurse Practitioner Certificate Program.
5. Pre-admission interview with a member of the Graduate Nursing Admissions Committee.
6. Two letters of recommendation.

## Admission Procedure

1. File application for admission directly to the College of Nursing and Health Sciences Graduate Program Office prior to registration and complete and online application available at http://gradschool.fiu.edu.
2. Submit official transcripts of all previous college work, both graduate and undergraduate.
3. Application file must be completed by June 1 for Fall admission, October 1 for Spring admission. Applicants whose files are not completed by these dates will need to wait until the appropriate semester for admission.

## Curriculum

Nurse Practitioner Core: (9)
NGR 5035C Advanced Client Assessment 3
NGR $5141 \quad$ Pathophysiologic Basis of Adult Nursing 3
NGR $6172 \quad$ Pharmacological Concepts in Advanced
Nursing Practice
3
MSN Core: (3)
NGR 5131
Culture and Advanced Nursing Practice 3
Primary Core: (6-8)
$\begin{array}{lll}\text { NGR 6601C } & \text { Advanced Family Health Nursing I } & 4 \\ \text { NGR 6601L } & \begin{array}{l}\text { Advanced Family Health Nursing } \\ \text { Practice I }\end{array} & 4\end{array}$
Role Development (4)
NGR 6700L Role Synthesis in Advanced AdultGerontology Nursing Practice

## Post Master's Certificate in Nursing <br> Education

The Post Master's Certificate in Nursing Education is designed to provide nursing faculty teaching in all nursing programs (LPN, ADN, BSN, MSN, and Doctoral) knowledge, skill, and structured experiences in classroom and clinical teaching. It enables Community College nursing faculty in Florida to meet requirements for courses in education to maintain their teaching certificates. It will prepare nursing faculty for professional certification by the National League for Nursing for Nursing (NLN) as a Nurse Educator. This certificate program is open to non-degreeseeking students only.

The curriculum for the Post Master's Certificate in Nursing Education consists of 15 credit hours, 9 credit hours in classroom/didactic instruction and 6 credit hours in classroom/clinical teaching experience/seminar.

## Admission Requirements

1. Master's degree in Nursing from a nationally accredited education institution.
2. GPA of 3.0 in MSN
3. Letters of recommendation from prior faculty member and nursing supervisor.
4. Statement of personal goals including personal philosophy of teaching and learning.
5. Graduate course in culture and advanced practice nursing (3 credits)

## Curriculum

| NGR 6713 | Curriculum Development in Nursing | 3 |
| :--- | :--- | :--- |
| NGR 6715 | Instructional Technology in Nursing and <br>  <br> NGR 6718 | Health Sciences <br> Testing and Evaluation in Nursing |
|  | Education |  |
| NGR 6708C | Classroom Teaching Strategies for |  |
|  | Nursing <br> (Practicum Experience in Classroom |  |
|  | Instruction) |  |
| NGR 6714C | Clinical Teaching Strategies for Nursing 3 <br>  <br>  <br>  <br> (Practicum Experience in Clinical <br> Instruction) |  |

## Course Descriptions

## Definition of Prefixes

ATR-Athletic Training; GEY-Gerontology; HSA-Health Services Administration; HSC-Health Sciences; NGRNursing Graduate; OTH-Occupational Therapy; PETPhysical Education Therapy; PHT-Physical Therapy; SPASpeech Language Pathology
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering.

ATR 5105C Principles of Athletic Training with Lab (4). Introduction to principles of risk management and injury prevention. Topics include the athletic training profession, fitness programs, environmental risk factors, taping techniques and nutrition. Prerequisite: Admittance into Athletic Training Education Program. Corequisites: ATR 5115C, ATR 5805.
ATR 5115C Management of Medical Emergencies (3). Students will learn the basic principles of managing medical emergencies utilizing immediate first aid techniques. American Red Cross certification in CPR and first aid will be obtained. Prerequisite: Admittance into Athletic Training Education Program. Corequisites: ATR 5105C, ATR 5805.

ATR 5217C Orthopedic Assessment I - Lower Extremity with Lab (4). Introduction to orthopedic injuries and/or dysfunctions that occur to the lower extremity during physical activity and the application of techniques of orthopedic assessment. Prerequisites: ART 5105C, ATR 5115C, ATR 5805. Corequisites: ATR 5305C, ATR 5815L.
ATR 5218C Orthopedic Assessment II - Upper Extremity (4). Introduction to common types of orthopedic injuries and/or dysfunctions that occur to the upper extremity during physical activity and the techniques of injury prevention, recognition, and evaluation. Prerequisites: ATR 5217C, ATR 5305C, ATR 5815L. Corequisite: ATR 5316C.

ATR 5219C Orthopedic Assessment III - Head, Spine, and Trunk (4). Introduction to common types of orthopedic injuries and/or dysfunctions that occur to the head, spine, and trunk during physical activity and the techniques of injury prevention, recognition, and evaluation. Prerequisites: ATR 5825L and ATR 5316C. Corequisite: ATR 5435.
ATR 5305C Therapeutic Modalities with Lab (4). Introduction to basic principles of theory and application of various therapeutic modalities encountered in athletic training practice and the application of the principles in the lab setting. Prerequisites: ATR 5105C, ATR 5115C, ATR 5805. Corequisites: ATR 5217C, ATR 5815L.

ATR 5316C Rehabilitation Techniques in Athletic Training with Lab (4). Introduction to basic principles of rehabilitation of athletic injuries, including range of motion, pain control, balance, proprioception, strengthening, and endurance. Corequisite: ATR 5218C.
ATR 5435 Diseases and Disabilities in the Physically Active (3). Introduction to the clinical signs and symptoms of general medical conditions that will present to the Certified Athletic Trainer. Prerequisites: ATR 5218C, ATR 5316C, and ATR 5825L. Corequisite: ATR 5219C.

ATR 5517 Administration and Professionalism in Athletic Training (3). Introduction to the concepts of legal liability, budgeting, inventory, facilities design and general administration of the athletic training room. Prerequisites: ATR 5219C, ATR 5835L, ATR 5435. Corequisite: ATR 6620.

ATR 5805 Clinical Education Seminar in Athletic Training (1). Addresses issues related to the clinical setting and prepares the student for the clinical component of the Athletic Training Program while completing clinical experience hours. Prerequisite: Admittance into Athletic Training Program.
ATR 5815L Clinical Education I (3). Designed to allow students to apply athletic training techniques associated with the principles of athletic training, management of medical emergencies, and clinical education. Prerequisites: ATR 5105C, ATR 5115C, ATR 5805. Corequisites: ATR 5217C, ATR 5305C.
ATR 5825L Clinical Education II (3). Designed to allow students to apply athletic training techniques associated with orthopedic assessment of the lower extremity and therapeutic modalities. Prerequisites: ATR 5217C, ATR 5305C, ATR 5815L. Corequisites: ATR 5218C, ATR 5316C.
ATR 5835L Clinical Education III (3). Designed to allow students to apply athletic training techniques associated with orthopedic assessment of the upper extremity and rehabilitation. Prerequisites: ATR 5218C, ATR 5316C, ATR 5825L. Corequisites: ATR 5219C, ATR 5435.

ATR 5845L Clinical Education IV (3). Designed to allow students to apply athletic training techniques associated with orthopedic assessment of the head, spine, and trunk, intervention and referral, and diseases and disabilities. Prerequisites: ATR 5219C, ATR 5835L, ATR 5435. Corequisite: ATR 6620.
ATR 6425 Pharmacology and Diagnostic Imaging in Athletic Training (3). Introduces students to the principles of pharmacology and diagnostic imaging and their relationships to the Certified Athletic Trainer. Prerequisite: ATR 5517, ATR 6620, ATR 5845L. Corequisites: ATR 6621, ATR 6855L.
ATR 6620 Research and Evidence-Based Practice in Athletic Training I (3). Introduces students to a systematic approach to ask and answer clinically relevant questions in athletic training through the critical examination of existing research evidence.
ATR 6621 Research and Evidence-Based Practice in Athletic Training II (3). Introduces students to the concepts of conducting research and disseminating findings. Prerequisite: ATR 6620.
ATR 6855L Clinical Education V (3). Designed to allow students to apply the athletic training techniques associated with administration and professionalism in allied health care in selected clinical education settings. Prerequisites: ATR 5517, ATR 5845L.
ATR 6906 Independent Study/Thesis in Athletic Training (1-9). Faculty supervised project or research thesis that involves an in-depth study of contemporary issues and/or clinical practices relevant to athletic training. Prerequisites: Graduate standing and permission of the instructor.

GEY 5005C Issues in Gerontology for Health Professions (3). This course examines social, economic, and demographic issues challenging older adults and health care professionals providing services to this age group.
GEY 5600 Physical Change and Healthy Aging (3). Primary health care and wellness with discussion and assessment of normal physiological alterations and their relationship to common health concerns and medical problems of older adults.
HSA 5125 Introduction to Health Policy and Management (3). The American health care system is broadly analyzed in social, economic, and political terms, including examination of its major operational and programmatic components as they have evolved in their changing patterns and trends of organizational development.
HSA 5177 Financing and Reimbursement for Long Term Care Facilities (3). This course introduces the theory and practice of government regulations as they pertain to long term care facilities. The program seeks to identify the critical elements for securing payments for service and study relevant capital investment procedures and policies. Prerequisite: HSA 5225. Corequisite: HSA 5227.

HSA 5225 Long Term Care Management I (3). Long term care facility organization and management are studied. Management implications of the social, economic, financial, and regulatory environment of nursing homes are examined. Prerequisite: HSA 6185.
HSA 5226 Management of Long Term Care Systems (3). Organizational, financial, and policy issues in the management of long term care systems in the U.S. with special emphasis on the State of Florida.
HSA 5227 Long Term Care Management II (3). Survey of theories of gerontic care for understanding the aging process. Focus is on the application of knowledge of the aging process to management and care given in nursing homes. Corequisite: HSA 5816.
HSA 5455 Ethical Decisions in Health Services Administration (3). This course will study ethical principles as they apply to areas of management, supervision and clinical practice in the delivery of health care. Emphasis is on managerial decision-making. Prerequisites: HSA 5125, HSA 6185.
HSA 5816 Practicum in Applied Management in Long Term Care (3). Students will spend 180 hours in supervised practice in a nursing home setting. They carry out managerial responsibilities related to the administration of the facility. Corequisite: HSA 5227.
HSA 5876L Administrative Residency in Nursing Home Setting (3-6). Students will spend 480 hours of supervised practice in a selected nursing home to gain experience in organization and management within the nursing environment. Prerequisites: HSA 5816, HSA 5225, HSA 5226, HSA 5227.

HSA 5935 Special Topics Seminar in Health Services (1-3). Students investigate topics of interest in health care services through lectures by the faculty and guest speakers. May be repeated. Prerequisite: Permission of faculty advisor.

HSA 6149 Strategic Planning and Marketing of Health Care Services (3). Principles, techniques, and case study applications of strategic planning and marketing in the context of changing environmental, policy, and competitive forces in the health services industry. Prerequisite: Completion of 36 credit hours in program coursework.
HSA 6175 Financial Management of Health Systems (3). Aspects of modern hospital and health care organization financial management are covered to prepare students for executive roles in policy planning and control responsibilities involving budgeting, auditing, investing, capital financing, etc. Prerequisites: Completion of Foundation Courses or minimum of 9 credit hours of program coursework including HSA 5125, HSA 6185, PHC 6065, HSA 6176.
HSA 6185 Management and Organizational Theory in Health Care (3). Fundamentals of management and organizational theory with focus on roles and functions of managers, and the influences of organizational structure and design in the dynamic environment of health care systems.
HSA 6186 Leadership and Organization Behavior in Health Care Systems (3). Examine leadership and organizational behavior in health care settings. Personal and profession growth are encouraged through integrative study of individual, group and organizations issues. Prerequisites: Completion of Foundation Courses or minimum of 9 credit hours of program coursework including HSA 5125, HSA 6185, PHC 6065, HSA 6176.
HSA 6187 Managing Human Resources and Health Professions (3). Study of human resource functions and activities necessary to enhance knowledge, competencies, skills, attitudes and behavior and to improve individual and organizational performance in health care organizations. Prerequisites: Completion of Foundation Courses or minimum of 9 credit hours of program coursework including HSA 5125, HSA 6185, PHC 6065, HSA 6176.
HSA 6197 Design and Management of Health Information Systems (3). The development and management of health information systems to support managerial decision-making. Emphasis is on the integration of clinical, personnel, and financial data. Prerequisites: Completion of Foundation Courses or minimum of 9 credit hours of program coursework including HSA 5125, HSA 6185, PHC 6065, HSA 6176.
HSA 6205 Hospital and Health Facilities Organization (3). Administrative theory and management principles are examined in their application to the organizational analysis of hospitals and health care facilities. Prerequisites: HSA 5125, HSA 6185 or permission of the instructor.
HSA 6215 HMO and Ambulatory Care Administration (3). Overview of the management process employed in health maintenance organizations (HMO's) and other group medical practices operating under various financial arrangements, including prepayment. Prerequisites: HSA 5125, HSA 6185, or permission of the instructor.
HSA 6415 Marketing and Demographic Analysis in Health Care (3). This course is designed to familiarize students with analytical procedures and empirical techniques of market analysis and to equip students for practical work in market analysis. Prerequisites or Corequisites: HSA 5125 and PHC 6065.

HSA 6426 Health Law and Legal Aspects of Management (3). The broad range of legal issues in health care and administrative aspects of law that concern health care managers are surveyed for implications concerning malpractice, patient rights, contracts, liability and immunity, taxation, surgical consent, etc. Prerequisites: Completion of Foundation Courses or minimum of 9 credit hours of program coursework including HSA 5125, HSA 6185, PHC 6065, HSA 6176.
HSA 6717 Advanced Health Services Management and Research Seminar (2). Integrates the theoretical and practical knowledge of other courses in the curriculum. Case studies and relevant research provide the substantive framework for analysis of health care issues. Prerequisite: Permission of the instructor.
HSA 6759 Quality Assessment and Outcome in Healthcare (3). The concept of quality and quantity assessment are examined from multiple perspectives: patients, healthcare providers, payors standard setting organization and healthcare policymakers. Prerequisites: Completion of Foundation Courses or minimum of 9 credit hours of program coursework including HSA 5125, HSA 6185, PHC 6065, HSA 6176.
HSA 6875 Administrative Residency (1-6). Off-campus placement in residency with health care organizations under supervision of a managing preceptor at the site. Prerequisites: HSA 6930 and approval of the coordinator.
HSA 6905 Directed Study in Health Services Administration (1-6). The course is designed to allow students an opportunity for in-depth literature research relating to a problem or issue in health services administration under the supervision of a faculty advisor. Prerequisite: Permission of faculty advisor.
HSA 6930 Professional Seminar in Health Services Management (1). A professional seminar to provide career development skills in preparation for residency or master's project. Prerequisite: Completed 36 credit hours in the program coursework.
HSA 6977 Masters Research Project (1-6). The student will be field afforded the opportunity to conduct a research project on a specific health care management problem in a community or institutional setting. A formal proposal will be prepared and approved by faculty. Students will be expected to demonstrate during the course of this research project that they can implement theoretical knowledge and skills learned earlier in courses on research methods and design. Prerequisites: HSA 6930 and permission of advisor.
HSC 5319 Teaching Health Education (4). Students will select various modern techniques and tools for teaching health education in elementary and secondary school settings.
HSC 5665 Information and Communication for Health Professionals (3). Information and communication technology introduces technology and practical computer applications for today's health care professional. This online course uses a web-based format. Prerequisite: Basic computer experience.
HSC 5905 Health Independent Study (3). Faculty supervised project in health-related topics in association with the student's special interests.

NGR 5035C* Advanced Client Assessment (3). Refinement of health assessment skills fundamental to advanced nursing practice emphasizing critical thinking in advanced health assessments across the lifespan. Prerequisites: MSN admission; basic health assessment (3 credits), NGR 5141.
NGR 5064C Diagnostic and Therapeutics in Advanced Nursing Practice (3). Provides the advance practice nurse/student the theoretical background and clinical applications for diagnostics and therapeutics across the lifespan.
NGR 5110 Theories in Nursing (3). Analysis, evaluation, and application of theories from nursing and related disciplines to advanced nursing practice, research, education and administration. Prerequisites: Departmental permission, Graduate standing.
NGR 5131 Culture and Advanced Nursing Practice (3). Theoretical models explanatory of culture and behavioral manifestations of cultural diversity. Focuses on multicultural nursing and methodologies for nursing care throughout the life span. Prerequisite: Departmental permission.
NGR 5134C Interdisciplinary Health Care Across Cultures (3). The course focuses on health care teams. Types of service, roles and interdisciplinary interaction will be studied as they relate to policies, economics, ethics and ethnic issues in various countries. Prerequisite: Permission of Instructor.
NGR 5136 International Nursing System/Advanced Nursing Practice (3). Comparative analysis of philosophical, legal, political, economic and social underpinnings of the nursing progression within the context of international developments and trends in the post-cold war era.
NGR 5138 Cultural Immersion for International Health Care (1-2). The course introduces basic language, values, social etiquette, daily life, and interpersonal, family and health care patterns in a foreign country in preparation for cross-cultural health study. Prerequisite: Permission of the instructor.

NGR 5141 Pathophysiologic Basis of Advanced Nursing Practice (3). Focuses on the pathophysiologic basis of clinical judgment and client management in advanced nursing practice. Prerequisites: Graduate standing and permission of the department.
NGR 5168 Complementary and Alternative Therapies in Nursing and Healthcare (3). Provides the theory, practice and patterns of use in complementary and alternative practices and products (CAPPs). Integrates CAPPs knowledge with conventional healthcare using National Institutes of Health NCCAM framework.
NGR 5250 Physical Change and Healthy Aging (3). Emphasis on health alterations in aging, delivery of healthcare, and ethical decision-making and advocacy in relationship to common medical problems of the elderly and their families.
NGR 5263 Gerontology for Health Professions (3). A comprehensive overview of aging with the goal of enhancing health outcomes and promoting healthy aging locally and globally. Prerequisite: Graduate status.

NGR 5340 Women and Health: A Nursing Perspective (3). Analysis of the unique health concerns of women across the life span. Emphasizes a multidisciplinary approach. Prerequisite: Graduate standing.
NGR 5495 Women's Health Issues (3). This course is designed to acquaint the student with selected conditions impacting the health of women.

NGR 5610C Family Theory and Nursing Intervention Across Cultures (3). Students are exposed to selective family theories, family nursing assessment, intervention and evaluation. Culture and economic status and their influence on family structure and processes are addressed. Prerequisites: Graduate status, permission of instructor.
NGR 5632 Practicum in International Family Focused Nursing (1). Students apply learning about nursing care in another country, assessment and intervention with families by instituting a change in their work/practice place at home. Prerequisite: Permission of Instructor.
NGR 5660C Leadership and Advocacy for Child and Family Health (3). Acquisition and application of leadership/advocacy skills with culturally diverse families to improve healthcare in professional/public healthcare settings.
NGR 5720C Organizational Dynamics and Nursing Systems (3). Course provides a theoretical understanding of the dynamics of organizational design and behavior. Emphasis is placed on skills to analyze, diagnose and intervene in organizational dynamics.
NGR 5723C Advanced Nursing Administration I (4). Analyzes how social/ethical/legal issues, workplace diversity and organizational culture influences nursing management. Strategies for recruitment, retention and managing human resources are included. Corequisite: NGR 5730C.
NGR 5737 Legal and Ethical Dimensions of Advanced Nursing Practice (3). Analysis of legal and ethical precepts and application to moral and legal dilemmas in advanced nursing practice focusing on the advocacy role in promoting rights of individuals and families. Prerequisite: Consent of instructor.
NGR 5810 Research Methods in Nursing (3). Research methods and designs commonly used in nursing. Focuses on the research process as it is integrated in the interchange of theory, practice, and research using information systems. Prerequisites: Statistics, departmental permission and NGR 5110. Corequisite: NGR 5110.
NGR 5832 Applied International Nursing Research (3). Examines and applies international nursing research methods with a focus on global health related to health disparities in underserved populations in health disparities in underserved populations in local, national, and international areas. Prerequisites: PHC 6706 or comparable.
NGR 5905 Independent Study in Nursing (1-10). Individually determined, research oriented, in-depth study of a nursing problem or clinical experience as approved by the faculty preceptor. Prerequisites: BSN, Permission of the instructor, and admission to a graduate program.

NGR 5936 Special Topics in Nursing (1-6). Critical analysis of the clinical decision making process in advanced health nursing practice (ANP). Synthesis of learning from previous clinical courses. Prerequisite: Must be a nursing student or Florida licensed RN.

NGR 6123 Knowledge Development in Nursing Science (3). This course examines theory development, philosophical inquiry, and ways of organizing nursing knowledge. Attention is directed to inquiry as grounded in languages and cultures. Prerequisite: Departmental permission.
NGR 6172 Pharmacological Concepts in Advanced Nursing Practice (3). In-depth study of principles of pharmacology, pharmacokinetics and pharmacodynamics. Emphasis on common prescription and non-prescription drugs used in advanced nursing practice across the lifespan. Prerequisites: Graduate standing and departmental permit.
NGR 6201C Advanced Adult-Gerontology Nursing I (3). Study of Advanced Adult Practice Nursing and specialization, expansion and advancement of evidencebased knowledge and skills fundamental to the role of the Adult Nurse Practitioner in primary care. Prerequisites: NGR 5035C, NGR 5141, NGR 6172. Corequisite: NGR 6201L.
NGR 6201L* Advanced Adult-Gerontology Nursing Practice I (3). Clinical implementation of evidence-based knowledge and skills required of the advanced adult practice nurse in the prevention, diagnosis and management of acute health conditions in primary care. Corequisite: NGR 6201.
NGR 6202C* Advanced Adult-Gerontology Nursing II (3). Continuing development of evidence-based knowledge and skills fundamental to the adult nurse practitioner role in the care of clients experiencing chronic and multisystem illnesses. Prerequisite: NGR 6201C, NGR 6201L. Corequisite: NGR 6202L.
NGR 6202L* Advanced Adult-Gerontology Nursing Practice II (3). Clinical implementation of evidence-based knowledge and skills fundamental to the adult nurse practitioner role in the care of the client and family experiencing chronic, multisystem illness. Corequisite: NGR 6202.

NGR 6209 Clinical Decision Making in Advanced Adult-Gerontology Nursing (3). Critical analysis of clinical decision making in ANP. Synthesis of learning to recognize similarities, differences, and contextual factors related to diagnosis and management of diseases and injuries. Prerequisites: NGR 6201, NGR 6201L, NGR 6202, NGR 6202L. Corequisite: NGR 6700L.
NGR 6301C Advanced Child Health Nursing I (3). Development of evidence-based and theoretical knowledge for the advanced pediatric nurse in health promotion, disease prevention and management of acute health conditions in primary care settings. Prerequisites: NGR 5035C, NGR 5141, and NGR 6172. Corequisite: NGR 6301L.
NGR 6301L* Advanced Child Health Nursing Practice I (3). Implementation of evidence-based knowledge and skills for the advanced pediatric nurse in health promotion, disease prevention and management of acute health
conditions in primary care settings. Corequisite: NGR 6301C.

NGR 6302 Advanced Child Health Nursing II (3). Continuing development of evidence-based knowledge and skills fundamental to the pediatric nurse practitioner role in the care of the client and family experiencing chronic, multisystem illness. Prerequisites: NGR 6301C, NGR 6301L. Corequisite: NGR 6302L.
NGR 6302L* Advanced Child Health Nursing Practice II (3). Application of evidenced-based knowledge and skills fundamental to the pediatric nurse practitioner role in the care of the client and family experiencing chronic, multisystem illness. Corequisite: NGR 6302.

NGR 6333 Conceptual Issues in Nursing Management of Developmental Disabilities (3). Study of developmental theories, concepts and research findings in context of nursing model. Problems relevant to nursing intervention are examined through critique of pertinent literature. Corequisites: Graduate standing and permission of the department.
NGR 6337 Clinical Decision Making in Advanced Child Health Nursing (3). Critical analysis of the clinical decision making process in advanced child nursing practice. Synthesis of learning from previous clinical courses. Prerequisites: NGR 6301C, NGR 6301L or NGR 6302, NGR 6302L.
NGR 6337L Role Synthesis in Advanced Child Health Nursing Practice (4). Capstone course synthesizing role functions of the Pediatric Advanced Practice Nurse with emphasis on professional practice issues and transition into the practice role. Prerequisites: NGR 6301C, NGR 6301L, NGR 6302, NGR 6302L.
NGR 6400 Chemistry and Physics of Anesthesiology Nursing (3). Detailed study of the chemical and physical principles which apply to physiology, pharmacology and anesthesia equipment. Emphasis is placed on biochemistry and physics of gases and vapors. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6404 Advanced Bioscience for Anesthesiology Nursing I (3). Course in human anatomy, physiology, and pathophysiology to include the effects of anesthesia on the cell, the circulatory system, and the respiratory system. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6405 Advanced Bioscience for Anesthesiology Nursing II (3). Study of the anatomy and physiology of the endocrine, excretory, and neurological systems. This will progress to the pathophysiology of these systems with emphasis on the application of anesthesia. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6421 Principles of Anesthesiology Nursing I (2). Broad field orientation to practice. Study of the areas of pre, intra, and post-anesthesia planning and action. The induction and emergence from anesthesia, monitoring and record keeping are included. Prerequisite: Graduate Anesthesiology Track.
NGR 6422 Principles of Anesthesiology Nursing II (2). The course will emphasize the anesthetic management of the pediatric, geriatric and obstetrical patient. The course will review the specific anesthetic needs for each specialty. Prerequisite: Graduate Nurse Anesthesiology Track.

NGR 6423 Principles of Anesthesiology Nursing III (2). Principles of cardiothoracic anesthesia, preoperative assessment, pre, intra, and postoperative management, extra-corporeal circulation, cardiac assist devices, and pharmacological intervention. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6424 Principles of Anesthesiology Nursing IV (3). The course will emphasize the anesthetic management of the emergency and trauma patient. A review of the assessment process, clinical management, and placement of appropriate monitoring lines. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6431L Anesthesiology Nursing Clinical Residency I (1). Introduction to the art and science of anesthesiology nursing. This course presents the basic concepts and introduces the students to the clinical component of the anesthesia management technique. Prerequisite: Graduate Anesthesiology Track.
NGR 6432L Anesthesiology Nursing Clinical Residency II (2). Clinical anesthesiology correlation conferences on a weekly basis. This clinical component includes the fundamentals of patient interaction under the direct supervision of a CRNA instructor. Prerequisite: Completion Sem. I Anesthesiology.

NGR 6433L Anesthesiology Nursing Clinical Residency III (3). (Include Clinical Case Conference). Case presentations to include the clinical component of anesthesia of progressively advanced cases. The instruction is under the direct supervision of CRNA to include between university semesters. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6434L Anesthesiology Nursing Clinical Residency IV (4). Seminar presentations weekly. Clinical experience: anesthetic management of advanced specialties, including insertion of monitoring lines as appropriate, and progression begin on-call experience. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6435L Anesthesiology Nursing Clinical Residency V (4). Students will incorporate information learned in Practicum I-IV in order to anticipate anesthesia needs for patients in all clinical settings, including postoperative and chronic pain management. Prerequisite: Graduate Nurse Anesthesiology Track.

NGR 6436L Anesthesiology Nursing Clinical Residency VI (4). Advanced practice to include completion of clinical competencies in all specialty areas. This includes professional conduct of the advanced practitioner to include knowledge of advance practice role. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6437L Anesthesiology Nursing Clinical Residency VII (4). Course in which a graduate functions as the primary nurse anesthetist, and the instructor as a consultant. Experience will be provided with management within the department of anesthesiology. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6441L Anesthesiology Nursing Simulation Practicum II (1). Application of knowledge and skills fundamental to advanced anesthesiology nursing practice in the care for the intermediate acuity patient; ultrasound guided regional anesthesia; and pain management. Corequisite: NGR 6432L.

NGR 6442L Anesthesiology Nursing Simulation Practicum III (1). Application of knowledge and skills fundamental to advanced anesthesiology nursing practice in the preparation, management and OB, pediatric, and cardio-vascular-thoracic anesthesia care. Corequisite: NGR 6433L.
NGR 6460 Pharmacology of Anesthesiology Nursing I (2). Pharmacology of drugs affecting the autonomic nervous system as well as anesthetic agents. Administration and doses of the drugs is included. Prerequisite: Graduate Anesthesiology Track.
NGR 6461 Pharmacology of Anesthesiology Nursing II (2). Course will study the uptake, distribution and biotransformation of anesthetics, including the advanced study of therapy in anesthesia of specialty areas and treatment of complications. Prerequisite: Graduate Anesthesiology Track.
NGR 6490 Regional Anesthesia (2). Theoretical and clinical aspects of the administration and management of regional anesthesia. Anatomy, physiology and pharmacology will be studied/applied to the administration of anesthetic blocks. Prerequisite: Graduate Nurse Anesthesiology.
NGR 6491 Advanced Anesthesiology Nursing Seminar (3). Advanced clinical review as presented by the graduate students regarding specific case presentations. The course will serve as a review for the National Certification Examination. Prerequisite: Graduate Nurse Anesthesiology Track.

NGR 6492 Professional Aspects of Anesthesiology Nursing (2). This course explores: American Association of Nurse Anesthetists, Councils on Accreditation, Certification and Practice and Professional issues for the practice model of Anesthesiology in Nursing. Prerequisite: Graduate Nurse Anesthesiology Track.
NGR 6493 Technology in Anesthesiology Nursing (2). The use and care of anesthesia equipment (mechanical and electronic) are discussed. Computers and their uses in anesthesiology are also included. Prerequisite: Graduate Anesthesiology Track.

NGR 6497 Advanced Anesthesia Life Support (1). Advanced Anesthesia Life Support (AALS) is an advanced course that highlights the importance of team management of emergency anesthesia events, team dynamics and communication, systems of care.
NGR 6503 Advanced Psychiatric-Mental Health Nursing I (3). This course prepares students for advance practice roles in psychiatric mental health nursing. Scientific knowledge is developed for ARNPs seeking to care for clients across the lifespan. Prerequisite: Admission to the program. Corequisite: NGR 6503L.
NGR 6503L* Advanced Psychiatric-Mental Health Nursing Practice I (3). Management of psychiatric mental health disorders in time-limited and extended care therapies in collaboration with health care providers across delivery systems. Blends the ARNP/CNS. Corequisite: NGR 6503.
NGR 6504C Advanced Psychiatric-Mental Health Nursing II (3). Continued development of advanced practice nursing model in the psychiatric care of individuals, groups and families across settings and
populations. Prerequisites: NGR 6503, NGR 6503L. Corequisite: NGR 6504L.
NGR 6504L* Advanced Psychiatric-Mental Health Nursing Practice II (3). Application of advanced practice nursing model with clients who have complex psychiatric problems or are at high risk. Collaborative process in therapy, consultation, and planned change. Corequisite: NGR 6504C.
NGR 6505L Role Synthesis in Advanced PsychiatricMental Health Nursing Practice (4). Advanced psychiatric/mental health nursing role with diverse population. Role developed through contractual agreements with faculty and mentors. Prerequisites: NGR 6503, NGR 6503L, NGR 6504C, NGR 6504L.
NGR 6538 Psychopharmacology for Advanced Practice Nursing (3). Background for neurobiological pharmacologic, psychiatric, and age dynamic factor to advanced practice nurse prescribing of psychiatric medications. Prerequisite: Advance to Semester III in graduate program.
NGR 6560 Advanced Psychiatric Mental Health Clinical Decision Making (3). Apply knowledge gained during the curriculum to develop the role and skills of the FPMHNP. Identify opportunities for collaboration, consulting, and referral. Prerequisites: NGR 6503, NGR 6503L, NGR 6504C, NGR 6504L, NGR 6538.
NGR 6601C Advanced Family Health Nursing I (4). Study of Advanced Family Practice Nursing and specialization, expansion and advancement of evidencebased knowledge and skills fundamental to the role of the Family Nurse Practitioner in primary care. Prerequisites: NGR 5035C, NGR 6172, NGR 5141. Corequisite: NGR 6601L.
NGR 6601L Advanced Family Health Nursing Practice I (4). Clinical implementation of evidence-based knowledge and skills required to the advanced family practice nurse in the prevention, diagnosis and management of acute health conditions in Primary Care. Corequisite: NGR 6601C.
NGR 6602C Advanced Family Health Nursing II (4). Continuing development of evidence-based knowledge and skills fundamental to the family nurse practitioner role in the care of clients and families experiencing chronic and multisystem illnesses. Prerequisites: NGR 6601C, NGR 6601L. Corequisite: NGR 6602L.

NGR 6602L Advanced Family Health Nursing Practice II (4). Clinical implementation of evidence-based knowledge and skills in the diagnosis and management of chronic and/or multi-system health conditions of clients and families in Primary Care. Corequisite: NGR 6602.
NGR 6619L Role Synthesis in Advanced Family Health Nursing Practice (4). Capstone course synthesizing role functions of the Family Advanced Practice Nurse with emphasis on professional practice issues and transition into the practice role. Prerequisites: NGR 6601C, NGR 6601L, NGR 6602C, NGR 6602L.

NGR 6700L* Role Synthesis in Advanced AdultGerontology Nursing Practice (4). Capstone course synthesizing role functions of the Adult Advanced Practice Nurse with emphasis on professional practice issues and
transition into the practice role. Prerequisites: NGR 6201C, NGR 6201L, NGR 6202C, NGR 6202L.

NGR 6708C Classroom Teaching Strategies for Nursing (3). Experience/seminar in classroom teaching for prospective nurse educators. Focuses on strategies for effective course planning, delivery, and evaluation in the classroom with diverse students. Prerequisites: NGR 6713, ADE 5386, ADE 6360.
NGR 6710* Role Synthesis in Nursing Education (4). Application of teaching/learning theories to nursing and selected teaching/learning strategies. Demonstration of various teaching strategies. Teaching practicum. Prerequisites: NGR 6713 and NGR 6202L, or NGR 6504L, or NGR 6302L or NGR 6602L.
NGR 6712C* Advanced Nursing Administration III (4). Intensive practicum applying leadership, decision-making, management, and administration theories and concepts under the guidance of a nurse executive preceptor and supervising faculty. Prerequisites: NGR 6726C, HSA 6176, PHC 6443, NGR 5723C, NGR 6724C.
NGR 6713 Curriculum Development in Nursing (3). Curriculum theory and its application in nursing education. Curriculum construction, implementation, and evaluation are discussed from theoretical, philosophical, historical, and current perspectives. Prerequisites: Graduate standing and departmental permission, NGR 5110.
NGR 6714C Clinical Teaching Strategies for Nursing (3). Experience seminar in clinical teaching. Application of research-based literature and best practices in the development/implementation/evaluation of clinical education for nursing students. Prerequisites: NGR 6713, ADE 5386.

NGR 6715 Instructional Technology in Nursing and Health Sciences (3). Provides advanced technological knowledge, skills, and opportunity to develop strategies using technology to improve and enhance student learning in variety of settings. Prerequisites: NGR 6713, ADE 5386.

NGR 6718 Testing and Evaluation in Nursing Education (3). Development of competency in concepts and measures of evaluation in nursing education. Prerequisite: Admission to the Certificate in Nursing Education.

NGR 6724C Advanced Nursing Administration II (4). Discusses financial issues surrounding nursing and the development and refinement of budgeting skills. Included are the nurse as entrepreneur, marketing, budgets and computers in financial management. Prerequisite: NGR 5723C (Adv. Nsg. Adm. I). Corequisite: HSA 6176.
NGR 6725 Issues and Strategies of Nursing Administration (3). Analysis of issues, principles, and concepts of nursing administration. Includes synthesis of behavioral and organizational theories with institutional goals in formulation of administrative strategies. Prerequisites: Graduate standing and departmental permission.
NGR 6726C Nursing Management and Continuous Quality Improvement (3). Role of nurse managers in developing and implementing continuous qualityimprovement programs; implications of such programs on health care delivery. Includes role of middle management in personnel development and promoting nursing research
in the clinical arena. Corequisites: NGR 6202L, or NGR 6504L, or NGR 6302L.

NGR 6743 Advanced Practice Nursing Clinical Education Seminar (1). This course provides the Advanced Practice Nursing (APN) student with the necessary foundational knowledge and skills known contribute to the successful transition of APN students from the classroom to the community-based clinical practicum environment. Prerequisites: Acceptance in one of the advanced practice nursing programs (AGNP, FNP, PNP, PMHNP) and successful completion of all preclinical core courses.
NGR 6748 Clinical Decision Making in Advanced Family Nursing Practice (3). Critical analysis of the clinical decision making process in advanced family nursing practice. Synthesis of learning from previous clinical courses. Corequisite: NGR 6619L.
NGR 6800 Advanced Nursing Research Methods I: Design and Sampling (3). The first course in a 2-course sequence on the design and conduct of nursing research focuses on the conceptual and empirical basis, design, sampling, and ethical conduct of nursing research. Prerequisite: Departmental Permission.
NGR 6801 Advanced Nursing Research Methods II: Measurement and Dissemination (3). The second course in a 2-course sequence on the design and conduct of nursing research focuses on measurement in nursing research, data management and analysis, and dissemination of findings. Prerequisite: NGR 6800.

NGR 6812 Master's Research (3). Refinement of research proposals focusing on methodology and pilot study. Hands-on experience on computerized data analysis. Prerequisites: HSC 6910 or NGR 5810.
NGR 6815 Qualitative Methods (3). Critical issues, theoretical and practical applications for conducting qualitative research explored as they relate to health, social service and public administration environments. Prerequisites: PHC 6706 or NGR 5810. Corequisite: NGR 6123.

NGR 6850 Empirical Evidence for Clinical Research and Practice I (3). This course is focused on basic empirical evaluation procedures -- categorical analysis, comparison of means, correlations -- for clinical research and evidence-based practice.
NGR 6851 Empirical Evidence for Clinical Research and Practice II (3). This course is focused on advanced empirical evaluation procedures -- linear regression, structural equation modeling overview, power analysis -for clinical research and evidence-based practice. Prerequisites: NGR 6850 or equivalent.

NGR 6857 Empirical Evidence for Clinical Research and Practice III (3). This course is focused on complex empirical evaluation procedures -- MANOVA, logistic regression, missed methods, power analysis -- for clinical research and evidence-based practice. Prerequisites: NGR 6851 or equivalent.

NGR 6910C Research Project (3). Focus is on the development of competencies in scientific inquiry. Competencies are achieved through participation in ongoing research projects and a written report of the
experience. Prerequisites: PHC 6091 or NGR 5810, NGR 5110.

NGR 6917 Grantsmanship I (3). The first course in a 3course series on development and funding of programs of research focuses on successful research programs, planning a research trajectory, and obtaining predoctoral funding. Prerequisite: Departmental permission.

NGR 6918 Grantsmanship II (3). The second course in a 3-course series on development and funding of programs of research focuses on refinement of student trajectories, and grantsmanship for small research grant funding. Prerequisite: Departmental permission.

NGR 6939C NSG Management of At-Risk Populations (6). Intensive study of the advanced nursing management of at-risk populations, focusing on the elderly, persons with HIV/AIDS, survivors of domestic violence, substance abusers, and uninsured persons. Prerequisites: Departmental permit. Corequisites: NGR 6601L/NGR 6201L.

NGR 6941L Anesthesiology Nursing Simulation Practicum I (1). Application of knowledge and skills fundamental to basic anesthesiology nursing practice emphasizing preparation, assessment, positioning, fluid and airway management, and basic anesthesia care. Corequisite: NGR 6431L.
NGR 6970 Master's Thesis I (3). Refinement of research proposals focusing on methodology and pilot study. Hands-on experience on computerized data analysis. Completion of a research project for non-thesis students. Prerequisite: NGR 5810. Corequisites: NGR 6202L or NGR 6504L or NGR 6302L.

NGR 6971 Master's Thesis II (3). Implementation through completion of student's research thesis proposal. Prerequisite: NGR 6970.
NGR 7121 Scientific and Theoretical Foundations for Advanced Nursing Practice (3). This course examines the scientific underpinnings, theoretical models, and the ways of organizing nursing knowledge for advanced nursing practice.
NGR 7716 Fundamentals of Clinical Education (2). Fundamental principles of clinical education and teaching of adult learners in the healthcare professions. Emphasis is on in-service education, clinical precepting, and simulation-based instruction.

NGR 7733 Organizational Dynamics of Health Systems (3). This course will explore and analyze the role of the DNP as a systems leader and change agent for the creation, implementation, and evaluation of care delivery models within health care systems. Prerequisite: Admission to any track in the Advanced Practice Nursing Program.
NGR 7736 Academic Health Care and Political Systems: Function, Structure Leadership and Survival. (3). Analyzes purpose, structure, function, challenges, politics of academic, health care and political systems. Examines leadership roles, strategies for change and dealing with organizational politics. Departmental permission.

NGR 7769 Patient Safety and Quality Improvement in Healthcare (3). Principles and practices for patient safety
and quality improvement. Focus on technologies, evidence based practices and high-performance teams. Emphasize safety and QI strategies for DNP practice.
NGR 7830 Research in Health Care for Multicultural Diverse and Vulnerable Populations (3). The course focuses on research issues with multicultural, diverse, and vulnerable populations. Prerequisite: Departmental permission.
NGR 7853 Translational Research (3). Critique and application of research to support improved models of care delivery using evidence-based practice.
NGR 7854 Analytical Methods for Evidence-Based Clinical Practice (3). Analytical methods for evidencebased clinical practice. Focus on analysis of data to answer clinical research questions, including data mining, meta-analysis, and evaluation of practice changes. Prerequisites: Undergraduate statistics and research courses.

NGR 7871 Healthcare Informatics (3). This course is designed to prepare students to critically analyze, develop, implement, and evaluate healthcare information systems/technology within clinical and/or academic settings. Prerequisite: Admission to any track in the Advanced Practice Nursing Program.
NGR 7873 Accessing, Managing and Packaging Information (3). Focuses on finding, obtaining, evaluating, managing, and disseminating information from the internet and other sources, and packaging information to convey a message and maximize the impact using current technology. Prerequisite: Departmental permission.
NGR 7891 Healthcare Finance and Economics in Advanced Clinical Practice (3). This course provides foundational knowledge and understanding of health care economic trends, reimbursement issues, funding sources and related ethical and legal issues in Advanced Clinical Practice. Prerequisites: Enrollment in DNP degree plan or admission in other graduate program with permission.

NGR 7892L Health Policy Practicum (3). This course will examine the role of health policy at the federal, state, and local governmental levels and its impact on health care organizations and nursing delivery systems. Prerequisite: Admission to any track in the Advanced Practice Nursing Program.
NGR 7940C DNP Project I (4). First of a 3-course series providing the DNP resident with an immersive residency experience and mentored guidance undertaking the development, implementation and evaluation of a scholastic project.
NGR 7941C DNP Project II (4). Second of a 3-course series providing the DNP resident with an immersive residency experience and mentored guidance undertaking the development, implementation and evaluation of a scholastic project.

NGR 7942C DNP Project III (2). Third of a 3-course series providing the DNP resident with an immersive residency experience and mentored guidance undertaking the development, implementation and evaluation of a scholastic project.
NGR 7943 DNP Capstone Project Completion (1). This course will provide the DNP resident with continuous
enrollment until the DNP Capstone Project requirement is fulfilled. Prerequisites: NGR 7940C, NGR 7941C, NGR 7942C.
NGR 7980 Dissertation I (3-18). Provides an overview of the dissertation process within framework of completing the dissertation. Prerequisite: Admission to candidacy.
NGR 7982 Candidacy Examination (3-9). The candidacy examination includes the successful completion of 4 written papers and an oral defense. This course is designed to assist students to prepare their papers for the candidacy examination. Prerequisite: This course must be taken during the last semester of coursework and/or after completion of required coursework as presented in student's plan of study.
OTH 5002 Occupation and Health (3). Concepts of purposeful activities, occupation, and health will be explored in relation to self and the OT profession.
OTH 5011 Theories and Practice of Occupational Therapy (3). The theoretical foundations of occupational therapy and issues affecting professional practice. (SS)
OTH 5162 Adaptation of Human Occupation (2). Through development of an understanding of the components and nuances of human occupation, students will develop skills needed to promote optimal performance through simulation and adaptation of life tasks. (SS)
OTH 5162L Adaptation of Human Occupation Lab (1). Emphasis on analysis of activities and the integration of therapeutic activities and their physical, emotional, cognitive, and sociocultural implications for occupational performance. Prerequisite: Admission to graduate program. Corequisite: OTH 5162.
OTH 5195 Occupational Therapy Job Modification (3). Analysis and adaptation of client's workplace for the disabled. Prerequisites: Admission to program or permission of the instructor (occasional elective).
OTH 5202 Occupational Development: Infancy Throughout Adolescence (2). Occupation during infancy, childhood, and adolescence. Includes social, cultural, and environmental factors on occupational competence.

OTH 5202L Occupational Development: Infancy Through Adolescence Lab (1). Laboratory to accompany OTH 5202, Occupational Development Throughout the Life Span. Corequisite: OTH 5202.
OTH 5203 Occupational Development: Adulthood and Aging (3). Exploration of occupational development from young adulthood through the geriatric years.
OTH 5213 Pediatric Seminar: School Based Occupational Therapy (3). Course designed to provide students with necessary skills and specific knowledge to practice occupational therapy effectively in the educational setting. One week fieldwork. Interdisciplinary classes with physical therapy. Prerequisite: Permission of the instructor.
OTH 5214 Occupational Therapist Role in Family Centered Care (3). Course designed to orient O.T. students to family-centered care issues, such as legislation, cultural issues, family systems and empowerment strategies, in order to prepare them for clinical practice. Prerequisite: Permission of the instructor.

OTH 5280 Role of Environment in Occupational Therapy (3). Assessing the influence of environmental factors on OT practice in specific field settings. Prerequisite: Admission to program.
OTH 5301 Adaptation of Human Occupation and Environment for Psychosocial Practice I (2). Designed to prepare the student with the tools and knowledge needed for clinical reasoning in the selection of assessment and treatment of individuals with cognitive and neuropsychiatric disorders. Prerequisite: Admission to graduate program. Corequisite: OTH 5301L.
OTH 5301L Adaptation of Human Occupation and Environment for Psychosocial Practice I Lab (1). Administration of assessments and treatment planning for individuals with cognitive and neuropsychiatric disorders. Prerequisite: Admission to Graduate Program. Corequisite: OTH 5301.
OTH 5324 Clinical Intervention for Persons with Neuropsychiatric \& Cognitive Disorders (4). Develops clinical reasoning abilities in the selection of assessment and treatment strategies for individuals with cognitive and neuropsychiatric disorders.
OTH 5326 Psychiatric O.T.: Contemporary Theory and Practice (3). Examination of contemporary knowledge relevant to the theory and practice of O.T. in psychiatry. Prerequisites: Admission to Program or permission of the instructor.
OTH 5345 Occupational Therapy Program
Development in Psychiatry (3). Seminar discussion and practical experience in OT programming in psychiatry. Prerequisites: Admission to program or permission of the instructor.

OTH 5360 Global Social Justice Issues in Health Care (3). An examination of relevant social justice related theories for health professionals leading to an understanding of how therapists can empower persons with disabilities to navigate the health system.

OTH 5405C Analysis of Therapeutic Procedures in Physical Disabilities (3). A lecture/lab course designed to introduce advanced students to theory based assessment problem identification and treatment for the physically disabled adult.

OTH 5406 Sensory Problems and Therapeutic Implications (3). An in-depth study of sensory problems and the implications for therapy. A variety of patient populations and clinical applications will be discussed. Prerequisites: Graduate standing or permission of the instructor (occasional elective).
OTH 5407 Theoretical Perspectives of Pain (3). Theoretical perspectives of pain: etiology, assessment, management and effects. Prerequisites: Admission to the program or permission of the instructor (occasional elective).
OTH 5414 Analysis \& Adaptation in Human Motion (3). Presents anatomical, physiological, and biomechanical principles of human motion \& biomechanical frame of reference in adaption with biomechanical problems.
OTH 5414L Analysis \& Adaptation in Human Motion Lab (1). Laboratory to accompany OTH 5414, Analysis \& Adaptation of Human Motion in OT.

OTH 5427 Neurorehabilitation Approaches in OT (3). OT evaluation procedures and treatment planning for patients with CNS dysfunction. Corequisite: OTH 5427L.
OTH 5427L Neurorehabilitation Approaches in OT Lab (1). Laboratory to accompany OTH 5427, Neurohabilitation approaches in OT. Corequisite: OTH 5427.

OTH 5429 Biomechanics \& Rehabilitative Approaches in OT (3). Biomechanics and rehabilitative frames of reference as they focus on body parts and occupational performance.
OTH 5429L Biomechanics \& Rehabilitative Approaches in OT Lab (1). Lab to accompany OTH 5429 Biomechanics \& Rehabilitative Approaches.
OTH 5430 Adaptation of Human Occupation and Environment for Musculoskeletal Disorders I (2). First of a two-part course. Application of occupational therapy evaluation and interventions for individuals with musculoskeletal disorders to prepare clients for the engagement in occupation. Prerequisites: Admission to graduate program, OTH 5414, OTH 5414L. Corequisite: OTH 5430L.
OTH 5430L Adaptation of Human Occupation and Environment for Musculoskeletal Disorders I Lab (1). Experience in client evaluation and treatment planning. Includes a four week Level I fieldwork experiences. Prerequisites: Admission to graduate program, OTH 5414, OTH 5414L. Corequisite: OTH 5430.
OTH 5438 Adaptation of Human Occupation and Environment for Neuromotor Disorder II (3). Course covers evaluation and intervention principles of selected practice models as they relate to neuromotor disorders and their impact on the occupational performance of individuals. Prerequisite: Admission to graduate program. Corequisite: OTH 5438L.
OTH 5438L Adaptation of Human Occupation and Environment of Neuromotor Disorders II Lab (1). Students will apply occupational therapy evaluation and intervention principles to adults with neuromotor dysfunction. Prerequisite: Admission to graduate program. Corequisite: OTH 5438.
OTH 5440 Treatment Approaches for the Neurologically Impaired (3). In depth instruction in approaches to the neurologically impaired patient. Emphasis will be on dysfunction due to stroke or head injury. Prerequisites: OTH 4422 or equivalent.
OTH 5503 Current Occupational Therapy Practice in the Neonatal Intensive Care Unit (3). Theoretical framework and guidelines for assessment and intervention in a neonatal intensive care unit. Prerequisite: Majors only.
OTH 5505 Pediatric Health and Dysfunction in Occupational Therapy (3). Investigation of pediatric health and dysfunction issues encountered by Occupational Therapists. Corequisite: OTH 5505L.
OTH 5505L Pediatric Health and Dysfunction in OT Lab (1). Laboratory to accompany OTH 5505, Pediatric Health and Dysfunction in Occupational Therapy. Corequisite: OTH 5505.
OTH 5524 Adaptation of Human Occupation and Environment for Neuromotor Disorders I (3). Course
introduces developmental and meuromotor theories as they are applied to the pediatric populations and provide the student with frames of reference for pediatric occupational therapy practice. Prerequisite: Admission to graduate program. Corequisite: OTH 5524L.
OTH 5524L Adaptation of Human Occupation and Environment for Neuromotor Disorders I Lab (1). Students will apply theoretical knowledge to clinical problems in occupational therapy evaluation and treatment of children with neuromotor and/or sensorimotor disorders. Prerequisite: Admission to graduate program. Corequisite: OTH 5524.
OTH 5600 Study of Gerontology as Related to Occupational Therapy (3). An overview of current issues in the practice of occupational therapy for the aged.
OTH 5603 Role of Occupational Therapist in Family Centered Care of Elderly (3). Issues related to care giving of elder and caregivers including autonomy, cultural influences and family systems. Prerequisite: Permission of the instructor.
OTH 5610 Foundations in Gerontology for Health Professions (3). Implication for health professions of the biological, cross-cultural, physiological, psychological, social, and societal contexts of aging.
OTH 5613 Interdisciplinary Approach to Aging (3). Issues related to roles of specific health team members and application of interdisciplinary approach to care of the elderly. Prerequisites: Aging course or work experience with elderly, permission of the instructor.
OTH 5630 OT Assessment of the Elderly (3). Study of assessment techniques appropriate for OT evaluation of the elderly. Prerequisite: Admission to program.
OTH 5725 Infusing Occupation into Community Based Practice (3). The evaluation and promotion of community based programming to serve non-traditional client populations.
OTH 5751 Rehabilitation Seminar in Occupational Therapy (3). A seminar designed to gain an understanding of OT clinical practice areas in rehabilitation. Various clinicians will present their perspectives of organizational structure, populations served, evaluation and treatment approaches. Prerequisite: Permission of the instructor.
OTH 5760 Current Research in Occupational Therapy (3). Review of research methodology and statistical concepts in the clinical setting using examples of research in occupational therapy.
OTH 5764 Research in a Clinical Specialty (3). Participation in ongoing research of faculty members in clinical specialty area. Prerequisite: Permission of the instructor.
OTH 5765 Research in Clinical Practice (3). Students identify a research topic and questions based on observation of clinical problems during field visits.
OTH 5805 Service Learning in Health (3). Student's learning is centered on a community service experience which meets specific principles of service learning. Prerequisites: Admission to graduate study in OT. (Other graduate students or graduate certificate students in aging admitted by permission of the instructor.)

OTH 5843C Adaptation of Human Occupation and Environment for Psychosocial Practice II (3). This fieldwork course provides the student with the experience needed for occupational therapy assessment and treatment of individuals with cognitive and neuropsychiatric disorders. Prerequisites: OTH 5301 and OTH 5301L.

OTH 5845 Level II Fieldwork I (6-12). Three-month internship in an approved setting. Prerequisite: Completion of didactic coursework.

OTH 5846 Level II Fieldwork II (6-12). Three-month internship in an approved setting. Prerequisite: Completion of didactic coursework.
OTH 5849 Fieldwork Experience (1-20). Internship in a specialized treatment setting. Prerequisite: Completion of didactic coursework. OTH 5905 Independent Study (Variable Credit). (F,S,SS)
OTH 5853 Fieldwork Level I (3). Practicum fieldwork experience in an approved setting.
OTH 5921L Integrative Seminar I (2). This course is designed to introduce students to the integrative process, develop strategies for learning and academic success and integrate concepts related to foundations of occupational therapy. Prerequisite: Admission to graduate program.
OTH 5922L Integrative Seminar II (2). This course is designed to integrate concepts related to research, the pediatric population and occupational therapy. Prerequisite: OTH 5921L.
OTH 5934 Evaluation and Treatment of Hand Dysfunction (3). Seminar in current issues related to the assessment and treatment of common injuries of the hand (occasional elective).
OTH 5938 O.T. Theoretical Perspectives in Health Therapy (3). This seminar course is designed to examine the OT's role in the prevention of both physical and mental diseases. It will demonstrate and discuss how OT foundational underpinnings provide the tools therapists need to guide patients and clients toward lifestyle behaviors which can prevent or delay disease onset and foster functional adaptation. Prerequisite: Permission of the instructor.
OTH 6009 Current Issues and Theories of Occupational Therapy (3). Exploration of current issues and theories in occupational therapy leading to development of student's theoretical reference for practice. Prerequisite: Admission to the program.
OTH 6106 The Role of Occupational Therapy and Assistive Technology (3). This course provides the student with in-depth information about assessment for AT and recommendation of appropriate equipment.
OTH 6215 Advanced OT Intervention Strategies (3). Principles and characteristics of treatment regimens designed to enhance the study of treatment effectiveness. Emphasis on application of activity appropriate for student's clinical concentration. Prerequisite: Admission to program. (F)
OTH 6265 Measurement and Assessment in Occupational Therapy (3). Measurement concepts and practices used in occupational therapy evaluation.

Prerequisites: Admission to program or permission of the instructor.

OTH 6281 Cultural, Global, and Environmental Issues in Occupational Therapy (3). Exploration to the cultural, socioeconomic, and ethnic variables that impact occupational therapy interventions. Prerequisite: Admission to graduate program.
OTH 6431 Adaptation of Human Occupation and Environment for Musculoskeletal Disorders II (2). Using the biomechanical and rehabilitative practice models, students will design appropriate occupational therapy interventions for individuals with musculoskeletal and connective tissue disorders. Prerequisites: OTH 5414, OTH 5414L. Corequisite: OTH 6431L.
OTH 6431L Adaptation of Human Occupation and Environment for Musculoskeletal Disorders II Lab (1). Lab will provide students with the hands-on experience needed to evaluate and design occupational therapy intervention plans for individuals with musculoskeletal disorders. Prerequisite: Admission to graduate program. Corequisite: OTH 6431.
OTH 6507 Occupational Therapy for Occupationally Dysfunctional Children \& Adolescents (3). Exploration of factors leading to successful adaptation to occupational roles, are explored with particular emphasis on the relationship between these factors and Occupational Therapy theory. Prerequisite: Permission of the instructor.
OTH 6538 Advanced Methods in Pediatric Assessment (3). Advanced applications of theory and research in the area of pediatric occupational therapy assessment. Skills in neonatal, neurodevelopmental, occupational behavior, and computer-assisted methods.
OTH 6542 Role of the Occupational Therapist in the School System: A Consultation Model (3). Course introduces consultation as a viable service provision option to enable occupational therapists to create more effective living and learning environments on behalf of children. Prerequisite: Permission of the instructor.
OTH 6548 Advanced Methods in Pediatric Occupational Therapy (3). Advanced application of theory and research in occupational therapy. Includes neurodevelopmental treatment approaches, neonates through adolescents. Prerequisite: OTH 6538.
OTH 6706 Occupational Therapy Management (3). Study of administrative issues in OT in relation to licensing, certification, documentation, supervision, and professional roles.
OTH 6772 Evidence Based Practice and Critical Appraisal (3). An in-depth investigation of the tools and resources for systematically locating and reviewing research evidence.
OTH 6923L Integrative Seminar III (2). This course is designed to integrate concepts related issues common across all practice areas an emphasis on the audit population and occupational therapy. Prerequisites: OTH 5921 L and OTH 5922L.
OTH 6937 ADA Workplace Accommodations of Persons with Disabilities (3). Interdisciplinary course designed to bring together students of both rehabilitation and business/management disciplines to develop
strategies to implement the Title I-Workplace provision of the Americans with Disabilities Act (ADA).

OTH 6948 Continuing Clinical Competence for Occupational Therapists (3). Design, execution, and presentation of a major Occupational Therapy project.
OTH 6950L Integrative Seminar IV (2). This course is designed to serve as a capstone experience in the integrative process. Possibilities for practice will be explored and students will prepare for the role transition to a clinician. Prerequisites: OTH 5921L, OTH 5922L, and OTH 6923L.
OTH 6970 Master's Thesis (1-6). Supervised research on a research project submitted in partial fulfillment of Master's degree requirement. Prerequisite: Permission of major professor.

OTH 6972 Master's Project Development (3). Development and planning of Master's Project.

OTH 6973 Master's Project Implementation (3). Implementation and completion of the Master's Project. Prerequisite: OTH 6972.

PET 5716 Analysis and Observation of Teaching in Physical Education (3). This course analyzes the teaching-learning process in physical education. The emphasis is on systematic observation instruments and guidelines for systematic development of instructional skills. (F)
PET 5935 Special Topics in Athletic Training (1-3). This course presents current trends and professional issues in Athletic Training.
PET 6406L Physical Assessment, Measurement, and Evaluation Workshop (1-3). The workshop will provide the student with a working knowledge and basic theory in physical assessment, measurement, and evaluation laboratory teaching and develop skills associated with each. Prerequisite: Permission of instructor.
PHT 5017 Technology and Communication Management for Physical Therapists (3). This course integrates technology, research and education for physical therapists. The course consists of practical projects using the Internet, software applications, and web-based applications.
PHT 5027 Clinical Education Seminar (1). This course is designed to address prerequisite clinical education issues that historically contribute to the overall success in the clinical internships. Topics range from use of the evaluation tool to taxonomies of learning. Prerequisites: Admission to Professional PT Curriculum or permission of department.
PHT 5045 Applied Educational Theory in Physical Therapy (3). The application of teaching and learning principles to Physical Therapy patient education, student clinical education, and continuing education. A variety of teaching methodologies will be practiced by participants. Prerequisites: Admission to PT Professional Program or permission of department.
PHT 5070 Principles of Diagnostic Imaging (1). This course covers the basic physics of medical imaging and provides an overview of various diagnostic imaging tools such as X-rays, Scans, MRI, Ultrasound with emphasis on
the musculoskeletal system. Corequisites: PHT 5371 and PHT 5174.
PHT 5174 Analysis of Movement and Function (3). The course is designed to give physical and/or occupational therapy students the cognitive skills necessary to analyze human movement in the context of physical therapy practice. Prerequisites: Admission to PT Professional Program or permission of department. Corequisite: PHT 5174L.
PHT 5174L Analysis of Movement and Function Lab (1). The course is designed to give physical and occupational therapy students the psychomotor skills necessary to analyze human movement in the context of PT practice. Prerequisites: Admission to PT Professional Program or permission of department. Corequisite: PHT 5174.

PHT 5180 Musculoskeletal Diagnosis and Management I (3). This course is designed to prepare the student in the area of physical therapy related musculoskeletal diagnosis and treatment with focus on upper extremities. Prerequisites: Admission to PT Professional Program or permission of department. Corequisite: PHT 5180L.
PHT 5180L Musculoskeletal Diagnosis and Management I Lab (1). This is the laboratory course designed to prepare students for evaluating and treating physical therapy related musculoskeletal diagnosis. Prerequisites: Admission to PT Professional Program or permission of department. Corequisite: PHT 5180.
PHT 5181 Musculoskeletal Diagnosis and Management II (3). This is designed to prepare the student in the area of Physical Therapy related musculoskeletal diagnosis treatment with focus on lower extremities. Prerequisites: PHT 5180, PHT 5180L, PHT 6341, PHT 6341L. Corequisite: PHT 5181L.
PHT 5181L Musculoskeletal Diagnosis and Management II Lab (1). This is a laboratory course designed to prepare students for evaluating and treating physical therapy related musculoskeletal diagnosis. Prerequisites: PHT 5180, PHT 5180L, PHT 6341, PHT 6341L. Corequisite: PHT 5181.
PHT 5182 Musculoskeletal Diagnosis and Management III (3). This course is designed to prepare the student in the area of Physical Therapy related musculoskeletal diagnosis and treatment with focus on the spine. Prerequisites: PHT 5181 and PHT 5181L. Corequisite: PHT 5182L.
PHT 5182L Musculoskeletal Diagnosis and Management III Lab (1). This is a laboratory course designed to prepare students for evaluating and treating physical therapy related musculoskeletal diagnosis specific to the spine. Prerequisites: PHT 5181 and PHT 5181L. Corequisite: PHT 5182.
PHT 5205 Clinical Skills (3). Utilizing a seminar format, this course will provide the student with the theory and practice of necessary and basic physical therapy clinical skills. Prerequisites: Admission to the PT Program or permission of instructor. Corequisites: PHT 5174 and PHT 5174L.

PHT 5205L Clinical Skills Lab (1). Utilizing a laboratory format, this course will provide the student with the theory
and practice of necessary and basic physical therapy clinical skills. Prerequisites: Admission to the PT Program or permission of instructor. Corequisite: PHT 5205, Clinical Skills.
PHT 5218 Physical Agent Modalities for Non-Physical Therapy Majors (1). The course is an introduction to physical agent modalities in rehabilitation for students and practitioners of occupational therapy, athletic training, massage therapy or other health care professions.
PHT 5244C Principles of Therapeutic Exercise (3). This course will discuss principles of therapeutic exercise as related to a comprehensive physical therapy plan of care for individuals across the lifespan. Prerequisite: Admission into the Physical Therapy Program.
PHT 5254 Disability Awareness Through Aquatic Sports (3). Designed for disabled and non-disabled persons to learn lifelong sports in an interactive format cumulating in weekend sailing and camping trip. Participants will learn the difficulties and methods to facilitate sports for disabled persons.
PHT 5303 Principles of Pathophysiology in Physical Therapy (3). This pathology course is designed for physical therapy students. It deals with the pathophysiologic processes that affect specific tissues and organ systems of the body. Prerequisite: PHT 5174. Corequisites: PHT 5205, PHT 5181.
PHT 5323C Pediatric Physical Therapy (3). Entry-level, skills and competencies in pediatrics, including motor development; diagnosis, examination and intervention; and family, health education, and service delivery issues. Prerequisites: Admission into the graduate program in PT or permission on instructor.
PHT 5328 Advanced Pediatric Physical Therapy Assessment (3). Analysis of assessment tools in relation to treatment. Competence in administration of appropriate tools will be required at end of course. Prerequisites: Either STA 5126 or STA 6166 and permission of the instructor.
PHT 5335 Physical Therapy in Obstetrics/Gynecology (3). This course will explore the role of the therapist in the field of obstetrics and provide an introduction to gynecological issues. Emphasis will be on evaluation and treatment of the OB client. Prerequisite: Permission of the instructor.
PHT 5336 Theories in Cardiopulmonary Rehabilitation (3). This course is designed to provide students with applied theory in the clinical and physical therapy management of medical and surgical cardiac and respiratory conditions. Prerequisite: Permission of the instructor.

PHT 5373 Advanced Therapy Assessment of the Elderly (3). The study of assessment tools used in geriatric rehabilitation in relation to appropriate intervention strategies and research findings. Prerequisites: Appropriate adult motor development course/permission of major advisor.

PHT 5375 Foundations in Gerontology for Health Professions (3). Implications for health professions of the biological, cross-cultural, physiological, psychological, social, and societal contexts of aging.

PHT 5504 Service Learning in Physical Therapy (1-3). The course includes a brief introduction to community service in Physical Therapy, an opportunity to assist professionals to deliver community-based physical therapy services, and the preparation of case studies based on the students' experiences. Prerequisites: Advanced standing in the undergraduate PT program or admission to Graduate PT program.
PHT 5505C Physical Therapy Constructs in Health and Wellness (3). Covers elements of Physical Therapy related prevention, screening, health and wellness for individuals, schools, and communities.
PHT 5515 Therapeutic Services for Physically Impaired and Mentally Retarded Students (3). Lecture, lab, and group work to develop skills of education and therapy professionals for implementation with disabled children in schools. Prerequisite: Permission of major advisor or instructor.

PHT 5523 Dimensions of Professional Practice Seminar I (3). This is the first in a sequence of four (4) courses designed to prepare the student in the areas of physical therapy related research, administration, education and professional issues. Prerequisite: Admission to Professional PT Curriculum.
PHT 5524 Dimensions of Professional Practice Seminar II (3). This is the second in a sequence of four (4) courses designed to prepare the student in the areas of physical therapy related research, administration, education and professional issues. Prerequisite: PHT 5523.

PHT 5525 Dimensions of Professional Practice Seminar III (3). This is the third in a sequence of four (4) courses designed to prepare the student in the areas of physical therapy related research, administration, education and professional issues. Prerequisite: PHT 5524.

PHT 5639 Physical Therapy Administrative Techniques and Methods (3). Provides an in-depth view of the health care industry and its relationship to the P.T. profession. Management techniques in all areas will be presented with emphasis on planning and financial management.
PHT 5805 Clinical Internship I (4). This is the first in a sequence of 4 supervised full-time clinical internships designed to offer the student experiences in patient evaluation and care with emphasis on musculoskeletal dysfunction. Prerequisite: PHT 5960.
PHT 5815 Clerkship in Physical Therapy (2). Two-week full-time clinical experience combined with independent study of question or issue in clinical Physical Therapy. Prerequisite: Permission of major advisor.
PHT 5823 Internship (3). Supervised, full-time clinical experience, designed to offer the student experience in patient evaluation and care, particularly in the areas of rehabilitation and neurorehabilitation.
PHT 5960 Comprehensive Exam I (1). This is the first of two comprehensive examinations that cover all previously completed coursework and is required for continued progression in the curriculum. Prerequisites: All Fall and Spring Semester Courses-Year I.

PHT 6009 Differential Diagnosis in Physical Therapy (3). This course is designed to enable the physical therapy student to engage in the diagnostic process to establish differential diagnoses for patients across the life span. Prerequisite: PHT 4300.

PHT 6125 Clinical Biomechanics (3). An introduction to temporal parameters, kinetics and kinematics of normal and pathological movement. Prerequisites: PHT 5182, PHT 5182L, PHT 6165C.
PHT 6127 Advanced Pathologic Movement Analysis (3). Explores the abnormal gait and movement patterns as they relate to pathologic states involving either the musculoskeletal or the neurologic system, or both. Prerequisite: Permission of major advisor.
PHT 6145 Motor Development: Adult Through Geriatrics (3). A study of motor development of the adult through old age. Application of developmental principles to physical therapy practice and research. Prerequisite: Permission of major advisor.
PHT 6163 Neurological Diagnosis and Management I (3). This is the first in a sequence of three (3) lecture courses designed to prepare the student in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 5960 or permission of instructor. Corequisite: PHT 6163L.
PHT 6163L Neurological Diagnosis and Management I Lab (1). This is the first in a sequence of three (3) laboratory courses designed to prepare the student in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 5960 or permission of instructor. Corequisite: PHT 6163.
PHT 6164 Neurological Diagnosis and Management II (3). This is the second in a sequence of three (3) lecture courses designed to prepare the student in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 6163, PHT 6163L. Corequisite: PHT 6164L.

PHT 6164L Neurological Diagnosis and Management II Lab (1). This is the second in a sequence of three (3) laboratory courses designed to prepare the student for psychomotor competencies in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 6163, PHT 6163L. Corequisite: PHT 6164.

PHT 6165C Applied Clinical Neuroanatomy (3). Examines correlation of sites of pathology in the central and peripheral nervous systems with actual patients; their signs and symptoms, their regimen of treatment, and prognosis for rehabilitation. Prerequisites: Neuroanatomy and permission of major advisor.

PHT 6169 Neurological Diagnosis and Management III (3). This is the third in a sequence of three (3) lecture courses designed to prepare the student in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 6164, PHT 6164L. Corequisite: PHT 6169L.

PHT 6169L Neurological Diagnosis and Management III Lab (1). This is the third in a sequence of three (3) laboratory courses designed to prepare the student for psychomotor competencies in the areas of physical therapy related neurological diagnosis and treatment.

Prerequisites: PHT 6164, PHT 6164L. Corequisite: PHT 6169.

PHT 6237 Environments/Energy Expenditures of the Disabled (3). Analysis of the home and work settings in relation to various forms of physical disabilities. Energy expenditures pertaining to environmental factors as they pertain to physical therapy evaluation and treatment. Prerequisite: Permission of major advisor.
PHT 6239 Developmental Disabilities in Adulthood (3). A study of adults with developmental disabilities; including aspects of societal perspectives, political and public policy regarding the handicapped, and current theories in treatment of the handicapped adult population. Prerequisite: Permission of major advisor and instructor.
PHT 6325 Advanced Clinical Pediatric Physical Therapy (3). The study of theory, treatment and current clinical research in pediatric physical therapy practice. Prerequisites: Permission of major advisor and PHT 5320.
PHT 6326 Physical Therapy for At-Risk Infants (3). This course will explore current PT practice and research for atrisk infants in NICU, NCCU, and follow-up programs. Includes aspects of physiological and behavioral monitoring indicators for physical therapy intervention. Prerequisite: PT graduate students.
PHT 6341 Diagnosis and Management of Disease (3). Covers Physical Therapy implications of disease processes, conditions and systemic disorders throughout the lifespan. Prerequisite: All Fall Semester Courses-Year I. Corequisite: PHT 6341L.

PHT 6341L Diagnosis and Management of Disease Lab (1). The practicum portion of PHT 6341 that covers physical therapy intervention in disease processes, conditions, and systemic disorders throughout the life span. Prerequisite: All Fall Semester Courses-Year I. Corequisite: PHT 6341.
PHT 6353 Principles of Diagnostics and Pharmacology in Physical Therapy (3). Topics include interpretation of medical laboratory tests results, diagnostics imaging, and pharmacology with a focus on effects, side effects, and toxicity in relation to PT interventions. Prerequisites: PHT 5182, PHT 6381, PHT 6169, PHT 6341.
PHT 6365 Theories in Sports Physical Therapy (3). Study and exploration of relevant issues in sports physical therapy. Focus on problem identification, investigation, analysis, and problem solving approaches. Prerequisite: Permission of major advisor.
PHT 6381 Diagnosis and Management of Cardiopulmonary Systems (3). This lecture course covers the elements of patient and client management provided by physical therapists with anticipated goals of preferred practice patterns in cardiopulmonary care. Prerequisites: PHT 5205 and PHT 5205L. Corequisite: PHT 6381L.
PHT 6381L Diagnosis and Management of Cardiopulmonary Systems Lab (1). This laboratory course covers the elements of patient and client management provided by physical therapists with anticipated goals of preferred practice patterns in cardiopulmonary care. Prerequisites: PHT 5205 and PHT 5205L. Corequisite: PHT 6381.

PHT 6403 Client-Centered Rehabilitation (3). Utilizes small and large group discussion, multimedia presentations, readings and projects to explore issues of communication, cultural diversity and client-centered rehabilitation.

PHT 6526 Dimensions of Professional Practice Seminar IV (3). This is the fourth in a sequence of four (4) courses designed to prepare the student in the areas of physical therapy related research, administration, education and professional issues. Prerequisite: PHT 5525.

PHT 6547 Case Management in Physical Therapy (1). Comprehensive physical therapy patient care management and practice review cumulating in a simulated physical therapy licensure examination. Prerequisite: PHT 6705 (Long Term Rehabilitation). Corequisite: PHT 6970 (DPT Project).
PHT 6552 Private Practice Seminar for Physical Therapists (3). This course analyzes various practice models and includes presentations from private practitioners and community business experts.
PHT 6625 Advanced Physical Therapy Clinical Research Methodologies and Design (3). Exploration of scientific method and theory as applied to clinical and experimental research in physical therapy; includes method of inquiry, techniques of data collection, organization, and interpretation. Prerequisites: STA 5126 or STA 6166 and permission of major advisor.
PHT 6705 Long Term Rehabilitation for Persons with Chronic Disease and Disability (3). Applying long term rehabilitation for persons with chronic disease and disability with focus on the continuum of fitness, health and rehabilitation throughout the life span.
PHT 6706 Information and Communication Technology in Rehabilitation (3). An introductory course that focuses on computer rehabilitation technology for clinical practices, research and education, and devices that assist the quality of patient activities. Prerequisite: Student should have a basic understanding of personal computers.
PHT 6714 Spinal Dysfunction I (Lower Back) (3). Indepth exploration of the evaluation and treatment of various lumbar spine dysfunctions. Prerequisite: Permission of major advisor.
PHT 6715 Spinal Dysfunction II (Upper Back) (3). Indepth exploration of the evaluation and treatment of various cervical spine dysfunctions. Prerequisite: Permission of major advisor.
PHT 6716 Theories in Orthopedic Physical Therapy (3). Study and exploration of relevant issues in orthopedic physical therapy. Focus on problem identification, investigation, analysis, and problem solving approaches. Prerequisite: Permission of major advisor.
PHT 6718 Theories in Neurorehabilitation (3). Examines theoretical bases of evaluation and treatment of the neuro-patient; includes exploration of the relationship of motor control and motor learning to current neurologic rehabilitation. Prerequisite: Permission of major advisor.

PHT 6725 Extremity Evaluation and Rehabilitation (3). In-depth exploration, critical analysis, and investigation of
joint and extremity dysfunctions. Prerequisite: Permission of major advisor.
PHT 6746C Complementary Therapies for Rehabilitation Professionals (3). Complementary PT will describe and explain how various complementary therapies will be introduced and incorporated into rehabilitation programs. Practical application and safety will be emphasized. Prerequisites: PHT 5205, PHT 5205L, PHT 5505.
PHT 6817 Clinical Internship II (5). This is the second in a sequence of 4 supervised full-time clinical internships designed to offer the student experience in patient evaluation and care with general medical and surgical clients. Prerequisites: PHT 5960, PHT 6164, PHT 6164L.
PHT 6824 Internship I (3). Supervised full-time clinical experience with emphasis on: evidence-based practice; clinical decision making; administration; educational activities; outcomes assessment; differential diagnosis; and consultation. Prerequisite: PHT 6009.
PHT 6825 Internship II (3). Continuation of PHT 6824, Internship I. Prerequisite: PHT 6824.
PHT 6826 Internship III (3). Continuation of PHT 6825, Internship II. Prerequisite: PHT 6825.
PHT 6827 Clinical Internship III (5). This is the third in a sequence of 4 supervised full-time clinical internships designed to offer the student experience in patient evaluation and care with the neurologically involved client. Prerequisite: PHT 6961.
PHT 6828 Clinical Internship IV (5). This is the final in a sequence of 4 supervised full-time clinical internships designed to offer the student experience in patient care in a specialty setting, including but not limited to pediatrics, SCIP, burns, etc. Prerequisite: PHT 6961.
PHT 6845 Resources and Skills for the PT/PI Student (3). This course focuses on the interdisciplinary team that works for the optimum educational benefit of the student. Therapists and teachers will learn and work collaboratively within this course. Corequisites: Graduate OT, PT, or Education students.

PHT 6905 Independent Study (1-3). Individually determined, research-oriented, in-depth study of a physical therapy issue. An independent study contract must be approved by the instructor. Prerequisites: Permission of major advisor and instructor. Must be fully admitted to the graduate program.
PHT 6961 Comprehensive Exam II (1). The second comprehensive examination covering all previously completed coursework and is required for continued progression in the curriculum. Prerequisites: All Fall and Spring Semester Courses-Year II.

PHT 6970 DPT Project (3). An individually supervised project for physical therapy students.
PHT 6971 Master's Thesis (3). Supervised research which demonstrates the application of analytical, conceptual and technical skills to a specific physical therapy problem. Prerequisite: Permission of major advisor.
SPA 5009C Normal Communication Development and Disorders (3). Advanced study of the processes of typical
speech and language acquisition as the basis for understanding associated developmental speech and language disorders. Prerequisite: Admission to the Graduate Certificate in Communication Sciences and Disorders.

SPA 5012C Introduction to Communication Sciences and Disorders (3). Introduction to the processes of communication sciences and principles of identification, assessment, and treatment of speech and language disorders. Prerequisite: Admission to the Graduate Certificate in Communication Sciences and Disorders.
SPA 5035C Disorders of Hearing and Audiological Sciences (3). Principles and procedures involved in the identification and assessment of problems associated with the auditory mechanism, including hearing loss prevention and conservation of auditory functioning. Prerequisite: Admission to the Graduate Certificate in Communication Sciences and Disorders.

SPA 5051C Clinical Observation, Management, and Procedures in Communication Disorders (3). Study of the principles involved in therapeutic intervention of communication disorders in different clinical settings. Observation of assessment and treatment sessions is a requirement of the course. Prerequisite: Admission to the Graduate Certificate in Communication Sciences and Disorders.

SPA 5102C Advanced Human Anatomy and Physiology of Mechanisms of Communication (3). Advanced study of anatomy, physiology, and neurology mechanisms of speech and hearing. Includes system study of speech production and perception: respiration, phonation, articulation, audition. Prerequisite: Admission to the Graduate Certificate in Communication Sciences and Disorders. Corequisite: SPA 5102L.
SPA 5102L Laboratory in Advanced Human Anatomy and Physiology of Mechanisms of Communication (1). Laboratory extension of SPA 5102C Advance Human Anatomy and Physiology of Mechanisms of Communication to accompany this course. Prerequisite: Admission to the Graduate Certificate in Communication Sciences and Disorders. Corequisite: SPA 5102C.

SPA 5107 Neurological Bases of Communication (3). The anatomical and physiological aspects of the central and peripheral nervous system as they pertain to communication acquisition and disorders. Prerequisite: Permission of the instructor.
SPA 5113C Advanced Applied Phonetics (3). Advanced study of principles of phonetics and phonetic transcription via International Phonetic Alphabet. Physiological descriptions and classification of speech sounds. Prerequisite: Admission to the Graduate Certificate in Communication Sciences and Disorders.
SPA 5150C Acoustics of the Sciences of Speech and Hearing (3). Advanced study of the communication sciences associated with the process of speech and hearing, including speech perception and production, speech and hearing physiology, and acoustic phonetics. Prerequisite: Admission to the Graduate Certificate in Communication Sciences and Disorders.

SPA 5204 Phonological Disorders (3). An examination of normal and deviant articulatory acquisition and
behavior. Presentation of major theoretical orientations and the therapeutic principles based upon them. Prerequisite: Permission of the instructor.
SPA 5216 Vocal and Velopharyngeal Disorders (3). Study of etiology, symptoms, and treatment strategies for a variety of vocal and craniofacial disorders. Prerequisite: Permission of the instructor.

SPA 5225 Fluency Disorders (3). Study of etiology, symptoms, and treatment strategies for fluency disorders.
SPA 5402 Language Learning in Preschool Children (3). Presentation of the linguistic development in children ages 0-5 years as well as the delays and disorders associated with language. Prerequisite: Permission of the instructor.
SPA 5403 Language Learning in School-Aged Children (3). Overview and evaluation of the language skills of preschool and school aged children including metalinguistic and discourse development. Prerequisite: SPA 5402 and permission of the instructor.
SPA 5500 Basic Clinical Practicum (3). Supervised practice with representative speech and language problems in the school settings. Prerequisites: SPA 5204, SPA 5402, SPA 5403, SPA 5553.
SPA 5502 Intermediate Clinical Practicum (3). Supervised practice with communication problems in outpatient settings, private practices, rehabilitation. Prerequisite: SPA 5500.
SPA 5553 Differential Diagnosis of Communicative Disorders (3). The administration, evaluation and reporting of diagnostic tests and procedures used in assessment of speech and language disorders. Prerequisite: Permission of the instructor.
SPA 5805 Research Methodology in Communication Disorders (3). Research design, statistical analysis (descriptive and inferential) and dissemination of experimental data, with an emphasis on clinical research. Legal/ethical and cultural consideration in research design and implementation will also be addressed. Prerequisite: Permission of the instructor.

SPA 5935L Pre-Clinic Seminar (1). This course is designed to address the prerequisite practicum requirements to prepare students for clinical internship rotations. Prerequisite: Acceptance into the speech pathology master's program (or by permission from the instructor).
SPA 6005 Assessment \& Treatment of the Bilingual Child with Communication Disorders (3). Assessment and treatment of normal and atypical language development across cultures. Prerequisite: Permission of the instructor.
SPA 6232 Neuromotor Communication Disorders (3). Study of speech and communicative problems of neuromotorically-impaired children and adults with apraxia of speech, the dysarthrias, and other related motor speech disorders. SPA 5107 and Permission of the instructor.

SPA 6254 Adult Communication Disorders and Cognition (3). Relationship between cognition and language in typical aging and definition, appraisal, and treatment of communication disorders in dementia, traumatic brain injury, and right hemisphere brain-damage.

SPA 6322 Aural Habilitation and Rehabilitation (3). Provide information and strategies for aural habilitation intervention with hearing impaired children. Includes techniques of speech reading, auditory training and language for the hearing impaired. Prerequisite: Permission of the instructor.
SPA 6406 Dual Language Acquisition and Disorders (3). Development of normal and atypical language in speakers of more than one language. Prerequisite: Permission of the instructor.

SPA 6410 Aphasia and Related Disorders (3). Consideration of the neurological and psychological aspects of aphasia and related approaches are discussed and evaluated. Prerequisites: SPA 5107 and Permission of the instructor.

SPA 6479 Communications Disorders and Aging in a Bilingual Society (3). Survey of types and characteristics of bilingualism and normal and atypical speech and language changes associated with aging. Prerequisite: Permission of the instructor.
SPA 6505 Advanced Clinical Practicum (3). Supervised practice with severe communication problems in area hospitals and long term care facilities. Prerequisite: SPA 5502.

SPA 6559 Augmentative and Alternative Communication (3). Introduction to augmentative and alternative communication practices relative to individuals with severe speech, language, and/or communication deficits requiring AAC strategies or devices. Prerequisite: SPA 5107.
SPA 6565 Dysphagia (3). Information and training in the evaluation and treatment of swallowing disorders. Prerequisite: Permission of the instructor.
SPA 6930 Master's Project (1-6). This course provides the student with an opportunity to explore in-depth a specific topic of interest in speech pathology. Prerequisite: Permission of the instructor.
SPA 6938 Topics in Speech Pathology (1-3). This course is intended to give students information about topical issues in the field of Speech Language Pathology. Prerequisite: Permission of instructor.
SPA 6971 Master's Thesis (1-6). Supervised research on an original research project submitted in partial fulfillment of the Master's degree requirement. Prerequisite: Permission of the instructor.
*All students must provide evidence of personal professional liability insurance prior to registering for any clinical nursing courses.

# Nicole Wertheim College of Nursing and Health Sciences 

Dean
Associate Dean, Academic Affairs
Associate Dean, Administrative Affairs
Ora Strickland
Tami Thomas Assistant Dean, Student Services

Marguerite Cooke-William

## Chairs and Directors

Athletic Training
Jennifer Doherty-Restrepo
Communication Sciences and

Disorders
Bachelor of Health Services Administration
Nursing, Anesthesiology Nursing
Nursing, Graduate (DNP)
Nursing, Graduate (MSN)
Nursing, Graduate (PhD)
Nursing, Undergraduate
Occupational Therapy
Physical Therapy

Monica Hough
Salvatore Barbera Jeffrey Groom Sheldon Fields
Yhovana Gordon Amy Paul-Ward Sharon Simon Lynne Richard Mark Rossi

## Faculty

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Goldin, Deana, DNP, RN, ARNP-BC (University of Miami), Clinical Assistant Professor, Nursing
Gonzalez, Juan, Ph.D., CRNA, (Barry University), Clinical Assistant Professor and Vice-Chair, Anesthesiology Nursing
Gonzalez, Vicente, DNP, CRNA (Barry University), Clinical Assistant Professor, Anesthesiology Nursing
Gordon, Yhovana, Ed.D., RN, ARNP-BC (Nova Southeastern University), Clinical Assistant Professor and Director of the Advanced Practice Nursing Programs, Nursing
Groom, Jeffery, Ph.D., CRNA (Nova Southeastern University), Clinical Associate Professor and Chair, Anesthesiology Nursing
Hannan, Jean, Ph.D., RN (Florida International University), Assistant Professor, Nursing
Henao, Henry, M.S.N., RN, ARNP, FNP-BC (Barry University), Clinical Assistant Professor, Nursing and Simulation Center Coordinator, Nicole Wertheim College of Nursing and Health Sciences
Hernandez, Laura, M.S.N., RN-BC, ARNP (Barry University), Courtesy Clinical Instructor, Nursing
Hough, Monica, Ph.D., CCC-SLP (Kent State University), Professor and Chairperson, Communication Sciences and Disorders
Huerta, Hector, O.T.D., MS, OTR/L (Chatham University), Clinical Assistant Professor, Occupational Therapy
Jones, Sandra, Ph.D., RN, ACRN, ARNP, FAAN (Barry University), Associate Professor, Nursing
Kameka, Michelle, Ed.D., MPH (Argosy University), Assistant Professor, Bachelor of Health Services Administration
Little, Daniel, Ph.D., RN, ARNP-BC (Barry University), Clinical Assistant Professor, Nursing
Lobar, Sandra, Ph.D., RN, ARNP-BC (University of Miami), Associate Professor, Nursing
Loffredo, Diane, M.S.N, RN (Barry University), Clinical Assistant Professor, Nursing
Marrero, Yamile, JD, MPH, CSCS (Florida State University), Clinical Assistant Professor, Bachelor of Health Services Administration
McPherson, Laura, PT, DPT, Ph.D. (Northwestern University), Assistant Professor, Physical Therapy

Mead, Jean, Ed.D., CCC-SLP (West Virginia University), Clinical Assistant Professor, Communication Sciences and Disorders
Medina, Angela, Ph.D., CCC-SLP (University of Louisiana at Lafayette), Assistant Professor, Communication Sciences and Disorders
Miller, Ann, DNP, CRNA Clinical Associate Professor, Anesthesiology Nursing
Miller, Audrey, Ph.D., RN (Barry University), Visiting Assistant Professor, Nursing
Montalvo, Alicia, Ph.D., LAT, ATC (Penn State University), Assistant Professor, Athletic Training
Munoz, Mariatereza, M.S., CCC-SLP (Nova Southeastern University), Clinical Assistant Professor, Communication Sciences and Disorders
Odai, Michelle, Ph.D., LAT, ATC, CSCS (Florida International University), Clinical Assistant Professor, Athletic Training
Olafson, Elizabeth, M.S.N., RN, M.S.Ed. (Florida Atlantic University), Clinical Assistant Professor, Nursing and Director of Clinical Education
Olenick, Maria, Ph.D., RN (Widener University), Clinical Assistant Professor, Nursing and Assistant Director of Nursing, Biscayne Bay Campus
Parchment, Yvonne, Ed.D., RN, CCRN, ARNP, CNE (Florida International University), Clinical Associate Professor, Nursing
Paul-Ward, Amy, Ph.D. (University of California Los Angeles), Associate Professor and Director, Nursing PhD Program
Phillips, Suzanne, Ed.D., RN, ARNP (Florida International University), Associate Professor, Nursing
Porter, Luz, Ph.D., RN, ARNP, FAAN (New York University), Professor Emeritus, Nursing
Ramos, Eliane, Ph.D., CCC-SLP (University of Massachusetts), Clinical Associate Professor, Communication Sciences and Disorders
Randolph, Marilys, Ph.D., P.T. (Howard University), Associate Professor, Physical Therapy
Richard, Lynne, Ph.D., OT/L (Rutgers University), Interim Chair and Assistant Professor, Occupational Therapy
Roberts, Lisa, D.P.T., P.T., G.C.S. (Nova Southeastern University), Clinical Assistant Professor, Physical Therapy
Rodriguez, Ana, M.S.O.T., OTR/L (Florida International University), Visiting Clinical Instructor, Occupational Therapy
Rossi, Mark, Ph.D., P.T. (Texas Woman's University), Associate Professor, Physical Therapy
Schwartz, Jaclyn, Ph.D., OTR/L (University of Wisconsin, Milwaukee), Assistant Professor, Occupational Therapy
Scisney-Matlock, Margaret, Ph.D., RN, FAAN (University of Notre Dame), Professor, Nursing and Interim Associate Dean of Academic Affairs, Nicole Wertheim College of Nursing and Health Sciences
Sherman, Deborah, Ph.D., ARNP, ACHPN, FAAN (New York University), Professor, Nursing
Simon, Sharon, Ph.D., RN (Barry University), Clinical Assistant Professor and Director of the Undergraduate Nursing Program, Nursing
Stallworth, Nicolette, M.S., LAT, ATC (Florida International University), Visiting Clinical Instructor, Athletic Training

Strickland, Ora, Ph.D., DSc (Hon), RN, FAAN (University
of North Carolina), Professor, Nursing and Dean, Nicole Wertheim College of Nursing and Health Sciences
Treminio, Ingris, O.T.D., OTR/L (Nova Southeastern University), Visiting Clinical Assistant Professor, Occupational Therapy
Vieira, Edgar, Ph.D. (University of Alberta), Associate Professor, Physical Therapy
Wen, Pey-Shan, Ph.D., OTR/L (University of Florida), Assistant Professor, Occupational Therapy
Wunder, Linda, Ph.D., CRNA (Barry University), Clinical Assistant Professor, Anesthesiology Nursing
Young-Whiting, Chanadra, Ed.D., MPH/HSA (Nova Southeastern University), Clinical Assistant Professor and Chairperson, Bachelor of Health Services Administration
Youngblut, JoAnne, Ph.D., RN, FAAN (University of Michigan), Professor, Nursing

# Robert Stempel College of Public Health and Social Work 

Dean
Interim Associate Dean, Academic Affairs
Associate Dean, Research
Interim Assistant Dean, Student and Alumni Affairs
Assistant Dean, External Affairs
MPH Program Director

## Chairs and Directors:

## Biostatistics

Dietetics and Nutrition
Environmental and Occupational Health
Epidemiology
Health Policy and Management
Health Promotion and Disease
Prevention
School of Social Work

Tomás Guilarte

Mark Macgowan
Stanislaw Wnuk

Melissa Howard
Cecile Houry
Vukosava Pekovic

O. Dale Williams Fatma Huffman<br>Marcus S. Cooke Wasim Maziak Benjamin Amick

## Elena Bastida Mary Helen Hayden

The Robert Stempel College of Public Health and Social Work includes six departments: Biostatistics, Dietetics and Nutrition, Environmental and Occupational Health, Epidemiology, Health Policy and Management, and Health Promotion and Disease Prevention; and the School of Social Work. Programs of study are offered that lead to a Master's of Public Health degree (MPH) (with specializations in biostatistics, environmental and occupational health, epidemiology, health policy and management, and health promotion and disease prevention); a Master of Science degree in Dietetics and Nutrition, and a Master's degree in Social Work (MSW). A Ph.D. in Public Health (with specializations in environmental and occupational health, epidemiology, and health promotion and disease prevention, health systems research); a Ph.D. degree in Dietetics and Nutrition; and a Ph.D. in Social Welfare are also offered. In addition, a Bachelor of Science degree in Dietetics and Nutrition; and a Bachelor of Science degree in Social Work are also offered. The Department of Dietetics and Nutrition also offers an accredited pre-professional practice program, the Coordinated Program (CP).

The mission of the college is to serve the South Florida community by increasing, sharing, and applying knowledge, wisdom, and ethical decision making in public health and social welfare. Our mission is carried out through:

- Educating and training future leaders, researchers, and practitioners;
- Conducting innovative research translating research into policy, programs, and practice, and
- Promoting healthy lives for diverse and especially underserved populations, here and abroad.


## Accreditation

The Robert Stempel College of Public Health and Social Work is accredited by the Council on Education for Public Health. The Didactic (DPD) and pre-professional practice programs (CP) in Dietetics and Nutrition are accredited by the Commission on Accreditation of Dietetic Education. The BSSW and MSW programs are accredited by the

Council on Social Work Education. Each degree program is committed to preparing students for the pursuit of excellence in professional and scholarly endeavors in an era of globalization, scientific and technological advances, and demographic changes. The health and well-being of communities as affected by multiple determinants is reflected in our interdisciplinary curriculum. The programs emphasize the involvement of practitioners, academic researchers, and the community to improve and promote public health and social well-being.

## Office of Student and Alumni Affairs

The Office of Student and Alumni Affairs serves as a liaison between the Robert Stempel College of Public Health and Social Work and university-wide student support services. The office works with directors and department chairs to coordinate admissions and advising services, and provides students with information on scholarships, assistantships, stipends, curriculum, requirement changes, internships, and graduation application deadlines. The office coordinates alumni services and communication.

The College has dynamic professional staff dedicated to promoting the college and supporting our students while they pursue their academic goals.

## Admission Application

Students seeking admission to the graduate programs in the Robert Stempel College of Public Health and Social Work must formally apply to the University for acceptance at http://gradschool.fiu.edu. For additional information contact the:

Robert Stempel College of Public Health and Social Work Office of Student and Alumni Affairs
Email: ph@fiu.edu
Telephone: (305) 348-7777
Fax: (305) 348-4901
Website: http:I/stempel.fiu.edul
For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/students/advising/index.html.

## School of Social Work

Mary Helen Hayden, Director
Jennifer Abeloff, Clinical Instructor and Associate Director
Richard Beaulaurier, Associate Professor and Ph.D. Program Coordinator
Shanna Burke, Assistant Professor
Shimon Cohen, Visiting Clinical Instructor and BSSW Coordinator of Field Education
Mario De La Rosa, Professor and Director, Center for Research on U.S. Latinos HIVIAIDS and Drug Abuse
Beatrice Farnsworth, Clinical Instructor and Assistant Supervisor of Social Work, Neighborhood HELP ${ }^{\text {TM }}$
Nicole Fava, Assistant Professor
Andres Gil, Professor and Vice President for Research
Natalia Giordano, Visiting Clinical Instructor and Child Welfare Title IV-E Coordinator
Victoria Gray, Clinical Instructor
Hui Huang, Assistant Professor
Rosa Jones, Founding Professor and Vice President for Student Affairs Emeritus
Elise Linder, Clinical Instructor and M.S.W. Coordinator of Field Education
Mark Macgowan, Professor and Interim Associate Dean, Robert Stempel College of Public Health and Social Work
Lourdes Martin, Clinical Instructor and Supervisor of Social Work, Neighborhood HELP ${ }^{\text {TM }}$
Welker Mitchell, Clinical Instructor
Miriam Potocky, Professor
Paul Stuart, Professor
Barbara Thomlison, Professor
Ray Thomlison, Professor
Eric F. Wagner, Professor and Director, FIU-Banyan
Research Institute on Dissemination, Grants and Evaluation
Stephen Wong, Associate Professor
Social Work offers graduate and undergraduate studies leading to the Master of Social Work and Bachelor of Science in Social Work degrees. The School also offers a Ph.D. in Social Welfare.

The profession of Social Work requires a high degree of knowledge and dedication. The desire and ability to work effectively with people and to help solve social problems demands a scientific understanding of society and human behavior, skills in social work practice, and identification with the values of the profession.
Note: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's, College's and School's regulatory and accrediting agencies. Changes may be made without advance notice. The curricula described in this catalog are continually subject to review in order to respond to the mandates of the Florida Department of Education, Board of Governors, the legislature, the Council on Education for Public Health and the Council on Social Work Education. The School makes every effort to minimize the impact of curriculum changes on currently enrolled students by stipulating that students complete the requirements of their degree program in effect at the time of admission or readmission to the program. In the event that this is not possible due to accreditation standards or the deletion of courses,
students may be required to complete alternative degree requirements in order to graduate.

## Master of Social Work

Social Work offers an integrated program that leads to the Master of Social Work (MSW) degree. The program is designed to give the student professional education for the advanced practice of social work. The curriculum applies a bio-psychosocial model within the context of a social systems framework to understand client systems, address problems and develop interventions.

The Master of Social Work Program at Florida International University is accredited by the Council on Social Work Education (CSWE). The program is grounded in the core competencies set forth by CSWE. Students are expected to meet all core competencies, including foundation and advanced practice behaviors, by the end of their studies. Students are also provided grounding in basic public health knowledge.

All students will be required to acquire or to possess the core competencies in the areas of professional study considered essential in social work education: professional identity, ethics, critical thinking, diversity, social economic justice, human behavior and the social environment, policy practice, research, societal contexts, and practice including engagement, assessment, interventions, and evaluations with individuals, families, groups, organizations, and communities. The knowledge acquired in the professional courses will be applied in supervised field experiences in social agencies. As part of field education, social work students may also participate with students from the Herbert Wertheim College of Medicine and the Nicole Wertheim College of Nursing and Health Sciences in the Green Family Foundation Neighborhood HELP ${ }^{\text {TM }}$, an inter-professional team approach in MiamiDade communities.

The program offers a concentration in advanced clinical practice and students complete a field practicum program that supports practice in that concentration. With the help of faculty, students will develop individualized programs in the concentration to meet their educational needs, advanced practice behaviors, and contribute to their professional objectives. The program provides a curriculum which meets the current educational requirements for clinical licensure in Florida.

Field agencies require the disclosure of conviction records for misdemeanors and/or felonies and current screening for drug use. Therefore, students are required to submit to state and federal background checks and drug screening tests prior to the initiation of the practicum. Findings in the background checks and/or drug screenings tests may affect a student's ability to participate in field internship and, thus, complete the social work program. Students are further advised that Florida and most other states may restrict or deny social work employment and/or licensure for persons with a felony conviction. Students with a criminal background must consult with the MSW Program Coordinator before continuing in the program.

Evening and weekend field placements are extremely limited and are granted only as an exception in extreme circumstances for MSW II/MSW III Advanced Clinical students. The School of Social Work is under no obligation to provide such placements. Consequently, practicum placement cannot be guaranteed even for

MSW II/MSW III students who require evening and weekend placements and all students must have at least eight (8) weekday, daytime hours available per week during their practicum experience. Students cannot complete their field placements in an agency at which they are employed.

For additional information regarding the graduate social work program of study and degree requirements, contact the School of Social Work at (305) 348-5880.

## Admission Requirements

Applicants to the MSW program are required to meet the minimum standards set forth by the Florida Board of Education, the University, and the School of Social Work. Students must have a GPA of 3.0 or better in all upperlevel courses. Application procedures for admission to graduate study are found in the graduate admission section of this catalog. An application to the University, an application to the Social Work MSW program, a personal narrative, and three letters of reference are required for admission. A personal interview may be requested. All applicants are required to have completed college-level courses in biology (including coverage of Human Biology) and statistics and 12 semester hours in the social and behavioral sciences.

In addition to the College and University policies governing transfer credit the following regulations apply:

1. Courses taken in a Master of Social Work program, accredited by the Council on Social Work Education, in which the applicant was fully admitted, may be transferred up to a maximum of 6 semester hours.
2. Graduate courses taken in other than CSWE accredited Social Work programs may not be transferred.
3. Required concentration courses ( 6000 level) are not transferable.

## Advanced Standing Status

Applicants with a B.S.W. degree from a program accredited by the Council on Social Work Education (CSWE) within five years prior to matriculation and a minimum of 3.25 GPA (last 60 hours/upper division of undergraduate studies) may be considered for Advanced Standing status. Advanced Standing is not automatically granted. All students admitted to the MSW Program are required to take 30 semester hours of concentration courses in addition to the course in public health. Students who are admitted with Advanced Standing status will not be required to take the graduate foundation courses if they earned a ' $B$ ' or better in the corresponding course(s) at the bachelor's level. Students admitted with Advanced Standing Status will not be awarded any transfer credit, substitutions, or exemptions.

## Degree Requirements

The Master of Social Work program is a 60 semester hour program composed of a 30 semester hour foundation followed by 30 semester hours of concentration courses in the second year. The Master of Social Work for students with Advanced Standing Status is composed of 33 semester hours of concentration courses.

An overall GPA of 3.0 is required for graduation. Any required course in which a student receives a grade lower than ' $B$ ' must be retaken. (A grade of ' $B$-' is not acceptable.) However, a grade of ' $B-$ ' in an elective does
not have to be retaken. A passing grade in field practicum courses is required for continuation in the program. Field courses cannot be repeated.

Students in the MSW program who fail a required social work course (a 'B-' or lower) three (3) times may not take the course again and will be automatically dismissed from the program.

A student must successfully complete all work applicable to the Master of Social Work program within 48 months from initial admission. In unusual circumstances, and if the reasons warrant it, a student may petition the School Director for an extension of the time limit.

## Required Courses: (60)

| Block I FOUNDATION COURSES |  |  |
| :--- | :--- | :--- |
| SOW 5105 | Human Behavior and the Social <br> Environment I | 3 |
| SOW 5235 | Social Welfare Policy and Services I <br> SOW 5342 | 3 |
|  | Social Work Practice with Individuals <br> and Families | 3 |
| SOW 5379L | Interviewing Skills Lab <br> SOW 5404 <br> Social Work Research Methodology | 3 |
| Block II FOUNDATION COURSES |  |  |
| SOW 5324 | Theory and Practice with Groups |  |
| SOW 5629 | Social Work Practice with Diverse | 3 |
|  | Populations |  |
| SOW 5532 | Field Practicum I |  |
| SOW 5344 | Theory and Practice with Communities <br> and Organizations | 4 |
| PHC 6500 | Foundations of Public Health Practice | 3 |

## Block III CONCENTRATION COURSES

| SOW 6125 | Human Behavior \& the Social <br> Environment II - Psychopathology |  |
| :--- | :--- | :--- |
| SOW 6236 | Social Welfare Policy and Services II |  |
| SOW 6435 | Evaluating Empirically Based Social |  |
|  | Work Practice |  |
| SOW 6425 | Clinical Assessment and Intervention |  |
|  | Planning | 3 |
| SOW 6533 | Field Practicum II |  |
| PHC 6500 | Foundations of Public Health Practice |  |

Block IV CONCENTRATION COURSES

| SOW 6351 | Clinical Intervention in Couple and |  |
| :--- | :--- | :--- |
|  | Family Social Work Practice | 3 |
| SOW 6534 | Field Practicum III | 6 |
| SOW | Social Work Clinical Practice Elective | 3 |
| SOW | Social Work Clinical Practice Elective | 3 |

Students are required to complete all of the first-year Foundation Courses and be fully admitted to the MSW Program before enrolling into any of the 6000 level Concentration courses.

## Juris Doctor/Master of Social Work Joint Degree Program

1. Candidates for the program must meet the entrance requirements for and be accepted by both the College of Law and the School of Social Work. Both schools must be informed by the student at the time of application to the second school that the student intends to pursue the joint degree.
2. The joint degree program is not open to students who have already earned one degree.
3. For law students, enrollment in the M.S.W. program is required no later than the completion of 63 credit hours in the J.D. program. For M.S.W. students, enrollment in the J.D. program is required no later than the completion of 30 credit hours in MSW Program.
4. A student must satisfy the curriculum requirements for each degree before either degree is awarded. The School of Social Work will allow 9 credit hours of approved law courses to be credited toward both the M.S.W. and J.D. degrees. These 9 credit hours of law classes will be in lieu of Social Work electives and must be selected from an approved list of law classes. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the J.D. degree for courses taken in the M.S.W. curriculum upon completion of the M.S.W. degree curriculum with a grade point average of 3.0 or higher.
5. A full-time law student enrolled in the joint degree program may spend the first year in either the College of Law or the School of Social Work. A part-time law student enrolled in the joint degree program may begin the student's studies in either the College of Law or the School of Social Work, but must take the first three semesters of law study consecutively. Students admitted to one school but electing to begin study in the other school under the joint degree program may enter the second school thereafter without once again qualifying for admission so long as they have notified the second school before the end of the first week of the first semester in the second school and are in good academic standing when studies commence in the second school.
6. A student enrolled in the joint degree program will not receive either degree until the student has satisfied all of the requirements for both degrees, or until the student has satisfied the requirements of one of the degrees as if the student had not been a joint degree candidate.

## Doctor of Philosophy in Social Welfare

The Doctor of Philosophy in Social Welfare aims to prepare students for careers in research, university teaching, and leadership in social work and social welfare.

The Program emphasizes research that informs the development, implementation and evaluation of culturally appropriate interventions to meet the human needs of individuals, families, groups, and communities.

The Program is structured to develop and strengthen students' skills in the methods of scientific inquiry, to deepen their understanding and analysis of social problems and public issues, and to contribute to the knowledge base of social welfare. Students pursue a course of study focused on social problems, intervention research, and research methodology related to an area of specialization of particular interest to them.

The faculty mentor students on a specific area of research, its theoretical foundations and practical applications. Instruction and mentoring involve courses and seminars, supervised conduct of research, collaborative work with faculty, presentations of scientific papers, writing and publishing scholarly work, and submitting research grant proposals. While in the program, students are expected to disseminate the results of their
study and research in appropriate forums. Students are also offered opportunities to teach.

## Admission Requirements

Applicants are required to meet the following requirements:

1. A Master's degree in Social Work from an accredited school of social work, or in a closely related field;
2. Evidence of superior academic achievement in undergraduate and graduate education, including a 3.0 (upper division) undergraduate GPA and a 3.5 graduate GPA;
3. Official Graduate Record Examination (GRE) scores;
4. Documentation of completion of courses in statistical methods and research methodology with grades of ' $B$ ' or better;
5. Three letters of recommendation (two academic and one professional);
6. Two examples of written scholarly work;
7. A personal statement describing the applicant's research interests and career goals;
8. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or overall 6.5 on the IELTS is required;
9. All applicants must be approved by the Doctoral Committee. Applications for Fall semester admission are due by February $15^{\text {th }}$ of the year of application.

## Degree Requirements

1. Completion of a minimum of 60 credits: (at least 36 credit hours of required coursework taken over the first three consecutive semesters following admission, obtaining at least a "B" grade for each course, and at least 24 dissertation credit hours following advancement to candidacy); continuous registration for at least 3 credit hours of dissertation courses during each semester following advancement to candidacy; maintenance of an overall cumulative grade point average (GPA) of at least 3.0;
2. Filing, before the end of the fourth semester of study, three major papers, each having obtained a grade of at least " $\mathrm{B}+$ " from a three-member Doctoral Candidacy committee (this constitutes the Doctoral Candidacy Examination);
3. Successful defense of a Dissertation Proposal from a duly constituted Dissertation Committee;
4. Completion of a dissertation under the guidance of the Dissertation Committee;
5. Successful defense of the dissertation before the Dissertation Committee and the University community;
6. Obtaining the Ph.D. degree within nine years of admission into the Ph.D. program.

## Program of Study

The Doctor of Philosophy in Social Welfare is a 60 semester hour program comprised of 12 required courses and 24 semester hours of dissertation study.

## Course Offerings

Semester I (12 hours)
SOW 7216 Social Welfare Policy

| SOW 7406 | History \& Systems of Social Work Research |
| :---: | :---: |
| SOW 7492 | Theory Development and Research Methods in Social Welfare |
| PHC 6709 | Quantitative Research Analysis I (or equivalent) |
| Semester II (12 hours) |  |
| SOW 7237 | Micro-Practice Theory and Research |
| SOW 7238 | Macro-Practice Theory and Research |
| PHC 6091 | Biostatistics 2 (or equivalent) |
| AAA xxxx | Graduate Elective (or SOW 7916 Supervised Research) |
| Semester III (12 hours) |  |
| SOW 7936 | Dissertation Seminar in Social Welfare |
| SOW 7493 | Research Methods in Social Welfare II (or equivalent) |
| AAA $x x x x$ | Graduate Elective (or SOW 7916 Supervised Research |
| SOW 7916 | Supervised Research |
| Semester IV + <br> If Doctoral Candidacy attained: |  |
| SOW 7980 If Doctoral | Dissertation Credits (min 24 hours) dacy not attained: |
| SOW 7916 or | Supervised Research |
| SOW 6914 | Independent Research |
| For additional and updated information about degrees offered, entrance requirements, and services, please visit our website: <br> http://stempel.fiu.edu/academics/socialwork/index.html. |  |

## Biostatistics

O. Dale Williams, Professor and Chair

Boubakari Ibrahimou, Assistant Professor
Tan Li, Assistant Professor
Emir Veledar, Courtesy Associate Professor
Changwon Yoo, Associate Professor
Neera Bhansali, Research Assistant Professor
The Department offers a major in Biostatistics for the College's MPH degree, which covers basic applied biostatistics especially as required for public health and community health research and practice.
Biostatistics is a field that facilitates the conduct of health and medical research through a focus on designing sound experiments and studies relevant to human health and through the process of collecting, managing, analyzing and interpreting data. Biostatisticians assist in the identification and refinement of important research questions and in the methods and procedures required to obtain high quality and reliable answers to these questions. There remains a shortage of professional biostatisticians and the field provides meaningful and rewarding careers for those interested and able to go down this path.

## Application Deadline

The priority application deadline for the MPH degree program with a major in Biostatistics is February 15th. Applications submitted prior to this deadline will be considered for admission first. Applications submitted after February 15th will be considered for slots that have not been filled until the University's deadline of June 1st.

## Admission Requirements

Applicants must meet the University's general graduate admission requirements:

1. A Bachelor's degree or equivalent from an accredited college or university or, in the case of foreign students, an institution recognized in its own country as preparing students for further study at the graduate level.
2. A minimum 3.0 GPA on the last 60 under-graduate hours. In addition, applicants are required to submit 1) a current resume; and 2) a written statement of purpose (career goals). Applicants are also encouraged to submit three letters of recommendation.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Students with diverse backgrounds are encouraged to apply.
4. Submission of official GRE scores. Scores must be less than 5 years old.
5. Preference will be given to applicants having completed coursework in mathematics through calculus.

| MPH Core Curriculum: (15 credits) |  |
| :---: | :---: |
| PHC 6000 | Epidemiology I: Introduction to Public |
|  | Health Epidemiology |
| PHC 6065 | Public Health Statistics |
| PHC 6102 | Introduction to Public Health Policy and Management |
| PHC 6315 | Introduction to Environmental Health |
| PHC 6410 | Health Behavior and Public Health |
| Major in Biostatistics: (15 credits) |  |
| PHC 6055 | Data Management and Applied Epidemiologic Analysis |
| PHC 6064 | Model for Binary Public Health |
|  | Outcomes |
| PHC 6190 | Biostatistical Methods for Survey |
|  | Research |
| PHC 6091 | Biostatistics 2 |
| PHC 7719 | Quantitative Multivariate Analysis in Health Sciences Research |
| Electives for Biostatistics: (9 credits) |  |
| PHC 6056 | Longitudinal Health Data Analysis |
| PHC 6059 | Cohort Studies and Lifetime Events in Public Health |
| PHC 6086 | Cluster Analysis for Public Health |
| PHC 6067 | Probabilistic Graphical Models |
| PHC 6907 | Independent Study: Public Health |
| PHC 7050 | Advanced Biostatistics I |
| Practicum and Culminating Experience: (6 credits) |  |
| PHC 6945 | Practicum in Public Health |
| PHC 6930C | Integrative Seminar in Public Health |

PHC 6945 (Practicum) and PHC 6930C (culminating experience) are both required for all MPH students. The Practicum may be taken after completing a minimum of 30 hours, including all core courses. The Practicum may be waived if the student has at least 3 years of relevant practice experience working in a public health practice setting. The waiver request is prepared and submitted by the student, through their Faculty Advisor and Department Chair, for final approval/disapproval by the Academic Public Health Director. If the Practicum requirement is waived, the student will need to substitute 3 additional approved hours so that the total curriculum hour requirement of 45 is met. MPH students are expected to complete PHC 6930C Integrative Seminar in Public Health during their last semester in the program.
For additional and updated information about degrees offered, entrance requirements, and services, please visit the College's website: http://stempel.fiu.edu.

## Dietetics and Nutrition

Fatma Huffman, Professor and Chair and Director, Doctoral Program
Deborah M. Abel, Assistant Clinical Professor and Director, Graduate Certificate in Pediatric Nutrition
Marianna Baum, Professor
Adriana Campa, Associate Professor and Director, MS Program
Michele Ciccazzo, Dean Emeritus
Catherine Coccia, Assistant Professor
Katharine R. Curry, Professor Emeritus
Evelyn B. Enrione, Associate Professor
Valerie George, Research Associate Professor
Julia D. C. Gonzalez Pampin, Coordinator of Student and Alumni Services, Graduate Programs
Kathryn Hartlieb, Assistant Professor
Susan P. Himburg, Professor Emeritus and Director, Academic Planning and Accountability
Juan P. Liuzzi, Associate Professor
Marcia Magnus, Associate Professor
Joan A. Marn, Clinical Instructor and Director, Didactic Program
Vijaya Narayanan, Assistant Professor
Tania Rivera, Clinical Instructor and Director, Coordinated Program
Sabrina Sales Martinez, Visiting Assistant Professor
Dian O. Weddle, Associate Professor Emeritus
The Program in Dietetics and Nutrition offers graduate studies leading to a Master of Science or a Doctor of Philosophy in Dietetics and Nutrition. The M.S. program is designed to meet the needs of professional practitioners as well as students with undergraduate degrees in related fields. The Ph.D. program prepares graduates to assume leadership roles in research, academia, government agencies, private industry and community-based organizations. Our doctoral program allows students to study and work side-by-side with nationally known educators, researchers, and practitioners who serve as mentors.

## Master of Science in Dietetics and Nutrition

## Admission Requirements

Minimum entrance requirements under current University Graduate School must be met. For the M.S. this includes a ' $B$ ' (3.0 on a 4.0 scale) average in all upper division coursework. Prospective applicants must have completed the following courses with a grade of " C " or higher:
CHM 1045 General Chemistry I 3

CHM 1045L General Chemistry Lab I 1
CHM $2210 \quad$ Organic Chemistry I 4
CHM 2210L Organic Chemistry Lab I 1
CHM 2211 Organic Chemistry II 3
CHM 2211L Organic Chemistry Lab II 1
CHM 2200 Survey of Organic Chemistry 3
CHM 2200L Survey of Organic Chemistry Lab 1
MCB 2000 Introductory Microbiology 3
MCB 2000L Introductory Microbiology Lab 1

PCB 3702
HSC 3549

HUN 2201
HUN 4240
BCH 3033

Intermediate Human Physiology OR
Clinical Physiology for Health Professionals

Principles of Nutrition 3

Nutrition and Biochemistry OR General Biochemistry
Students who are candidates for the Master of Science degree in Dietetics and Nutrition must complete a minimum of 37 semester hours of graduate study including at least 30 hours at this University. All course work must be recent enough to be relevant to the contemporary field of nutrition.

Graduate students wishing to become a Registered Dietitian may use the Department website for information and discuss their options with the Graduate Program Director.

Each student's program will be planned to support his/her career goals through consultation with an assigned faculty advisor. Retention and graduation in the Master's program requires maintenance of a 3.0 GPA and student may not receive more than 2 grades of " $\mathrm{C}+$ " or less.

## Course Requirements: (37 credits)

There are 3 options to meet the requirements for research:
Option 1: Research Courses
Option 2: Master's Thesis
Option 3: Master's Project

## Research Courses (14 credits)

DIE 6568 Research I 3
DIE 6567 Research II 3
STA 6166 Statistical Methods in Research 3
DIE 6937 Graduate Seminar in Dietetics (two semesters, 1 credit each)
Recommended Elective

## Master Thesis Option (14 credits)

The thesis option provides the student the opportunity to conduct original research and to report this in a scholarly manuscript. This option is especially well suited to a student who plans on pursuing a PhD degree. Students who select this option must choose a major professor to act as the chair of their thesis committee and two additional committee members. Before beginning work on a thesis, a student must present a proposal to their committee for approval. The committee will direct and supervise the work carried out by the student. Student will write a report and present the research at an announced open forum.

| DIE 6568 | Research I <br> Graduate Seminar in Dietetics (two | 3 |
| :--- | :--- | :--- |
| DIE 6937 | semesters, 1 credit each) | 2 |
| DIE 6971 | Thesis in Dietetics and Nutrition | 6 |
| STA 6166 | Statistical Methods in Research | 3 |

## Masters Project Option (14 credits)

Master's Project is a non-thesis option. It affords the opportunity to conduct applied research, program planning, or program evaluation on a specific dietetics and nutrition problem, topic, or existing program in either a community or institutional setting. Students who select the

Master's Project must choose a major professor to direct their project. The advisor and the student may identify other resource persons to serve in an advisory capacity for the project. Before beginning the project, student must present a project concept proposal to the major professor. Student will write a project report and present the project at an announced open forum. This report will not be on file in the FIU library.

| DIE 6568 | Research I <br> DIE 6937 | Graduate Seminar in Dietetics (two <br> semesters, 1 credit each) |
| :--- | :--- | :--- |
| STA 6166 | Statistical Methods in Research | 2 |
| DIE 6576 | Project in Dietetics and Nutrition | 6 |

Nutrition Core: ( 9 credits)
Students must take at least three out of five courses. One course must be in macro-nutrients, one in micro-nutrients.
HUN 5245 Nutrition and Biochemistry 3
HUN 6307 Carbohydrates and Lipids 3
HUN 6327 Proteins 3
HUN 6335 Functions of Vitamins 3
HUN $6355 \quad$ Minerals in Human Nutrition 3
Public Health Core: (3 credits)
PHC $6500 \quad$ Foundation of Public Health Practice 3
Recommended Electives ${ }^{1}$ : ( 11 credits)

| ANT 6469 | Graduate Medical Anthropology <br> DIE 6368 | 3 |
| :--- | :--- | :--- |
|  | Advanced Techniques in Dietetic <br> Practice | 2 |
| DIE 6368L | Advanced Techniques in Dietetic <br> Practice Lab |  |
| DIE 6929 | Specialized Short Course in Dietetics |  |
|  | and Nutrition | 1 |
| FOS 6236 | Food Toxicology and Food Safety | 3 |
| HUN 5123 | Ethnic Influences on Nutrition and Food |  |
|  | Habits | 3 |
| HUN 5621 | Food, Nutrition and Communication | 3 |
| HUN 6248 | Sports Nutrition | 3 |
| HUN 6254 | Drug and Nutrient Interaction | 3 |
| HUN 6255 | Nutrition and Wellness | 3 |
| HUN 6257 | Physio/Psychology of Food Intake | 3 |
| HUN 6266 | Nutritional Assessment | 3 |
| HUN 6295 | Contemporary Issues in Food and |  |
|  | Nutrition | 3 |
| HUN 6435 | Nutrition and Aging | 3 |
| HUN 6522 | Public Health Nutrition | 3 |

${ }^{1}$ Courses that are not listed as recommended electives may be taken as approved by advisor/Program Director.

## Doctor of Philosophy in Dietetics and Nutrition

Ph.D. students must complete a minimum of 55 hours after M.S. degree or a minimum of 75 hours beyond the B.S. degree. The stated minimum does not include remedial coursework. Students who did not complete PHC 6500 Foundations of Public Health prior to admission to the PhD program must complete PHC 6500 as part of the program of studies. Coursework will be planned with the advisor and the dissertation committee to support the student's research interests and career goals. A 3.0 GPA must be maintained, and all courses needed for graduation must be completed with a grade of "C+" or higher.

## Required Courses

Research \& Methods Core: (15 credits)
(Prerequisites: PHC 6706 or equivalent; PHC 6709 or equivalent)
PHC 6091 Biostatistics 2
PHC $6710 \quad$ Qualitative Research Methods in Public Health 3
PHC 6703 Epidemiology Methods: Experimental Design or
Approved Experimental or Clinical Research Methods
Course
HUN 6266 Nutritional Assessment 3
PHC 7981 Research Concepts and Proposal Development
Seminar: (minimum 3 credits)
DIE $6937 \quad$ Graduate Seminar in Dietetics \& Nutrition 1 (course may be repeated 3 times, minimum)
Nutrition Science: (0-9 credits) ${ }^{1}$
HUN $6285 \quad$ Nutrition \& Metabolism I (CHO\&Lipids) 3
HUN $6286 \quad$ Nutrition \& Metabolism II (Proteins) 3
HUN 6287 Nutrition \& Metabolism III (Vit\&Min) 3
${ }^{1}$ Do not need if equivalent previously taken at the graduate level.
Dietetics: (minimum 13 credits) ${ }^{2}$
HUN $7408 \quad$ Nutrition Across the Lifespan 3
HUN 7523 Community Nutrition 3
HUN $7524 \quad$ Nutrition Science and Implications for Community Health
${ }^{2} \mathrm{~A}$ program of study will be developed with the assistance of a major professor and dissertation committee. More than 13 credits may be required for the student to achieve competency in the research methods and content related to their dissertation research. Graduate courses outside of Dietetics \& Nutrition may be taken as approved by dissertation committee.
Dissertation: (minimum 24 credits)
DIE 7980
Dissertation
For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/students/advising/index.html.

## Environmental and Occupational Health

Marcus Cooke, Professor and Chair<br>Jayanta K. Das, Research Assistant Professor<br>Alok Deoraj, Instructor and Graduate Program Director<br>Quentin Felty, Associate Professor<br>Tomás R. Guilarte, Professor and Dean, Robert Stempel College of Public Health and Social Work<br>Deodutta Roy, Professor<br>Shimelis Setegn, Research Assistant Professor<br>Stanislaw Wnuk, Professor and Associate Dean for Research

## Affiliated Faculty

William Brookman, Director of Community Health Services, Monroe County Health Department
Samir Elmir, Director, Environmental Health and Engineering, Miami-Dade County Health Department
Yenny Diaz, Director, Environmental Health and Safety, FIU

The Department offers a Graduate Certificate, a Master's degree in Public Health with a major in Environmental and Occupational Health and a Ph.D. in Public Health with a major in Environmental and Occupational Health.

## Application Deadline

The application deadline for PhD and priority deadline for MPH with a major in Environmental and Occupational Health is February 15th. MPH applications submitted prior to this deadline will be considered for admission first. MPH applications submitted after February 15th will be considered for slots that have not been filled until the University's deadline of June $1^{\text {st }}$.

## MPH in Environmental and Occupational Health

The graduate training programs in Environmental and Occupational Health are both interdisciplinary and interdepartmental. The Department of Environmental and Occupational Health is committed to the highest quality performance of mechanism-based and evidence-based research. The application of this research is to help detect, prevent, and control adverse influences of the environment on human health, based on the understanding of the complex interplay of genetic variations with environmental stressors. Our faculty are pursuing research on how the built environment and environmental stressors interact to influence human health and health-related behaviors that goes beyond the traditional focus on hazardous agents.

## Admission Requirements

Applicants to the MPH program with a major in Environmental and Occupational Health (EOH) must meet the following requirements:

1. A Bachelor's (or Master's) degree in biology, chemistry, physics, nursing, medicine, engineering, or other appropriate field with at least one (1) undergraduate biology, and one (1) undergraduate chemistry course from an accredited college or university or, in the case of foreign students, an
institution recognized in its own country as preparing students for further study at the graduate level.
2. A minimum 3.0 GPA (on the last 60 undergraduate hours). In addition, applicants are required to submit 1) a current resume; and 2) a written statement of purpose (career goals).
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Students with diverse backgrounds are encouraged to apply.
4. Submit a GRE, MCAT, DAT or GMAT score. Scores must be no more than five years old.

In addition to the formal application to the University Graduate School, the Department recommends that applicants submit the following documents directly to the College of Public Health and Social Work's Office of Student and Alumni Affairs:

1. three letters of recommendation
2. a written statement of purpose
3. current curriculum vitae/resume

## Curriculum and Course Requirements

For the Master's of Public Health with major in Environmental and Occupational Health (EOH), ALL students must complete the MPH (15 credits) and departmental core courses (15 credits), MPH selected electives (9 credits), a Practicum (3 credits) and Integrative Seminar (3 credits.
MPH Core Curriculum: ( $\mathbf{1 5}$ credits)
PHC 6000 Epidemiology I: Introduction to Public Health Epidemiology
PHC $6065 \quad 3$
PHC 6102 Introduction to Public Health Policy and Management
PHC 6315 Introduction to Environmental Health 3
PHC 6410 Health Behavior and Public Health 3
Major in Environmental and Occupational Health
Department Core Courses: ( 15 credits)
PHC 6307 Exposure Assessment in Environmental \& Occupational Epidemiology 3
PHC 6310 Environmental \& Occupational Toxicology
PHC 6311 Environmental Health Risk Assessment 3
PHC 6316 Environmental Health Management 3
PHC $6355 \quad$ Occupational Health and Safety 3
Elective Courses: (9 credits)
PHC $6001 \quad \begin{aligned} & \text { Environmental and Occupational } \\ & \\ & \text { Epidemiology }\end{aligned}$
$\begin{array}{ll}\text { PHC } 6004 & \begin{array}{l}\text { Injury Epidemiology and Violence } \\ \text { Prevention }\end{array}\end{array}$
PHC 6312C Health Impacts of Air, Water, and Land
PHC 6356 Fundamentals of Industrial Hygiene 3
$\begin{array}{ll}\text { PHC } 6374 & \text { Environmental Disasters \& Human } \\ & \text { Health }\end{array}$
$\begin{array}{ll}\text { PHC } 6422 & \begin{array}{l}\text { Legal and Regulatory Aspects of } \\ \text { Environmental Health }\end{array} \\ & \text { P }\end{array}$
PHC $6520 \quad$ Public Health Aspects of Food borne Disease

PHC 6763 Global Perspectives of Environmental Health in Caribbean \& Latin America

PHC 6907 omics and Molecular Toxicology Journal Club 3 Independent Study in Public Health 1-3
PHC 6914L Current Topics in Environmental and Occupational Health Science Research Lab
PHC $6920 \quad$ Special Topics in Environmental Health 3
PHC 7018C Advanced Environmental Health 3
PHC $7300 \quad$ Biological Basis of Environmental Public
PHC $7372 \quad$ Signal Transduction in Environmental
PHC 7374C $\quad \begin{aligned} & \text { Health and Toxicology } \\ & \text { Advances in Cellular \& Environmental }\end{aligned}$
PHC 7374C Advances in Cellular \& Environmental Toxicology
Practicum and Culminating Experience: (6 credits)

| PHC 6945 | Practicum in Public Health | 3 |
| :--- | :--- | :--- |
| PHC 6930C | Integrative Seminar in Public Health | 3 |

PHC 6930C Integrative Seminar in Public Health
PHC 6945 (Practicum) and PHC 6930C (culminating experience) are both required for all MPH students. The Practicum may be taken after completing a minimum of 30 hours, including all core courses. The Practicum may be waived if the student has at least 3 years of relevant practice experience working in a public health practice setting. The waiver request is prepared and submitted by the student, through their Faculty Advisor and Department Chair, for final approval/disapproval by the Academic Public Health Director. If the Practicum requirement is waived, the student will need to substitute 3 additional approved hours so that the total curriculum hour requirement of 45 is met. MPH students are expected to complete PHC 6930c Integrative Seminar in Public Health during their last semester in the program.

## Doctor of Philosophy in Public Health Major in Environmental and Occupational Health

The Doctor of Philosophy (Ph.D.) in Public Health is available with a major in Environmental and Occupational Health. Students will be expected to demonstrate significant research capacity by completing 60 credits beyond the Master's degree and through the writing of an original dissertation.

## Doctoral Admissions

Applicants must meet the University's general graduate admission requirements:

1. A four-year bachelor's degree or equivalent from a nationally accredited institution or, in the case of foreign students, from a well established institution of higher learning that is authorized to grant degrees by appropriate authorities in that country.
2. A minimum of a 3.0 GPA , " $B$ " average, in the last 60 upper-division undergraduate coursework, or a graduate degree from a nationally accredited institution.
3. Official GRE scores (scores must be no more than five years old).
4. International graduate student applicants whose native language is not English are required to submit
a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or a 6.5 overall on the IELTS is required.
The College also requires:
5. A current resume.
6. Three letters of recommendation.
7. A writing sample (master's thesis or project, published manuscript, or other).
Potential applicants are strongly encouraged to contact individual faculty to discuss common research interests since admission decisions may require identification of a potential faculty mentor.

## Doctoral Requirements

A student may enroll for dissertation credits after completing all coursework, passing the candidacy examination, and being advanced to candidacy. Dissertation credits cannot be taken before advancement to candidacy.

The candidacy examination will be prepared and graded by a committee consisting of a minimum of three faculty members. Admission to candidacy requires that a majority of the committee members agree that the student passed the examination. A candidacy examination may not be passed conditionally. A "Pass" on the examination cannot be made contingent upon other factors such as the completion of additional coursework or the preparation of extra research projects. Students will be allowed only two attempts to pass the candidacy examination.

After a doctoral student is admitted to candidacy, continuous registration for at least 3 dissertation credit hours each semester (including the summer term) is required until the dissertation requirement is fulfilled.

## Required Courses

The major requires a minimum of 75 credit hours beyond the baccalaureate which includes a minimum of 24 credit hours of dissertation credits. There are three components to the Ph.D. curriculum. The first is a core curriculum shared across all majors ( 12 credit hours). The second component is specific to the major ( 27 credit hours) and secondary field courses (12 credit hours). The third component consists of the dissertation, including 24 dissertation credit hours.
Shared Core Courses: ( $\mathbf{1 2}$ credits)
PHC 6601 Emerging Issues in Public Health 3
PHC $6091 \quad 3$
(or other approved Quantitative Methods course)
PHC 7981 Research Concepts and Proposal
PHC 7705 $\quad$ Development Health
Health 3

Courses for Environmental and Occupational Health Major (A minimum of 27 hours which include a minimum of 9 hours in Methods Courses and 18 hours (with minimum of 9 at the 7000 level) in Content Courses.

## Methods Courses: ( 9 credits)

PHC 6914L Current Topics in Environmental and Occupational Health Science Research Lab

1-3

| PHC 7713 | Advanced Environmental and <br> Occupational Epidemiology Research |  |
| :--- | :--- | :--- |
|  | Methods | 3 |
| PHC 6917 | Pre Doctoral Research | $1-6$ |

PHC 6914L Course may be taken three times to equal 9 credit hours, OR PHC 6917 may be taken twice, to equal 6 credit hours, along with PHC 7713 totaling the 9 credit hours needed for method courses.

## Content Courses: (18 credits)

$\begin{array}{ll}\text { PHC } 6001 & \text { Environmental and Occupational } \\ & \text { Epidemiology }\end{array}$
$\begin{array}{ll}\text { PHC } 6004 & \begin{array}{l}\text { Injury Epidemiology and Violence } \\ \text { Prevention }\end{array}\end{array}$
$\begin{array}{ll}\text { PHC } 6310 & \text { Environmental \& Occupational } \\ & \text { Toxicology }\end{array}$
PHC 6311 Environmental Health Risk Assessment 3
PHC 6312C Health Impacts of Air, Water, and Land
PHC 6316 Environmental Health Management 3
PHC $6355 \quad$ Occupational Health and Safety 3
PHC 6356 Fundamentals of Industrial Hygiene 3
$\begin{array}{ll}\text { PHC } 6374 & \text { Environmental Disasters \& Human } \\ & \text { Health }\end{array}$
PHC 6422 Legal and Regulatory Aspects of Environmental Health 3
PHC $6520 \quad \begin{aligned} & \text { Public Health Aspects of Food Borne } \\ & \\ & \text { Diseases }\end{aligned}$
PHC $6538 \quad$ Genetic Issues in Public Health 3
PHC $6763 \quad$ Global Perspectives of Environmental Health in Caribbean \& Latin America 3
PHC 6900 Environmental Public Health Genomics and Molecular Toxicology Journal Club 3
PHC 6907 Independent Study in Public Health 3
PHC 6920 Special Topics in Environmental and Occupational Health3

PHC 7018C Advanced Environmental Health 3
PHC $7300 \quad$ Biological Basis of Environmental Public
PHC $7372 \quad$ Signal Transduction in Environmental Health and Toxicology 3
PHC 7374C Advances in Cellular \& Environmental Toxicology

## Secondary Field Courses: (12 credits)

At least 12 credit hours of approved secondary field courses. Secondary field courses selected from approved graduate school courses in consultation with academic advisor.

## Dissertation Requirements: ( $\mathbf{2 4}$ credits)

PHC 7980 Dissertation
For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/students/index.html.
For information regarding Ph.D. research project areas, please visit:
http://findaphd.com/search/PhDDetails.aspx?CAID=26
82\&LID=546.

## Epidemiology

Wasim Maziak, Professor and Chair
Nasar U. Ahmed, Associate Professor
Miguel Cano, Assistant Professor
Kristopher P. Fennie, Assistant Professor
Gladys Ibanez, Assistant Professor
Purnima Madhivanan, Associate Professor and PhD Program Coordinator
Vukosava Pekovic, Clinical Assistant Professor and
MPH Program Director
Mary Jo Trepka, Professor

## Affiliated Faculty

Erica Gollub, Courtesy Assistant Professor
Jeffrey D. Klausner, Courtesy Professor
David J. Lee, Courtesy Professor
Claudio Micieli, Adjunct Instructor
Khurram Nasir, Courtesy Professor
The Department offers a Graduate Certificate in Epidemiology, a Master's degree in Public Health with major in Epidemiology; and a Ph.D. in Public Health with a major in Epidemiology.

## Application Deadline

The application deadline for PhD and priority deadline for MPH with a major in Epidemiology is February $15^{\text {th }}$. MPH applications submitted prior to this deadline will be considered for admission first. Applications submitted after February $15^{\text {th }}$ will be considered for slots that have not been filled until the University's deadline of June $1^{\text {st }}$.
MPH in Epidemiology courses prepare students to investigate the distribution of diseases and health conditions in the population, disease outbreaks and the factors determining the distribution.

## Admission Requirements

Applicants must meet the University's general graduate admission requirements:

1. A Bachelor's degree or equivalent from an accredited college or university or, in the case of foreign students, an institution recognized in its own country as preparing students for further study at the graduate level.
2. A minimum 3.0 GPA on the last 60 under-graduate hours. In addition, applicants are required to submit 1) a current resume; and 2) a written statement of purpose (career goals). Applicants are also encouraged to submit three letters of recommendation.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Students with diverse backgrounds are encouraged to apply.
4. Submission of official GRE scores. Scores must be no more than 5 years old.

## MPH Core Curriculum: ( $\mathbf{1 5}$ credits)

| PHC 6000 | Epidemiology I: Introduction to Public |  |
| :--- | :--- | :--- |
|  | Health Epidemiology | 3 |
| PHC 6065 | Public Health Statistics | 3 |
| PHC 6102 | Introduction to Public Health Policy and |  |
|  | Management | 3 |
| PHC 6315 | Introduction to Environmental Health | 3 |
| PHC 6410 | Health Behavior and Public Health | 3 |

Major in Epidemiology: ( 15 credits)
PHC 6002 Infectious Disease Epidemiology 3
PHC $6003 \quad 3$
PHC 6008 Cardiovascular Disease Epidemiology 3
PHC 6013 Epidemiology II: Observational Design 3
PHC 6016 Social Epidemiology 3
PHC 6441 Epidemiology of Health Disparity 3
PHC 6090 Advanced Public Health Statistics 3
Electives for Epidemiology: (9 credits)*
PHC 6001 Environmental and Occupational Epidemiology
PHC 6004 Injury Epidemiology and Prevention 3
PHC 6007 Cancer Epidemiology 3
PHC 6009 AIDS Epidemiology and Control 3
PHC 6012 Current Research in Epidemiology 3
PHC 6014 Behavioral Epidemiology 3
PHC $6020 \quad$ Clinical Epidemiology 3
PHC 6033 Mechanism of Complex Disease in Public Health 3
$\begin{array}{ll}\text { PHC } 6055 & \begin{array}{l}\text { Data Management and Applied } \\ \text { Epidemiologic Analysis }\end{array}\end{array}$
PHC 6062 Systematic Reviews and Meta-Analysis 3
PHC 6064 Model for Binary Public Health
Outcomes 3
PHC 6251 Disaster and Emergency Epidemiology 3
PHC 6443 Ethical Issues in Public Health 3
PHC 6536 Health Demography 3
PHC $6591 \quad$ Reproductive Health Epidemiology 3
PHC $6700 \quad$ Methods and Analysis of Epidemiologic
PHC 6703 Epidemiology Methods: Experimental Design

3

PHC 6762 Sul
PHC 6907 Independent Study in Public Health 1-3
PHC 6934 Scientific Writing and Oral Presentation
in Epidemiology
PHC $6595 \quad 3$
PHC 6034 Intermediate Epidemiology 3

* or any other advisor approved elective, including those
offered as Major in Epidemiology courses.


## Practicum and Culminating Experience: ( 6 credits)

PHC $6945 \quad$ Practicum in Public Health 3
PHC 6930C Integrative Seminar in Public Health 3
PHC 6945 (Practicum) and PHC 6930C (culminating experience) are both required for all MPH students. The Practicum may be taken after completing a minimum of 30 hours, including all core courses. The Practicum may be waived if the student has at least 3 years of relevant practice experience working in a public health practice setting. The waiver request is prepared and submitted by the student, through their Faculty Advisor and Department Chair, for final approval/disapproval by the Academic

Public Health Director. If the Practicum requirement is waived, the student will need to substitute 3 additional approved hours so that the total curriculum hour requirement of 45 is met. MPH students are expected to complete PHC 6930c Integrative Seminar in Public Health during their last semester in the program.

## Doctor of Philosophy in Public Health Major in Epidemiology

The Doctor of Philosophy (Ph.D.) in Public Health is available with a major in Epidemiology. Students will be expected to demonstrate significant research capacity by completing 60 credits beyond the Master's degree and through the writing of an original dissertation.

## Doctoral Admissions

Applicants must meet the University's general graduate admission requirements:

1. A four-year bachelor's degree or equivalent from a nationally accredited institution or, in the case of foreign students, from a well established institution of higher learning that is authorized to grant degrees by appropriate authorities in that country.
2. A minimum of a 3.0 GPA, " $B$ " average, in the last 60 upper-division undergraduate coursework, or a graduate degree from a nationally accredited institution.
3. Official GRE scores (scores must be no more than five years old).
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or a 6.5 overall on the IELTS is required.

The College also requires:

1. A current resume
2. Three letters of recommendation.
3. A writing sample (master's thesis or project, published manuscript, or other).
Potential applicants are strongly encouraged to contact individual faculty to discuss common research interests since admission decisions may require identification of a potential faculty mentor.

## Doctoral Requirements

A student may enroll for dissertation credits after completing all coursework, passing the candidacy examination, and being advanced to candidacy. Dissertation credits cannot be taken before advancement to candidacy.

The candidacy examination will be prepared and graded by a committee consisting of a minimum of three faculty members. Admission to candidacy requires that a majority of the committee members agree that the student passed the examination. A candidacy examination may not be passed conditionally. A "Pass" on the examination cannot be made contingent upon other factors such as the completion of additional coursework or the preparation of extra research projects. Students will be allowed only two attempts to pass the candidacy examination.

After a doctoral student is admitted to candidacy, continuous registration for at least 3 dissertation credit
hours each semester (including the summer term) is required until the dissertation requirement is fulfilled.

## Required Courses

The program requires a minimum of 75 credit hours beyond the baccalaureate which includes a minimum of 24 hours of dissertation credits. There are three components to the College Ph.D. curriculum. The first is a core curriculum shared across all majors (12 credit hours). The second component is specific to the major ( 27 credit hours) and secondary field courses (12 credit hours). The third component consists of the dissertation, including 24 dissertation credit hours.

## Shared Core Courses: (12 credits)

PHC 6601 Emerging Issues in Public Health 3
PHC 6091 Biostatistics 2
PHC 7981 Research Concepts and Proposal Development
PHC $7705 \quad$ Methods in Evidence Based Public Health

Courses for a Major in Epidemiology A minimum of 27 hours which include a minimum of 9 hours in Methods Courses and 18 hours (with minimum of 9 at the 7000 level) in Content Courses.

Methods Courses: (9 credits)
$\begin{array}{ll}\text { PHC } 6190 & \begin{array}{l}\text { Biostatistical Methods for Survey } \\ \text { Research }\end{array}\end{array}$
PHC 7015 Advanced Research Methods:
PHC $7719 \quad$ Quantitative Multivariate Analysis in Health Sciences Research
Content Courses: (18 credits)
PHC 6000 Epidemiology I: Introduction to Public Health Epidemiology
PHC 6001 Environmental and Occupational Epidemiology
PHC 6002 Infectious Disease Epidemiology
PHC $6003 \quad 3$ 3

PHC 6004 Injury Epidemiology and Prevention 3
PHC 6007 Cancer Epidemiology 3
PHC 6008 Cardiovascular Disease Epidemiology
PHC 6009 AIDS Epidemiology and Control 3
PHC $6012 \quad$ Current Research in Epidemiology 3
PHC 6013 Epidemiology II: Observational Design
PHC 60143
PHC 60163
PHC $6020 \quad 3$
PHC 6062 Systematic Reviews and Meta-Analysis
PHC 6251 Disaster and Emergency Epidemiology
PHC 6441 Epidemiology of Health Disparity 3
PHC 6443 Ethical Issues in Public Health 3
PHC 6536 Health Demography 3
PHC 6591 Reproductive Health Epidemiology 3
PHC $6700 \quad$ Methods and Analysis of Epidemiologic Research
PHC 6715 Survey Research in Public Health 3
PHC 6762 International Public Health 3
PHC 6907 Independent Study: Public Health 3
PHC 6934 Scientific Writing and Oral Presentation in Epidemiology

3
PHC 6939 Special Topics in Cardiovascular Disease Epidemiology

PHC 7011 Advanced Current Research in
Epidemiology 3
PHC 7017 Advanced Epidemiology of Health
PHC $7162 \quad$ Grant Writing in Public Health 3
$\begin{array}{ll}\text { PHC } 7982 & \text { Public Health Pre-Dissertation } \\ & \text { Research }\end{array}$
PHC $6595 \quad 3$
PHC 7606 Tobacco Use: Causes, Consequences,
Secondary Field Courses: ( 12 credits)
At least 12 credit hours of approved secondary field courses. Secondary field courses are selected from approved graduate school courses in consultation with academic advisor.

Dissertation Requirements: ( $\mathbf{2 4}$ credits)
PHC 7980 Dissertation 24
For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/students/advising/index.html.

## Health Policy and Management

Benjamin C. Amick III, Professor and Chair<br>Jessica L. Adler, Assistant Professor<br>Alejandro Arrieta, Assistant Professor<br>Weiwei Chen, Assistant Professor<br>Tianyan Hu, Assistant Professor<br>Timothy Page, Associate Professor<br>Fredrick Newman, Professor Emeritus<br>Mark L. Williams, Professor

The Department of Health Policy and Management, through the College of Public Health and Social Work, offers the MPH with a major in Health Policy and Management. In partnership with the Departments of Economics and Public Affairs, joint PhD's are offered in health economics and health policy.

## MPH Application Deadline

The priority application deadline for MPH with a major in Health Policy and Management is February 15th. Applications submitted prior to this deadline will be considered for admission first. Applications submitted after February 15th will be considered for slots that have not been filled until the University's deadline of June 1st.

## MPH in Health Policy and Management

Courses emphasize policy issues influencing management in the public health field. The major is for individuals interested in management positions in public health and non-profit, community organizations.

## Admission Requirements

Applicants must meet the University's general graduate admission requirements:

1. A Bachelor's degree or equivalent from an accredited college or university or, in the case of foreign students, an institution recognized in its own country as preparing students for further study at the graduate level.
2. A minimum 3.0 GPA on the last 60 undergraduate hours. In addition, applicants are required to submit 1) a current resume; and 2) a written statement of purpose (career goals). Applicants are also encouraged to submit three letters of recommendation.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Students with diverse backgrounds are encouraged to apply.
4. Submission of official GRE scores. Scores must be less than 5 years old.

## MPH Core Curriculum: ( 15 credits)

PHC 6000 Epidemiology I: Introduction to Public
PHC 6065 Public Health Statistics 3
PHC 6102 Introduction to Public Health Policy and Management

| PHC 6315 | Introduction to Environmental Health <br> PHC 6410 | 3 |
| :--- | :--- | :--- |
| Health Behavior and Public Health |  |  |$\quad 30$

## Elective Courses: (6 credits)

Electives may be selected from any PHC course with approval of a HPM faculty advisor, if prerequisites or their equivalents have been satisfied. Students should consult with their faculty advisor for approval prior to selecting elective courses.

PHC 6500 is not accepted as an elective course for the HPM major.
Practicum and Culminating Experience: (6 credits)
PHC $6945 \quad$ Practicum in Public Health 3 PHC 6930C Integrative Seminar in Public Health 3
PHC 6945 (Practicum) and PHC 6930C (culminating experience) are both required for all MPH students. The Practicum may be taken after completing a minimum of 30 hours, including all core courses. The Practicum may be waived if the student has at least 3 years of relevant practice experience working in a public health practice setting. The waiver request is prepared and submitted by the student, through their Faculty Advisor and Department Chair, for final approval/disapproval by the Academic Public Health Director. If the Practicum requirement is waived, the student will need to substitute 3 additional approved hours so that the total curriculum hour requirement of 45 is met. MPH students are expected to complete PHC 6930c Integrative Seminar in Public Health during their last semester in the program.
For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/students/advising/index.html.

## Combined M.P.H. in Health Policy and Management/Ph.D. in Economics

The Robert Stempel College of Public Health and Social Work and the Department of Economics in the College of Arts and Sciences are jointly proposing a new track of a Masters of Public Health, with a specialization in Health Policy and Management, and a Ph.D. in Economics. An M.P.H. with a specialization in Health Policy and Management provides students with grounding in public health, health policy analysis, health economics, and public health leadership. The Ph.D. in Economics extends the training in public health by providing advanced training in economics.

Students are admitted to the M.P.H. and the Ph.D. programs simultaneously. Classes begin in the fall semester in the Robert Stempel College of Public Health and Social Work, concentrating on training in the core
areas of public health. Students begin doctoral work in the Department of Economics in the second year. Requirements for the M.P.H. are completed at the end of the second year. Nine credit hours (three courses) in Economics can be applied towards the student's M.P.H. degree. The dissertation topic will be related to health economics or health economics and policy. Students will work with faculty in the Department of Economics and the Department of Health Policy and Management to write the dissertation.

Students will be expected to complete 45 credits for the M.P.H., nine credits of which will be in the Ph.D. program. Students will also be expected to complete 60 credit hours for the Ph.D.

## Required Courses

## First Year

Fall Semester
PHC $6000 \quad$ Epidemiology I: Introduction to Public Health Epidemiology
PHC 6065 Public Health Statistics
PHC 6315 Introduction to Environmental Health

| Spring Semester |  |
| :--- | :--- |
| PHC 6013 | Epidemiology II: Observational Design |
| PHC 6190 | Biostatistical Methods for Survey <br> Research |
| PHC 6102 | Introduction to Public Health Policy and <br> Management |

## Summer Semester

PHC 6410 Health Behavior and Public Health
PHC 6155C Health Policy Analysis

| Second Year <br> Fall Semester <br> PHC 6190 | Biostatistical Methods for Survey <br> Research |
| :--- | :--- |
| PHC 5430C | Public Health Economics <br> PHC 6104C <br> Public Health Management and <br> Leadership |
| Spring Semester |  |

## Summer Semester

ECO $7405 \quad$| Mathematical Methods in Economic |  |
| :--- | :--- |
|  | Analysis I |

Third Year

## Fall Semester

ECO 7115 Microeconomic Theory I
ECO 7206 Macroeconomic Theory I
ECO 7424 Econometric Methods I
$\begin{array}{ll}\text { Spring Semester } & \\ \text { ECO } 7207 & \text { Macroeconomic Theory II } \\ \text { ECO } 7116 & \text { Microeconomic Theory II }\end{array}$
Summer Semester
ECO 7425 Econometric Methods II
Fourth Year
Fall \& Spring Semester
Field Courses

## Summer Semester

Dissertation

## Combined M.P.H in Health Policy and Management/Ph.D. in History

The combined M.P.H. with a major in Health Policy and Management/Ph.D. in History is intended for those students in the program who are in interested in leadership positions in government, private, voluntary, and research organizations. The major is offered as a combined degree in Master of Public Health is offered by the Department of Health Policy and Management and the Ph.D. in History is offered by the Department of History. Students in this combined degree program will need to be admitted to both the M.P.H. and the Ph.D. programs. Students intending to pursue this major must check the Health Policy and Management subplan option in the application. All nine of the allowed M.P.H. elective credits will be completed in the History Department within the first two years of students' entry into the combined program. Three of those credits will be completed in HIS 6059 (Historical Methods). Students will be encouraged to pursue a public health practicum that allows them to explore historical questions and conduct qualitative research, in addition to other practicum requirements. Students will earn their M.P.H. after two full years of study (including summers), complete comprehensive exams in History immediately following their fourth year, and earn their Ph.D. after defending their dissertations, usually in or after their sixth year.

## Required Courses

First Year (Public Health: 15 PH core; 6 HPM core, 3 PH elective) (History: 9)

## Fall Semester

PHC 6102 Introduction to Public Health Policy and Management
PHC $6065 \quad$ Public Health Statistics
PHC 6000 Epidemiology I: Introduction to Public Health Epidemiology

## Spring Semester

HIS $6059 \quad$ Historical Methods
PHC 6410 Health Behavior and Public Health PHC 6315 Introduction to Environmental Health

## Summer Semester

PHC 6154C Evidence Synthesis Applied to Clinical Settings and Health Policy-Making
HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS)
HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS)
Second Year (Public Health: 9; HPM core; 6 PH elective) (History: 12)
Fall Semester
PHC 5430C Public Health Economics
HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS)
PHC 6104C Public Health Management and Leadership

## Spring Semester

PHC 6063C Health Policy Database Applications
PHC 6155C Health Policy Analysis
PHC 6945 Practicum in Public Health (could earn HIS credit with approval of Graduate Program Director)

## Summer Semester

PHC 6930C Integrative Seminar in Public Health (could earn HIS credit with approval of Graduate Program Director)
HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS) HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS)

## Third through Six Year

1. HIS 6059 (Historical Methods), 3 credits.
2. Readings and Research in Atlantic Civilization (HIS 6906 and HIS 6918), 6 credits.
3. 24 credits are required in the student's core culture area to be chosen from the United States, Latin America and the Caribbean, Africa, or Europe, including at least 6 credits in a research seminar.
4. 15 credits are required in geographical/topical areas outside the culture area of concentration, 3 of which must be in comparative course (WOH or HIS, not including Historical Methods or Atlantic Civilization).
5. 12 elective credits, 9 of which may be taken outside the department with the permission of the Director of Graduate Studies.
6. 15 credits of dissertation research.

## Combined M.P.H in Health Policy and Management/Ph.D. in Public Affairs

The combined M.P.H. with a major in Health Policy and Management/Ph.D. in Public Affairs is intended for those students in the program who are interested in research on issues of public health, health policy, health management and related areas. The major is offered as a combined degree in Master of Public Health is offered by the Department of Health Policy and Management and the Ph.D. in Public Affairs is offered by the Department of Public Administration. Students in this combined degree program will need to be admitted to both the M.P.H. and the Ph.D. programs. Students intending to pursue this major must check the Health Policy and Management subplan option in the application. Students will complete the M.P.H. course requirements in the first two years, and will begin the Ph.D. program in the second year.

The admission process and degree requirements for the combined degree program are the same as that of the requirements for the main Ph.D. in Public Affairs. The program curriculum is, however, customized for the combined degree program. In addition to the core classes, the students in this combined degree program will take specialization courses in health policy and management. The students will need to be admitted to both the M.P.H. and the Ph.D. programs.

## Program of Study

The combined M.P.H. with a major in Health Policy and Management/Ph.D. in Public Affairs is a 60 semester hour program (excluding the semester credit hours required for the Master of Public Health program). There are eight core courses ( 24 semester credit hours), six courses in health policy and management major (18 semester credit hours), a comprehensive examination (minimum of three semester credit hours), and dissertation (15 semester credit hours).

During the first semester of the Ph.D. program, students are required to select, with the assistance and approval of the Ph.D. Director, an Advisor who is a fulltime faculty member in the program. By the end of the first
year, students are required to develop a program of study with the assistance and approval of their Advisor and the Ph.D. Director. The Advisor may not necessarily be the same as the student's Dissertation Committee Chair at the later stage.

## Core Curriculum ( 24 credits)

| PAD 7277 | Public Administration and the American |
| :---: | :---: |
|  | Political Economy 3 |
| PAD 7155 | Organizational Development and |
|  | Change in Public and Nonprofit |
|  | Organizations 3 |
| PAD 7808 | Economic Development and Urban |
|  | Management 3 |
|  | (Crosslisted with PAD 5805 Econom |
|  | Development and Urban Revitalization) |
| PAD 7865 | Development Administration 3 |
|  | (Crosslisted with PAD 6838 |
|  | Development Administration) |
| PAD 7703C | Empirical Methods in Public |
|  | Administration 3 |
| PAD 7705 | Applied Quantitative Analysis I 3 |
| PAD 7707 | Applied Quantitative Analysis II 3 |
| PAD 7055 | Scope and Theory of Public |
|  | Administration 3 |

## Specialization Courses (18 credits)

Students are required to take six courses in an area of health policy and management. The courses must be at the 5000,6000 , or 7000 level and may be taken within the University. These specialization electives may also be especially designed courses developed in conjunction with the student's advisor and with approval of the Ph.D. Director. Specialization areas may be broadly related to health policy or healthcare management. Nine semester credit hours of the M.P.H. program will be included in the Ph.D. program. At least three hours must be URS 7926 (Supervised Readings), taken in conjunction with comprehensive examination preparation.

In developing a specialization and program of studies, students may consult with faculty in both public administration and health policy and management.

## Comprehensive Examination (3 credits)

Subsequent to completion of course work, students are required to pass a two-part comprehensive examination. The first component of the comprehensive examination is a written examination testing for knowledge of the Ph.D. core and related material. The second component is the submission of a research proposal that outlines the dissertation research problem, its significance, and the research method.

Students who fail the Comprehensive Examination on the first attempt must retake the examination at its next offering. Students who fail the examination twice are automatically dismissed in accord with general University policy.

## Dissertation (15 credits)

In consultation with the Ph.D. Director and the Advisor, students should identify Dissertation Committee Chair during the first two years of the program. Either the chair or the co-chair should be from the Department of Public Administration. The student should also form the dissertation committee before the comprehensive examination. Upon successful completion of the
comprehensive examination, students should finalize their dissertation prospectus before the end of the first semester subsequent to passing the Comprehensive Examination.

Upon the public defense and approval of the proposal, the students will initiate formal work on the dissertation. During this time, the students is expected to make appropriate progress toward completing the dissertation, and to enroll continually (at least six credits per semester) until the degree is completed. Upon completion of the dissertation, candidates will formally defend the research at a meeting conducted by the dissertation committee. The degree will be awarded upon a positive recommendation of the committee and compliance with all policies and procedures required by the university.

Award of en route Master's Degree to Ph.D. Candidates: Under certain circumstances, individuals directly admitted into the Ph.D. program following completion of their bachelor's degree, may be awarded a master's degree in public health. To be eligible, a student must complete core requirements in the master's program. Upon certification by the student's advisor that this requirement has been met, the Ph.D. committee will approve the award of the master's degree upon passing of comprehensive examinations.

## Combined MPH in Health Policy and Management/Graduate Certificate in Healthcare Management

The Department of Health Policy and Management in the Robert Stempel College of Public Health and Social Work and the Health Management Programs in the Chapman Graduate School of Business offer a combined Masters of Public Health (MPH) degree and a Graduate Certificate in Healthcare Management. An MPH with a specialization in Health Policy and Management provides students with grounding in public health, health policy analysis, health economics, public health leadership, and an introduction to qualitative and quantitative research methods. The Graduate Certificate in Healthcare Management is designed to provide breadth of knowledge in the healthcare management field. The objective of the graduate certificate is to provide individuals with the basic understanding of management, operational, and reimbursement issues challenging today's health care organizations.

Students are admitted to the MPH program once a year in the fall semester as a cohort. Classes begin in the fall semester in the College of Public Health and Social Work, concentrating on training in the core areas of public health. Students begin work in the graduate certificate during the second year, while taking public health courses. Requirements for the MPH are completed at the end of the second year. Nine credit hours (three courses) in the Certificate Program can be applied towards the student's MPH degree. Three credit hours (one course*) in the MPH program can be applied towards the student's Certificate program. The remaining three credit hours (one course) in the Certificate Program must be completed prior to completing the MPH degree. Courses in the College of Public Health and Social Work are offered on a traditional semester schedule. Courses in the Graduate Certificate in Healthcare Management are offered using an 8-week
hybrid schedule. This certificate program is open to degree-seeking students only.

## Required Credits

Students will complete 45 degree credits required for the MPH, 9 credits of which will be credits from the certificate program. These nine credits are substitutes for electives in the MPH program. To obtain the certificate, students must complete an additional 6 credits, for a total of 15 credits, in the certificate program.

## Required Courses

Students interested in pursuing the MPH/Certificate will apply to the MPH program in the College of Public Health and Social Work and the Certificate program in the College of Business. Before applying, students will be encouraged to speak with an advisor in the Department of Health Policy and Management and the advisor for the Graduate Certificate in Healthcare Management in the Chapman Graduate School of Business. Application for the Certificate program is completed after acceptance into the MPH program.

To be considered for admission to the College of Public Health, students must have, at minimum, a GPA of 3.0, GRE scores in the top $20^{\text {th }}$ percentile, and strong letters of recommendation from three faculty familiar with previous academic performance.

Students will be admitted to and enroll in the MPH program. Students will be required to complete all the requirements of the MPH degree program. The 15 hour core elements of the MPH degree will be completed. Students will enroll in the certificate program in the second year.

Required courses included in the plan are:


## Doctor of Philosophy in Public Health Major in Health Systems Research

The Doctor of Philosophy (Ph.D.) in Public Health is available with a major in Health Systems Research. Students will be expected to demonstrate significant research capacity through the writing of an original dissertation.

## Doctoral Admissions

Applicants must meet the University's general graduate admission requirements:

1. A four-year bachelor's degree or equivalent from a nationally accredited institution or, in the case of foreign students, from a well-established institution of higher learning that is authorized to grant degrees by appropriate authorities in that country.
2. A minimum of a 3.0 GPA , " B " average, in the last 60 upper-division undergraduate credits, or a graduate degree from a nationally accredited institution.
3. Official GRE scores (scores must be no more than five years old).
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or a 6.5 overall on the IELTS is required.
The College also requires:
5. A current resume.
6. Three letters of recommendation.
7. A writing sample (master's thesis or project, published manuscript, or other).

Potential applicants are strongly encouraged to contact individual faculty to discuss common research interests, since admission decisions require identification of a faculty mentor.

## Doctoral Requirements

A student may enroll for dissertation credits after completing all coursework, passing the candidacy examination, and being advanced to candidacy. Dissertation credits cannot be taken before advancement to candidacy.

The candidacy examination will be prepared and graded by a committee consisting of a minimum of three faculty members. Admission to candidacy requires a majority of the committee members agree the student passed the examination. A candidacy examination may not be passed conditionally. A "Pass" on the examination cannot be made contingent upon other factors such as the completion of additional coursework or the preparation of extra research projects. Students will be allowed only two attempts to pass the candidacy examination.

After a doctoral student is admitted to candidacy, continuous registration for at least three dissertation credits is required until the dissertation requirement is fulfilled.

## Required Courses

The program requires a minimum of 75 credit hours beyond the baccalaureate, including a minimum of 24 hours of dissertation credits. There are three components to the College Ph.D. curriculum. The first component is a core curriculum shared across all public health majors (12 credit hours). The second component is specific to Health Systems Research ( 27 credit hours) and doctoral seminar (12 credit hours). The third component consists of the dissertation, including 24 dissertation credit hours.
Shared Core Courses: ( $\mathbf{1 2}$ credits)
PHC 6601 Emerging Issues in Public Health 3
PHC 6091 Biostatistics 2

| PHC 7981 | Research Concepts and Proposal <br> Development | 3 |
| :--- | :--- | :--- |
| PHC 7705 | Methods in Evidence Based Public <br> Health | 3 |


| Courses for Health Systems Research Major: A minimum of 39 credit hours which include a minimum of |  |
| :---: | :---: |
| 12 hours in Methods Courses, 15 hours in Content Courses, and 12 credits of doctoral seminar. |  |
|  |  |
| Methods Cour | (12 credits) |
| PHC 7xxx | Advanced Methods for Health Systems Research |
| PHC 7xxx | Advanced Methods for Health Policy Evaluation |
| PHC 7xxx | Applied Econometrics for Health Systems Research |
| Content Courses: (15 credits) |  |
| PHC 6155C | Health Policy Analysis |
| PHC 5430C | Public Health Economics |
| PHC 6118 | Introduction to Population Health |
|  | Management |
| 7xxx | Health Systems Research Readings I |
| PHC 7xxx | Health Systems Research Readings II |

Doctoral Seminar: ( 12 credits)
PHC 7xxx Doctoral Seminar in Health Systems Research
Students will be required to participate in the doctoral seminar during Fall and Spring semesters of the first three years in the program.
Dissertation Requirements: ( $\mathbf{2 4}$ credits)
PHC 7980 Dissertation
24

## Health Promotion and Disease Prevention

Elena Bastida, Professor and Chair<br>Consuelo Beck-Sague, Assistant Professor<br>Rashida Biggs, Clinical Assistant Professor<br>William W. Darrow, Professor<br>Jessy Devieux, Associate Professor<br>Melissa Howard, Clinical Assistant Professor<br>Virginia McCoy, Professor<br>Richard Palmer, Associate Professor<br>Joseph Patterson, Emeritus Professor<br>Mary Shaw-Ridley, Associate Professor

The Department offers Graduate Certificates, a Master's degree in Public Health (MPH) with a major in Health Promotion and Disease Prevention, MPH in Health Promotion and Disease Prevention with a Concentration in Maternal and Child Health, and a Ph.D. in Public Health with a major in Health Promotion and Disease Prevention.

## Application Deadline

The application deadline for PhD and priority deadline for both MPH with a major in Health Promotion and Disease Prevention is February 15th. MPH applications submitted prior to this deadline will be considered for admission first. Applications submitted after February 15th will be considered for slots that have not been filled until the University's deadline of June $1^{\text {st }}$.
MPH in Health Promotion and Disease Prevention courses prepare students to develop and implement health promotion/health education programs in various sites. This program of study is concerned with personal and public health lifestyles, identification of risk factors and behavioral change strategies that promote positive health behaviors of individuals, groups, and community. See also Graduate Certificates in Health Promotion and Maternal and Child Health, which do not require enrollment in the MPH degree program.

## Admission Requirements

Applicants must meet the University's general graduate admission requirements:

1. A Bachelor's degree or equivalent from an accredited college or university or, in the case of foreign students, an institution recognized in its own country as preparing students for further study at the graduate level.
2. A minimum 3.0 GPA on the last 60 undergraduate hours. In addition, applicants are required to submit 1) a current resume; 2) a written statement of purpose (career goals). Applicants are also encouraged to submit three letters of recommendation.
3. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Students with diverse backgrounds are encouraged to apply.
4. Submission of official GRE scores. Scores must be less than 5 years old.

MPH Core Curriculum: ( 15 credits)
PHC 6000 Epidemiology I: Introduction to Public
PHC $6065 \quad$ Pealth Epidemiology
PHC 6102 Introduction to Public Health Policy and Management

3
PHC 6315 Introduction to Environmental Health 3
PHC 6410 Health Behavior and Public Health 3
Major in Health Promotion and Disease Prevention: (12 credits)
PHC 6146 Health Promotion Program Planning and Intervention Design 3
PHC 6602 Theoretical Foundations of Health Promotion

3
PHC 6706
Research Methods in Public Health 3
PHC 6750 Program Development and Evaluation in Health Promotion

3

## Elective Courses: (12 credits)

Electives may be selected from the following list of Health Promotion and Disease Prevention courses. Students must consult with a faculty advisor for approval prior to selecting elective courses not on this list.
PHC $5009 \quad$ AIDS: Contemporary Issues 3
PHC 5113 Communities and Public Health 3
PHC $5409 \quad$ Public Health Behavior Change Theory
PHC $5412 \quad$ Cultural Competency for Public Health 3
PHC $5415 \quad$ Public Health in Minority Urban
PHC 6443 Ethical Issues in Public Health 3
$\begin{array}{ll}\text { PHC } 6504 & \text { Introduction to Health Education and } \\ & \text { Wellness }\end{array}$
PHC $6530 \quad$ Principles of Maternal and Child Health 3
$\begin{array}{ll}\text { PHC } 6580 & \begin{array}{l}\text { Contemporary Issues in Health } \\ \text { Promotion }\end{array}\end{array}$
$\begin{array}{lll}\text { PHC } 6589 & \begin{array}{l}\text { Health Promotion in Institutional } \\ \text { Settings }\end{array}\end{array}$
$\begin{array}{ll}\text { PHC } 6600 & \begin{array}{l}\text { Health Promotion Communication } \\ \text { Theory and Design }\end{array}\end{array}$
PHC $6710 \quad$ Qualitative Research Methods in Public
PHC 6715 Survey Research in Public Health 3
PHC 6751 Community Organization for Health
PHC 6762 International Public Health

| Practicum and Culminating Experience: (6 credits) |  |  |
| :--- | :--- | :--- |
| PHC 6945 | Practicum in Public Health | 3 |
| PHC 6930C | Integrative Seminar in Public Health | 3 |

PHC 6930C Integrative Seminar in Public Health 3
PHC 6945 (Practicum) and PHC 6930C (culminating experience) are both required for all MPH students. The Practicum may be taken after completing a minimum of 30 hours, including all core courses. The Practicum may be waived if the student has at least 3 years of relevant practice experience working in a public health practice setting. The waiver request is prepared and submitted by the student, through their Faculty Advisor and Department Chair, for final approval/disapproval by the Academic Public Health Director. If the Practicum requirement is waived, the student will need to substitute 3 additional approved hours so that the total curriculum hour requirement of 45 is met. MPH students are expected to complete PHC 6930c Integrative Seminar in Public Health during their last semester in the program.

## MPH in Health Promotion and Disease Prevention with a Concentration in Maternal and Child Health

The total credit requirement for the MPH is 45 credits. The MCH Concentration is organizationally housed in the MPH Health Promotion and Disease Prevention major which includes five courses ( 15 credits) in the MPH Core Curriculum, four courses ( 12 credits) in the HPDP Major and 2 courses ( 6 credits) in the Practicum and Culminating Experience. The other 12 credits, as noted above will include the MCH required and MCH elective coursework.

## MPH Core Curriculum: ( 15 credits)

PHC 6000 Epidemiology I: Introduction to Public Health Epidemiology
PHC 6065 Public Health Statistics
PHC 6102 Introduction to Public Health Policy and Management 3
PHC 6315 Introduction to Environmental Health 3
PHC 6410 Health Behavior and Public Health 3
Major in Health Promotion and Disease Prevention: (12 credits)
PHC 6146 Health Promotion Program Planning and
PHC 6602 Intervention Design
Promotion 3
PHC 6706 Research Methods in Public Health 3
PHC 6750 Program Development and Evaluation in Health Promotion
Maternal and Child Health Required Courses: (6 credits)
PHC 6530 Principles of Maternal and Child Health 3
PHC 6537 Case Studies in Maternal and Child Health Programs, Policies and Research

## Elective Courses: (6 credits)

Electives may be selected from the following list of Maternal and Child Health courses. Students must consult with a faculty advisor for approval prior to selecting elective courses not on this list.
PHC $5412 \quad$ Cultural Competency for Public Health 3
SOW 5240 Advanced Interventions in Child
PHC $5415 \quad \begin{array}{ll}\text { Maltreatment } \\ \text { Public Health in Minority Urban }\end{array}$
Populations 3
PHC 6063C Health Policy Database Applications 3
PHC 6591 Reproductive Health Epidemiology 3
PHC 6504 Introduction to Health Education and Wellness
PHC 6762 International Public Health 3
PHC 6xxx Analytic Methods in MCH 3
HUN 6415 Pediatric Nutrition 3
Practicum and Culminating Experience: (6 credits)

| PHC 6945 | Practicum in Public Health | 3 |
| :--- | :--- | :--- |
| PHC 6930C | Integrative Seminar in Public Health | 3 |

The practicum may be waived if the student has at least 3 years of relevant public health practice experience, and substituted for 3 additional MCH elective credit hours.

## Doctor of Philosophy in Public Health Major in Health Promotion and Disease Prevention

The Doctor of Philosophy (Ph.D.) in Public Health is available with a major in Health Promotion and Disease Prevention. Students will be expected to demonstrate significant research capacity by completing 60 credits beyond the Master's degree and through the writing of an original dissertation.

## Doctoral Admissions

Applicants must meet the University's general graduate admission requirements:

1. A four-year bachelor's degree or equivalent from a nationally accredited institution or, in the case of foreign students, from a well established institution of higher learning that is authorized to grant degrees by appropriate authorities in that country.
2. A minimum of a 3.0 GPA , " B " average, in the last 60 upper-division undergraduate coursework, or a graduate degree from a nationally accredited institution.
3. Official GRE scores (scores must be no more than five years old).
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or a 6.5 overall on the IELTS is required.
The College also requires:
5. A current resume.
6. Three letters of recommendation.
7. A writing sample (master's thesis or project, published manuscript, or other).

Potential applicants are strongly encouraged to contact individual faculty to discuss common research interests since admission decisions may require identification of a potential faculty mentor.

## Doctoral Requirements

A student may enroll for dissertation credits after completing all coursework, passing the candidacy examination, and being advanced to candidacy. Dissertation credits cannot be taken before advancement to candidacy.

The candidacy examination will be prepared and graded by a committee consisting of a minimum of three faculty members. Admission to candidacy requires that a majority of the committee members agree that the student passed the examination. A candidacy examination may not be passed conditionally. A "Pass" on the examination cannot be made contingent upon other factors such as the completion of additional coursework or the preparation of extra research projects. Students will be allowed only two attempts to pass the candidacy examination.

After a doctoral student is admitted to candidacy, continuous registration for at least 3 dissertation credit hours each semester (including the summer term) is required until the dissertation requirement is fulfilled.

## Required Courses

The program requires a minimum of 75 credit hours beyond the baccalaureate which includes a minimum of 24 credit hours of dissertation credits. There are three components to the College Ph.D. curriculum. The first is a core curriculum shared across all majors (12 credit hours). The second component is specific to the major (27 credit hours) and secondary field courses ( 12 credit hours). The third component consists of the dissertation, including 24 dissertation credit hours.

Shared Core Courses: (12 credits)
PHC 6601 Emerging Issues in Public Health 3
PHC 6091 Biostatistics 2
(or other approved Quantitative Methods course)
PHC 7981 Research Concepts and Proposal Development
PHC $7705 \quad$ Methods in Evidence Based Public Health

Courses for Health Promotion and Disease
Prevention Major A minimum of 27 hours which include a minimum of 9 hours in Methods Courses and 18 hours (with minimum of 9 at the 7000 level) in Content Courses.
Methods Courses*: (12 credits)
Major advisor and the program committee for the student will identify appropriate methods courses from an approved list.
PHC 6055 Data Management and Applied Epidemiologic Analysis 3
PHC $7198 \quad$ Advanced Qualitative Methods in Public Health 3
PHC 7723 Survey Research in Public Health 3
PHC 7702 Advanced Measurement in Public Health
*or other advisor-approved methods course
Content Courses: (18 credits)
PHC 6443 Ethical Issues in Public Health 3
PHC $7162 \quad$ Grant Writing in Public Health 3
PHC $7583 \quad$ Policy and Practice in Health Promotion 3
PHC 7584 Advanced Research Designs 3
$\begin{array}{ll}\text { PHC } 7587 & \begin{array}{l}\text { Theory Development in Health } \\ \text { Promotion }\end{array}\end{array}$
PHC $7588 \quad$ History and Foundations of Public Health

## Secondary field courses or Additional Concentration Outside of Major: (9 credits) <br> 9

Courses to be selected in consultation with advisor from University offerings in a focused area appropriate to public health.

Dissertation Requirements: ( $\mathbf{2 4}$ credits)
PHC 7980 Dissertation
For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/students/advising/index.htmI.

## Certificate Programs

## Graduate Certificate in Addictions

This graduate certificate provides specialized advanced clinical training for social work students and professionals working in the addictions field. It will meet all of the classroom educational requirements laid out by the State of Florida for certification through the Florida Certification Board. This certificate program is open to degree-seeking students only.
Requirements: ( 30 credits)
SOW 5105 Human Behavior and the Social Environment I or BSSW equivalent
SOW 6125 Human Behavior and the Social Environment II - Psychopathology
SOW 5324 Theory and Practice with Groups or
SOW 5342 BSSW equivalent $\quad 3$
SOW 5342 Social Work Practice with Individuals \& Families or BSSW equivalent 3
SOW 5629 Social Work Practice with Diverse Populations or BSSW equivalent
SOW 6351 Clinical Intervention in Couple and Family Social Work Practice
SOW 6435 Evaluating Empirically Based Social Work Practice
SOW $5710 \quad$ Current Issues in Addiction Practices 3
SOW 6114C Assessment \& Treatment of Addiction \& Related Problems
SOW 6711 Prevention of Addiction \& Related Problems

## Graduate Certificate in Child Welfare

This Graduate Certificate in Child Welfare (GCCW) will provide specialized training in child protection and child welfare services. Students who are awarded the GCCW will be prepared for work with neglected and abused children, their families, and the social service organizations that serve them. A total of 18 graduate credits are required for this certificate. This certificate program is open to non-degree-seeking students only.

| Required Courses: (18 credits) |  |  |
| :--- | :--- | :--- |
| SOW 5240 | Advanced Interventions in Child <br> Maltreatment | 3 |
| SOW 5241 | Advanced Child Welfare Policy and | 3 |
| SOW 65actice |  | 3 |
| SOW 6534 | Field Practicum II (in a Child Welfare <br> agency) | Field Practicum III (in a Child Welfare |
| SOW 6425 | agency) <br> Clinical Assessment and Intervention | 6 |
|  | Planning | 3 |

Required Courses: (18 credits)
SOW 5240 Advanced Interventions in Child Maltreatment Practice agency)
Field Practicum III (in a Child Welfare agency)

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## Graduate Certificate Program in Environmental Health

This Graduate Certificate seeks to provide graduate level instruction in environmental and occupational health to non-graduate- degreed practitioners. Upon completion of the certificate, the student will be able to develop, implement, manage, and assess environmental and occupational health programs for local, state, and Federal
regulatory agencies. This certificate program is open to non-degree-seeking students only.

## Program Requirements

The Graduate Certificate Program requires the completion of 18 graduate credits. The student must demonstrate proficiency in the identification and characterization of human and ecological exposures to environmental and occupational contaminants. Students who are proficient in any one area covered by the required courses may choose from selected alternative courses to complete their requirements.

## Required Courses ( $\mathbf{1 8}$ credits)

PHC 6315 Introduction to Environmental Health
PHC 6355 Occupational Health and Safety
PHC 6310 Environmental and Occupational Toxicology
PHC 6307 Exposure Assessment in Environmental
PHC 6001 and Occupational Epidemiology
6001 Environmental and Occupational
PHC 6004 Epidemiology
PHC 6004 Injury Epidemiology and Violence Prevention

## Admission Requirements

Applicants must hold a bachelor's degree or equivalent from an accredited college or university, and must have completed a prerequisite graduate course in biostatistics or social science statistics.

## Graduation (completion) Requirements

Completion of 18 graduate credits with an overall ' B ' average.

## Graduate Certificate in Epidemiology

This Graduate Certificate seeks to provide graduate level instruction in epidemiology to non-graduate-degreed practitioners. Students shall be provided with a scientific foundation to utilize the fundamentals of biometry to describe and study variables related to disease risk, and to organize and maintain databases, while at the same time be provided with opportunities for practical application. This certificate program is open to non-degree-seeking students only.

## Program Requirements

The Graduate Certificate requires the completion of 18 graduate credits. The student must demonstrate proficiency in research methodology, basic statistical and computer skills related to distribution and determinants of disease. If students are proficient in any one area covered by the required courses, alternative courses may be selected. Substitution of courses must be approved by the advisor. Students should consult with advisors since new courses are frequently added, and some courses have prerequisites and enrollment stipulations.
Required Courses: (18 credits)
PHC 6003 Chronic Disease Epidemiology 3
PHC 6000 Epidemiology I: Introduction to Public
PHC 6001 Environmental and Occupational
PHC $6004 \quad$ Injury Epidemiology and Prevention

| PHC 6009 | AIDS Epidemiology and Control | 3 |
| :--- | :--- | :--- |
| PHC 6536 | Health Demography | 3 |

Alternate Courses: ( 6 credit maximum)
If students are proficient in any one area covered by the required courses, the following courses may be substituted:
PHC 6012 Current Research in Epidemiology 3
PHC 6014 Behavioral Epidemiology 3
PHC 6013 Epidemiology II: Observational Design 3
PHC 6016 Social Epidemiology 3

## Admission Requirements

Applicants must hold a bachelor's degree or equivalent from an accredited college or university.

## Graduation (completion) Requirements

Completion of 18 graduate credits with an overall ' B ' average.

## Graduate Certificate in Health Economics

The graduate certificate program requires the completion of 15 graduate credits. This certificate program is open to non-degree-seeking students only.
Required Courses: ( 15 credits)
PHC $5430 \quad$ Public Health Economics 3
PHC 6063C Health Policy Database Applications 3
PHC $6065 \quad$ Public Health Statistics 3
PHC 6102 Introduction to Public Health Policy and Management
PHC 6436 Advanced Issues in Economic Evaluation of Health Care Programs

## Graduation (completion) Requirements

To complete the certificate, students will be required to maintain an overall 3.0 GPA.

## Graduate Certificate in Health Policy

The graduate certificate program requires the completion of 15 graduate credits. This certificate program is open to non-degree-seeking students only.

| Required Courses: (15 credits) |  |  |
| :--- | :--- | ---: |
| PHC 6102 | Introduction to Public Health Policy and <br> Management | 3 |
| PHC 6104C | Public Health Management and <br> Leadership | 3 |
| PCH 6148 | Strategic Planning for Healthcare |  |
| PHC 6155C | Organizations | Health Policy Analysis |
| PHC 5158C | A History of United States Health Policy <br> or |  |
| PHC 6154C | Evidence Synthesis Applied to Clinical |  |
|  | Eettings and Health Policy-Making | 3 |

## Graduation (completion) Requirements

To complete the certificate, students will be required to maintain an overall 3.0 GPA.

## Graduate Certificate in Health Promotion

The Graduate Certificate Program seeks to provide graduate level instruction in health promotion to non-graduate- degreed practitioners. Students will gain a scientific foundation for designing, conducting, and evaluating health promotion programs in public health, while at the same time benefit from numerous opportunities for practical application. This certificate program is open to non-degree-seeking students only.

## Program Requirements

The Graduate Certificate Program requires completion of 18 graduate credits. The student must demonstrate proficiency in health promotion and design, implantation, and evaluation. If students are proficient in any one area covered by the required courses, alternative courses must be approved by the advisor. A graduate statistics course (biostatistics, social statistics) is a prerequisite.

Students should consult with advisors since new courses are frequently added, and some courses have prerequisites and enrollment stipulations.
Required Courses ${ }^{1}$ : ( 15 credits)

| PHC 6146 | Health Promotion Program Planning and <br> Intervention Design | 3 |
| :--- | :--- | ---: |
| PHC 6410 | Health Behavior in Public Health | 3 |
| PHC 6602 | Theoretical Foundations of Health |  |
|  | Promotion | 3 |
| PHC 6706 | Research Methods in Public Health | 3 |
| PHC 6750 | Program Development and Evaluation in <br> $\quad$ Health Promotion |  |

A three hour elective course must be selected.
${ }^{1}$ If students are proficient in any one area covered by the required courses, the following elective courses may be substituted:

| Approved Electives: (3 credit maximum) |  |  |
| :--- | :--- | :--- |
| PHC 5009 | AIDS: Contemporary Issues <br> PHC 5409 | Public Health Behavior Change Theory <br> and Practice |
| PHC 5415 | Public Health in Minority/Urban | 3 |
| PHC 6000 | Population <br> Epidemiology I: Introduction to Public | 3 |
| PHC 6443 | Health Epidemiology <br> Ethical Issues in Public Health <br> Introduction to Health Education and | 3 |
| PHC 6504 | Wellness | 3 |
| PHC 6530 | Principles of Maternal and Child Health <br> Contemporary Issues in Health | 3 |
| PHC 6580 | Promotion | 3 |
| PHC 6600 | Health Promotion Communication <br> Theory and Design | 3 |
| PHC 6751 | Community Organization for Health | 3 |
| PHC 6762 | Promotion <br> International Public Health | 3 |

## Admission Requirements

Applicants must hold a bachelor's degree or equivalent from an accredited college or university.

## Graduation (completion) Requirements

Completion of 18 graduate credits with an overall ' B ' average.

## Graduate Certificate in Management in Social Work

This graduate certificate provides specialized management training for social work students and professionals planning to enter or work in managerial positions in the social work field. Courses do not meet elective requirements for MSW clinical program. All certificate students will be required to take the three required courses as well as the two from the approved list. This certificate program is open to degree-seeking students only.
(Note: This certificate is currently under revision. Please check with the Student Services Coordinator in the School of Social work for information).

## Requirements: ( $\mathbf{1 5}$ credits)

## Required Courses

SOW 5344 Theory \& Practice with Communities \&
PAD 6156 Applied Organizational Theory \&
SOW 5455 Behavior
SOW $5455 \quad$ Writing and Managing Grants for Social Service Programs

## Select two from the following:

PAD 6205 Public Financial Management 3
PAD 5435 Administration \& the Role of Women 3
HSA 6425 Mental Health Administration \& Planning3
URS 5645 Strategic Planning in Public \& Non-Profit Organizations

3
PAD 6434 Leadership and Decision Making 3
SOW 6387 Social Services Management Skills 3

## Graduate Certificate in Maternal and Child Health

The graduate certificate program requires the completion of 15 graduate credits. This certificate program is open to degree-seeking students only.

## Required Courses: ( $\mathbf{1 5}$ credits)

PHC 6530 Principles of Maternal and Child Health 3
PHC 6537 Case Studies in Maternal and Child Health Programs, Policies and Research
PHC 6706 Research Methods in Public Health 3
PHC 6750 Program Development and Evaluation in Health Promotion
PHC 6762 International Public Health
PHC 5415 Public Health in Minority/Urban Population

## Graduate Certificate in Pediatric Nutrition

The graduate certificate program requires the completion of 15 graduate credits. The pediatric student must have completed an undergraduate dietetics program or equivalent and have the credentials to meet the Accreditation Council for Education and Dietetics (ACEND) criteria to apply for a coordinated program or dietetic internship (American Dietetic Association). The graduate certificate in Pediatric Nutrition is an online
graduate/professional certificate program that consists of 2 core courses plus at least three additional specialty courses over an academic year.
Required Courses: ( 6 credits)

| HUN 6415 | Pediatric Nutrition | 3 |
| :--- | :--- | :--- |
| HUN 6416 | Advanced Pediatric Nutrition | 3 |

Choose at least three of these specialty courses: (9
credits)
HUN 6417 Nutrition of the High Risk Infant and Newborn in Intensive Care
DIE 6287 Dysfunctional Eating in Pediatrics 3
DIE 6286 Pediatric Obesity 3
DIE $6285 \quad 3$

## Graduate Certificate in Public Health Foundations

The graduate certificate program requires the completion of 18 graduate credits. The student must demonstrate proficiency in basic statistical and computer skills related to distribution and determinants of disease. If students are proficient in any one area covered by the required courses, alternative courses may be selected. Substitution of courses must be approved by the advisor. Students should consult with advisors since new courses are frequently added, and some courses have prerequisites and enrollment stipulations. This certificate program is open to non-degree-seeking students only.

## Admission

Applicants must hold a bachelor's degree or equivalent from accredited college or university.

Required Courses: (18 Credits Total)
PHC 6000 Epidemiology I: Introduction to Public
PHC 6065
PHC 6102 Introduction to Health Policy and Management
PHC 6315 Introduction to Environmental Health 3
PHC 6410 Health Behavior and Public Health 3
PHC 6500 Foundations of Public Health 3

## Graduate Certificate in Social Work Practice with the Elderly

This graduate certificate provides specialized advanced clinical training for social work students working with elderly populations. This certificate program is open to degree-seeking students only.
Requirements: ( 15 credits)
Required
SOW 6236 Social Welfare Policy and Services II
SOW 6534 Field Practicum III (in an Elderly/Aging Setting)6

Select 2 from the following:
SOW 5641 Understanding the Process of Aging 3
SOW $6646 \quad$ Social Work Practice with the Elderly 3
SOW 5605 Medical Social Work 3
SOW 5805C Counseling the Elderly 3
SOW 6359 Social Work Treatment with Families of the Elderly

## Post-MSW Certificate in Clinical Practice

This certificate program is designed for MSW practitioners who specialized in macro/administrative or generalist practice and wish to increase their knowledge and skills in direct services/clinical practice. In most cases, MSW practitioners completing this certificate will have the requisite MSW course work for clinical licensure in the state of Florida. This certificate program is open to degreeseeking students only.

The post-MSW Certificate in Clinical Practice program of study is under revision. Students should anticipate changes in the 6000 level courses.

## Admission Requirements

Applicants must satisfy all minimum requirements as specified by the University Graduate School for admission into Graduate Programs. In addition, the applicant must have earned a Master's of Social Work degree with a minimum cumulative GPA of 3.0.

## Program of Study

| SOW 6125 | Human Behavior and Social <br> Environment II - Psychopathology | 3 |
| :--- | :--- | :--- |
| SOW 6351 | Clinical Intervention in Couple and |  |
|  | Family Social Work Practice |  |

For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/students/index.html.

## Course Descriptions

## Definition of Prefixes

DIE-Dietetics; FOS-Food Science; FSS-Food Service Systems; GEY-Gerontology; HSC-Health Sciences; HUNHuman Nutrition; IHS-Interdisciplinary Health Sciences; PHC-Public Health; SOW-Social Work

DIE 5247 Trends in Therapeutic Nutrition (3). Evaluation and interpretation of current research in dietary care of metabolic diseases. Prerequisites: Diet therapy or approval of the instructor.
DIE 5936 Advanced Practice Seminar (1-3). Designed to provide didactic components in tandem with practice learning experiences in health care institutions. Covers material in clinical dietetics, management, and community nutrition. Utilizes a team approach and will draw on specialists from all areas of dietetics. Corequisites: DIE 5946, DIE 5947, DIE 5948 or permission of the instructor. (S)

DIE 5946 Advanced Supervised Dietetics Practice I (6). Advanced practical application of knowledge and skills in a supervised practice setting. Prerequisite: Permission of the instructor. Dl course does not count towards M.S. degree. (S)
DIE 5947 Advanced Supervised Dietetics Practice II (6). Continuation of advanced practical application of knowledge and skills in a supervised practice setting. Prerequisite: Permission of the instructor. DI course does not count towards M.S. degree. (F)
DIE 5948 Advanced Practicum in Clinical Nutrition (16). Application of the principles, concepts, theories, and methodologies of administration and management to dietetic systems in healthcare and foodservice. Prerequisite: Permission of the instructor. DI course does not count towards M.S. degree. (F)
DIE 6128 Dietetic Administration and Management (3). Application of management and organizational theory to dietetic systems in health and community institutions.
DIE 6259 Management of Nutrition Services (3). Analysis of interdisciplinary nutrition services delivery with emphasis on management models and theories regarding division of work, quality improvement and productivity, leadership, motivation and planning, organizing, staffing, directing, and controlling.
DIE 6285 Pregnancy and Lactation (3). This course is designed to apply the principles of practical and comprehensive nutrition information on counseling and support needs during and between Pregnancy and Lactation. Prerequisites: HUN 6415 and HUN 6416.
DIE 6286 Pediatric Obesity (3). This course is designed to apply the latest tools and practice recommendations needed to educate and counsel in the area of childhood obesity and prevention. Prerequisites: HUN 6415 and HUN 6416.
DIE 6287 Dysfunctional Eating in Pediatrics (3). This course is designed to apply the principles of psychology, physiology, and nutrition to nutrition care and counseling for infants, children and adolescents engaged in dysfunctional/abnormal eating. Prerequisites: HUN 6415 and HUN 6416.

DIE 6368 Advanced Techniques in Dietetic Practice (2). Techniques and approaches in changing nutritional behavior, establishing private practice, providing dietetic services in various size institutions, hospitals, nursing homes, and in the community. Prerequisites: DIE 4435, DIE 4435L or equivalent. Corequisite: DIE 6368L. (S, even years)
DIE 6368L Advanced Techniques Dietetic Practice Lab (1). Individual practice in conducting interviews, planning nutritional care, changing nutritional behavior, and providing dietetic consultation. Prerequisite: Permission of the instructor. Corequisite: DIE 6368. (S, even years)
DIE 6567 Research II (3). This course will further expand student knowledge and skills in research in Dietetics and Nutrition primarily through the development of a research proposal. Prerequisite: DIE 6568.
DIE 6568 Research I (3). Consideration of scientific methods and theoretical orientation as applied to research in dietetics. Special consideration given to various techniques of investigation, data collection, data organization, and interpretation. Prerequisites: STA 6166 or permission of the instructor.
DIE 6576 Project in Dietetics and Nutrition (1-6). Development and completion of a research project on a specific, important topic, question or need in the area of dietetics and nutrition. Prerequisites: DIE 6568; 12 hours graduate study, and permission of project advisor.
DIE 6578 Qualitative Research Methods in Dietetics (3). Application of qualitative research methods including field and case study approaches in interpreting and designing research studies. Introduction to interdisciplinary research. Prerequisite: DIE 6568.
DIE 6906 Readings in Dietetics and Nutrition (1-3). Individual advanced study in a comprehensive overview of dietetics and nutrition or in-depth advanced study of a specialty. Prerequisites: Permission of the instructor and advanced standing in graduate program. (F,S,SS)

DIE 6907 Individual Study in Dietetics (1-3). Intensive individual investigation of a phase of dietetics. Emphasis on recent findings in dietetics and allied disciplines. Prerequisite: Permission of the Instructor. (F,S,SS)
DIE 6915 Supervised Research (1-3). Continuation of thesis research under thesis advisor. Repeatable. Prerequisite: Completion of all other required course work. (F,S,SS)
DIE 6929 Specialized Short Courses in Dietetics and Nutrition (1-3). Intense courses on specialized topics in dietetics and nutrition for the advanced student or professional. Topic based on current nutrition concerns. Prerequisites: Advance graduate standing and permission of the instructor.
DIE 6935 Special Topics in Dietetics (3). In-depth study of historical, epidemiological, prevention, and treatment aspects of topics related to dietetics. Prerequisites: Competence in topic covered, admission to graduate program.
DIE 6937 Graduate Seminar in Dietetics and Nutrition (1). Presentations by researchers and doctoral students on studies, theories, applications; journal club
presentations by students. Two semesters enrollment, M.S. students; three semesters Ph.D. students. (F,S)

DIE 6971 Thesis in Dietetics and Nutrition (1-6). Prerequisites: DIE 6568 or DIE 6578, 12 hours of graduate study and permission of Thesis advisor. (F,S,SS)
DIE 7566 Research Concept Development in Dietetics and Nutrition (3). Grant proposal writing for dietetic and nutrition research. Prerequisite: DIE 6568, STA 6166, and STA 6167.
DIE 7980 Ph.D. Dissertation (1-12). Research for doctoral dissertation. Prerequisite: Permission of Major Professor and Doctoral Candidacy.
FOS 6236 Food Toxicology \& Food Safety (3). Discusses food and water borne bacterial, parasitic, and viral infections and intoxication. Examines food additives, and contaminants. Describes toxic food constituents as well as naturally occurring toxicants. Prerequisites: Graduate standing and food science competency.
FSS 6535 Computer Assisted Food and Nutritional Services Management (3). Advanced course in computer analysis and utilization for detection and resolution of problems of food service and nutritional care. Prerequisites: Advanced graduate standing, DIE 6128 or equivalent, and computer competency.
GEY 5600 Physical Change and Healthy Aging (3). Primary health care and wellness with discussion and assessment of normal physiological alterations and their relationship to common health concerns and medical problems of older adults.
HSC 7935C Doctoral Seminar in Health Systems Research (2). This doctoral seminar includes presentations by researchers and doctoral students on studies, theories, applications related to health systems research.
HUN 5123 Ethnic Influences on Nutrition and Food Habits (3). Systematic study of food habits of various cultural groups. Emphasis on methodology, analysis of data, relationship of food habits to nutritional standards, and corrective measures. Includes laboratory. Prerequisite: Competency in food preparation and nutrition. Recommended for non-majors.
HUN 5195 International Nutrition: Problems, Policies, and Planning (3). Advanced study of magnitude, causes and nature of under nutrition in developing countries; emphasis on programs, planning and policies directed toward alleviating hunger. Prerequisite: Permission of the instructor. Recommended for non-majors.
HUN 5245 Nutrition and Biochemistry (3). Advanced study of the relationship of nutrition and biochemistry with emphasis on digestion, absorption, metabolism of nutrients, and determination of norms. Prerequisites: Organic Chemistry and Physiology.
HUN 5611 Nutrition Education in the Community (3). In-depth study of nutrition education information and methods in the community including the nutrition education component of school food service and other congregate meal programs. Prerequisites: Recent courses in nutrition education or permission of the instructor.

HUN 5621 Food, Nutrition and Communication (3). Concepts and techniques for effective professional
communication with individuals, groups and other professionals. Emphasis on communication via mass media. Prerequisites: Competency in food and nutrition knowledge.
HUN 6248 Sports Nutrition (3). The influence of exercise on specific nutrient demands and utilization of nutrients will be examined. Nutritional requirements and interrelationships between nutrition and exercise in the prevention and management of common diseases such as obesity, hypertension, diabetes and cardiovascular disease will also be discussed. Prerequisites: Human Nutrition and Intermediate Physiology. (S, odd years)
HUN 6254 Drug and Nutrient Interaction (3). The interaction of drug and nutrient metabolism in relation to optimum nutrition. Prerequisites: Advanced Nutrition, Biochemistry, Physiology.
HUN 6255 Nutrition in Wellness Program (3). Examination of required factors for successful development, implementation and evaluation of wellness programs and investigation of interrelationships between nutrition/physical activity as means of chronic disease risk reduction. Prerequisites: Advanced Nutrition and Nutrition Education.
HUN 6257 Physio/Psychology of Food Intake (3). Examination of food intake regulation with applications in both research and practice. Prerequisites: Competence in nutrition and physiology.
HUN 6266 Nutritional Assessment (3). In-depth study of the methodology and application of nutritional assessment. Prerequisites: Advanced Nutrition, physiology, and biochemistry.
HUN 6285 Nutrition and Metabolism I (3). Advanced study of the human nutrition of carbohydrates, lipid, fiber, thiamin riboflavin, panothenic acid, biotin and choline. Prerequisites: Advanced Nutrition, Biochemistry, Physiology.
HUN 6286 Nutrition and Metabolism II (3). Advanced study of the human nutrition of protein, energy, folate, vitamin B6, vitamin B12 and water. Prerequisites: Advanced Nutrition, Biochemistry, Physiology.
HUN 6287 Nutrition and Metabolism III (3). Advanced study of the human nutrition of vitamins C, A, D, E, and K, and essential macro and trace minerals. Prerequisites: Advanced Nutrition, Biochemistry, Physiology.
HUN 6295 Contemporary Issues in Food and Nutrition (3). Critical evaluation of current controversies in nutrition and dietetics research. Prerequisites: Advanced Nutrition, Biochemistry, Physiology, Research Methods.
HUN 6307 Carbohydrates and Lipids (3). The biological, physiological and metabolic functions of carbohydrate and lipids as they relate to human nutrition. Prerequisites: Biochemistry, Advanced Nutrition and Physiology.
HUN 6327 Proteins (3). Protein metabolism, physiology and nutrition. Prerequisites: Biochemistry, Advanced Nutrition, and Physiology.

HUN 6335 Functions of Vitamins (3). Integration of chemical, biological and physiological functions of vitamins as related to human nutrition. Prerequisites: Advanced Nutrition, Biochemistry, Physiology. (S, even years)

HUN 6355 Minerals in Human Nutrition (3). The physiological and metabolic functions of selected macro and trace minerals as they relate to nutritional status in humans. Prerequisites: Advanced Nutrition, Biochemistry, Physiology. (S, odd years)

HUN 6415 Pediatric Nutrition (3). This course is designed to apply the principles of physiology, biochemistry and nutrition to Medical Nutrition Therapy for healthy infants, children and adolescents.
HUN 6416 Advanced Pediatric Nutrition (3). This course is designed to apply the principles of physiology, biochemistry and nutrition to Medical Nutrition Therapy for medically compromised infants, children and adolescents. Prerequisite: HUN 6415.
HUN 6417 Nutrition of the High Risk Infant and Newborn in Intensive Care (3). This course is designed to apply the principles of physiology, biochemistry and nutrition to nutrition care and planning for high risk infants and newborns in intensive care.
HUN 6435 Nutrition and Aging (3). Changes associated with aging and the impact of nutrition on these changes. Prerequisite: Permission of the instructor. (S, odd years)
HUN 6522 Public Health Nutrition (3). Development and assessment of nutrition programs for the general population throughout the life cycle. Prerequisites: DIE 3310 or equivalent.

HUN 7408 Nutrition Across the Lifespan (3). The course will explore social, economic, physiologic, and lifestyle factors that influence nutrition status across the stages of growth and development, maturation, and aging. Prerequisites: HUN 4403, HUN 4241, DIE 5247.
HUN 7523 Community Nutrition (3). Evaluate models and methodologies to identify public health nutrition issues; analyze current and historical research/nutrition policy; recognize necessary infrastructure to support policy. Prerequisites: HUN 4410, HUN 6522, PHC 6500.

HUN 7524 Nutrition Science and Implications for Community Health (3). Critical examination and synthesis of current human nutrition science topics with emphasis on implications to human health, nutrition, public health policy, and research. Prerequisites: Nutritional Biochemistry and Pathophysiology.
IHS 6502 Principles of Clinical Trials (3). Advanced study of clinical trials including research design, ethics, monitoring and analysis. Prerequisites: PHC 6706 or equivalent.
IHS 6937 Interdisciplinary Graduate Seminar (1-3). Multidisciplinary seminar including foundations of reasoning and investigative methods focusing on a multidimensional problem related to social, legal, policy, economic, and health issues. Prerequisite: Research Methods.

PHC 5009 AIDS: Contemporary Issues (3). This course introduces the contemporary social and public health issues associated with the AIDS epidemic and the policies and programs designed to prevent HIV transmission.
PHC 5108 Foundations of Public Health Practice for Social Workers (1). This course will serve as an introduction to applied public health (PH) for MSW level
social workers, provide an overview of public health disciplines and provide exposure to its field applications.

PHC 5113 Communities and Public Health (3). This course introduces the student to the principles of Community Based Participatory Research. It builds on the principle of community as a unit of identity and local relevance.

PHC 5158C A History of United States Health Policy (3). Places contemporary health policy controversies into historical perspective by highlighting some of the major health-related issues that have drawn federal intervention during the past two centuries. Prerequisite: PHC 6102.

PHC 5409 Public Health Behavior Change Theory and Practice (3). A course for health promotion practitioners who lack formal training in behavior change foundations and strategies. The course emphasizes applications to practical development of health promotion interventions. (S)

PHC 5412 Cultural Competency for Public Health (3). Emphasizes the socio-historical growth of South Florida's populations in relation to public health competency skills. Review and critique diverse socioeconomic and historical issues relating to public health practices.

PHC 5415 Public Health in Minority/Urban Population (3). Covers the scope of Public Health Issues related to minority and urban populations with an emphasis on health care status, utilization of the health care system and expenditures. (F)
PHC 5430C Public Health Economics (3). This course focuses on the application of basic microeconomics tools to the analysis of consumers', producers', and insurers' behavior in the market for health care. Prerequisite: PHC 6065 or permission of the instructor.
PHC 5581 Public Health Aspects of Complementary and Alternative Medicine (3). Introduction of theory, practice and scientific evidence for complementary and alternative medicine. Emphasis on regulatory issues and quality assurance; politics of use and social, cultural and historical factors.

PHC 5675 The Cuban Maternal and Child Health Paradox: A View from Santiago de Cuba (3). This course consists of visits and encounters with workers in the front line of MCH in Cuba who contribute to the Cuban "paradox" (low maternal and infant mortality in a lowresource setting).
PHC 6000 Epidemiology I: Introduction to Public Health Epidemiology (3). This course is an introduction to the study of the distribution, determinants, and measurement of health and disease in populations, including design methods and their application. (F,S)

PHC 6001 Environmental and Occupational Epidemiology (3). This course covers outbreaks; cluster analysis; cross-sectional, case-control, cohort, ecological and time series designs; surveillance programs; environmental cancer; reproductive hazards, biological monitoring and biomarkers. Prerequisites: PHC 6315 and PHC 6000.
PHC 6002 Infectious Disease Epidemiology (3). This course covers principles specific to infectious disease epidemiology, explores the application of epidemiologic
methods to infectious disease problems, and examines surveillance, and outbreak investigation. Prerequisites: PHC 6000 and PHC 6065.
PHC 6003 Chronic Disease Epidemiology (3). A review of selected epidemiologic research methodology as it applies to infectious and chronic diseases and its application towards understanding selected major infectious and chronic diseases from a population based perspective. Prerequisite: PHC 6000.
PHC 6004 Injury Epidemiology and Prevention (3). Analyzes the impact and extent of injuries as a public health problem. Issues of prevention, sources of data, environment, social and occupational aspects are included in an epidemiological approach. Prerequisite: PHC 6000. (SS)
PHC 6007 Cancer Epidemiology (3). This course will provide an understanding of the epidemiological patterns, etiology and risk factors of cancer from a community and population perspective. Prerequisite: PHC 6000.
PHC 6008 Cardiovascular Disease Epidemiology (3). This course will increase understanding of epidemiological patterns, etiology and risk factors of selected major cardiovascular disease from a population based perspective. Prerequisites: PHC 6000, PHC 6065.
PHC 6009 AIDS Epidemiology and Control (3). Reviews the epidemiology, virology, immunology, and clinical aspects of HIV, and also examines its impact upon risk groups and the responses of society to the epidemic. Prerequisites: PHC 6000 and PHC 6065 or permission of the instructor. (S)
PHC 6012 Current Research in Epidemiology (3). This course will examine current areas of research in epidemiology and bring students into contact with researchers in various fields. Prerequisites: PHC 6000, PHC 6065. (S)
PHC 6013 Epidemiology II: Observational Design (3). The fundamental concepts, principles, and methods of observational epidemiologic research at an intermediate level. (S)
PHC 6014 Behavioral Epidemiology (3). This course will examine human behaviors as determinants of health and disease, methods of exploring these relationships, and ways of altering risk behaviors. Prerequisite: PHC 6000.
PHC 6016 Social Epidemiology (3). Explores the epidemiological aspects of health and medical care of the poor and disadvantaged population groups. Emphasis on the relationship of organization and delivery of health care, including health promotion, prevention, and related topics. Prerequisite: PHC 6000 and PHC 6065 or permission of the instructor. (F)
PHC 6020 Clinical Epidemiology (3). A course on methods in clinical epidemiologic studies, including study design, sample size, clinical measurements, clinimetric indices, casual inference, analytic issues and clinical decision making. Prerequisites: PHC 6065, PHC 6000 or permission of the instructor.
PHC 6033 Mechanism of Complex Disease in Public Health (3). This course will review genetic and nongenetic epidemiologic associations with complex diseases together with the underlying biological basis for them to
develop strategies for prevention. Prerequisites: PHC 6000 and undergraduate course in (human) biology.

PHC 6034 Intermediate Epidemiology (3). This course is designed for Public Health students requiring a more thorough knowledge of the concepts and methods used in epidemiological research. Prerequisite: PHC 6000.
PHC 6052 Biostatistics I (3). An introduction to basic biostatistical techniques for MPH students majoring in Biostatistics, but also open to those seeking a thorough understanding of and ability to use the essential biostatistical procedures. Prerequisites: Familiarity with basic algebra and basic calculus is important.
PHC 6055 Data Management and Applied Epidemiologic Analysis (3). Covers practical issues related to the management, security, and analysis of epidemiologic data by creating, managing, and analyzing an epidemiologic database using statistical software packages.
PHC 6056 Longitudinal Health Data Analysis (3). Applied longitudinal health data analysis; methods to compare different health treatments and behavioral interventions. Focus will be on models for single and multiple correlated public health outcomes. Prerequisites: PHC 6052, PHC 6091 or permission of the instructor.
PHC 6059 Cohort Studies and Lifetime Events in Public Health (3). Concepts of lifetime events and survival data in Public Health; modern methods used to analyze time-to-event data; non-parametric and parametric models. Prerequisites: PHC 6065; PHC 6013. Corequisite: PHC 6091.
PHC 6060 Principles and Approaches to Biostatistical Consulting (3). The course specifically addresses the process of providing biostatistical consulting support for public health, medical and clinical research. Prerequisites: PHC 6052, PHC 6091, PHC 6093.
PHC 6062 Systematic Reviews and Meta-Analysis (3). This course is designed to train students in the conduct of a systematic literature review and developing the skills critical for evidence-based clinical and public health practice.
PHC 6063C Health Policy Database Applications (3). This course focuses on data management and analysis. Students will analyze databases related to health policy research questions using statistical software packages including SPSS and SAS. Prerequisites: PHC 6000, PHC 6065.

PHC 6064 Models for Binary Public Health Outcomes (3). This course will offer students a focused introduction to statistical models for the analysis of binary medical and public health data. The course will provide an introduction to the application of statistical models for PH outcomes in epidemiology, dietetics and nursing. Prerequisite: PHC 6052 or permission of the instructor.

PHC 6065 Public Health Statistics (3). Covers the basic concepts and tools for non-biostatisticians, including descriptive statistics, confidence intervals, hypothesis testing, the basic statistical tests and data presentation. (F,S)
PHC 6067 Probabilistic Graphical Models (3). Concepts and implementation of Probabilistic Graphical Models,
comparative study the models, and their suitability for various datasets. Prerequisites: PHC 6052, PHC 6091, or permission of the instructor.
PHC 6080 SAS Computing for the Health Sciences (3). Course covers essential computer-based techniques for the SAS system for data management and statistical analysis relevant to public health. Topics include: programming techniques, macro programming, and SQL with SAS. Prerequisites: PHC 6052, PHC 6091 or permission of the instructor.
PHC 6086 Cluster Analysis for Public Health (3). This course introduces data matrix, types of data, measures of similarity, hierarchical and non-hierarchical clustering methods, density based methods, clustering trees, and number of clusters. Prerequisites: PHC 6065 or an equivalent, basic calculus and linear algebra.
PHC 6090 Advanced Public Health Statistics (3). Public Health Statistics continuation. Covers the concepts and interpretation of randomized blocks and factorial ANOVA, multiple, logistic and proportional hazards regression techniques and survival analysis. Prerequisite: PHC 6065.
PHC 6091 Biostatistics 2 (3). Continuation of Biostatistics I. Covers advanced methods for ANOVA, different regression and correlation techniques and survival analyses. Prerequisite: PHC 6052.
PHC 6093 Biostatistical Data Management Concepts and Procedures (3). Covers procedures and tools for data management, including data collection, transfer, handling, quality and security issues for research projects for public health, medicine and related fields.
PHC 6102 Introduction to Public Health Policy and Management (3). This course introduces students to the underlying principles of public health policy and management. Emphasis is on the philosophy, and extent of public health structure; organization and administration of public health law and regulations will be analyzed.
PHC 6103 Introduction to Applied Public Health (3). This course will serve as an introduction to applied public health and provide an overview of core public health disciplines with hands-on exposure to its application in the field.
PHC 6104C Public Health Management and Leadership (3). This course integrates theory with practice by examining management, leadership and organizational behavior in public health organizations.
PHC 6110 Health Risk Appraisal (3). Health promotion technique designed for identifying personal health risks and the use of these methodologies for inducing behavioral change. Evaluation of the effectiveness of various health appraisal instruments. Prerequisite: Biostatistics and Epidemiology.
PHC 6118 Introduction to Population Health Management (3). This course is an introduction to population health management, an emerging model in healthcare delivery that involves moving from individualbased episodic healthcare to a population health model. Prerequisite: PHC 6102.
PHC 6146 Health Promotion Program Planning and Intervention Design (3). The principles of and practices of health promotion program planning and design,
development, testing of behavioral interventions are described and explained in this course. Prerequisites: PHC 6410, PHC 6706, PHC 6065.
PHC 6148 Strategic Planning for Healthcare Organizations (3). This course introduces students to strategic planning for healthcare organizations encouraging modern business approaches, including the planning process and using data to identify growth opportunities. Prerequisite: PHC 6102.
PHC 6150 Public Health Policy Analysis and Formulation (3). Strategies for formulating public health policy; political processes; resource allocation, organization, and participation. Examination of current policy issues and efforts to effect change. (SS)
PHC 6154C Evidence Synthesis Applied to Clinical Settings and Health Policy-Making (3). This course covers evidence synthesis applied to decision-making processes in health-policy and clinical settings and describes methods for communicating evidence synthesis to its end-users. Prerequisites: PHC 6000, PHC 6065.
PHC 6155C Health Policy Analysis (3). This course provides an exploration of health policies from an economic perspective. Current issues and policy dilemmas in the areas of healthcare and public health will be analyzed. Prerequisite: PHC 6065.
PHC 6160 Public Health Budgeting and Financial Management (3). This course is designed for public health practitioners. Emphasis will be placed on models necessary to develop operational budgets in the public sector of health care and to anticipate financial anomalies.
PHC 6183 Disaster Risk and Emergency Management in Public Health I (3). This course meets the demand for new management strategies and skills that will permit an orderly, structured, effective, and flexible approach to health emergency preparedness and response.
PHC 6185 Disaster Risk and Emergency Management in Public Health II (3). This course meets the demand for new management strategies and skills that will permit an orderly, structured, effective, and flexible approach to health preparedness and response. Prerequisite: PHC 6183.

PHC 6190 Biostatistical Methods for Survey Research (3). Discusses the biostatistical issues for sample surveys in the health sciences. Includes the use of national/state health databases. Prerequisites: PHC 6052, PHC 6091, or permission of the instructor.
PHC 6251 Disaster and Emergency Epidemiology (3). Disaster and Emergency Epidemiology studies the public health response to natural disasters, environmental emergencies and perpetuated acts of terrorism.

PHC 6307 Exposure Assessment in Environmental and Occupational Epidemiology (3). Surveys available mechanisms utilized by public health and environmental agencies to monitor levels of pollution, environmental quality, and change in environmental conditions which impact human health. Prerequisites: PHC 6000, PHC 6065, PHC 6315. (SS)
PHC 6310 Environmental and Occupational Toxicology (3). Theory and practice of occupational and environmental toxicology; health effects of toxins in
humans; principles of toxicology; toxicokinetics; and health effects of toxins on organ systems. Prerequisite: PHC 6315.

PHC 6311 Environmental Health Risk Assessment (3). This course explores environmental health care management problems associated with risk to the population from exposure to particular agents and conditions. Emphasizes practical problems in risk estimation through the case method approach. Prerequisite: PHC 6315. (S)
PHC 6312C Health Impacts of Air, Water and Land Pollution (3). The course covers the impact of air, water and land pollution on human health/well-being and on the whole environment plus pollution and control measures of each kind of pollution. Prerequisite: PHC 6315.
PHC 6315 Introduction to Environmental Health (3). An overview of public health philosophy and government organization in the provision of official agency, environmental, and preventive medicine services, with particular emphasis on the regulatory and surveillance responsibilities authorized in the public sector. (F,S)

PHC 6316 Environmental Health Management (3). The course provides the student with skills in management of the programs dealing with food, water, waste, radiation, workplace, air, energy, human establishments, and humanitarian challenges. Prerequisites: PHC 6315 or permission of the instructor.
PHC 6326 Emerging Environmental Health Issues (Local/County, State, U.S., and Global) (3). This course is designed to provide students in environmental health with a step-by-step guide to the practical application of knowledge already acquired in environmental and occupational health sciences.
PHC 6355 Occupational Health and Safety (3). The course covers recognition of occupational hazards, injuries and diseases and the principles of occupational safety including safety regulations and standards and models of accident causation. Prerequisite: PHC 6315.
PHC 6356 Fundamentals of Industrial Hygiene (3). The course covers recognition, evaluation, and control of chemical biological and physical agents in the workplace; application to exposure, control measures, and standard setting procedures. Prerequisite: PHC 6315.
PHC 6374 Environmental Disasters and Human Health (3). This course will provide an overview of environmental disasters and the measures designed to reduce the impact of disasters on Environmental Health. It aims to strengthen the ability of people to withstand the disruption of their accustomed infrastructure and systems for environmental health.
PHC 6410 Health Behavior and Public Health (3). The overall goal of this course is to introduce the student to the learning and behavioral science theories that provide the framework for the practice of health promotion and public health. Prerequisites: Public Health major or permission of the instructor. $(F, S)$
PHC 6422 Legal and Regulatory Aspects of Environmental Health (3). The application of law as it relates to the environment and human health. Legal process and rule-making; cost-benefit analysis; judicial review; evidentiary problems; and other elements of
environmental law are emphasized. Prerequisites: PHC 6000, PHC 6065 and PHC 6315. (S)

PHC 6436 Advanced Issues in Economic Evaluation of Health Care Programs (3). Economic evaluation issues including cost analysis, health outcomes, health state utilities, measurement of population health measures; cost-effectiveness, cost-benefit, and cost-utility analysis. Prerequisites: Biostatistics, Health Economics.
PHC 6441 Epidemiology of Health Disparity (3). This course is designed to provide an overview and understanding of Health Disparity, its indicators, measuring methods and models as well as theoretical underpinning for explanation of Health Disparity. Prerequisites: PHC 6000 and PHC 6065.
PHC 6442 Global Public Health (3). This graduate level course addresses global public health issues by integrating the complex molecular, biological, environmental, technological and social system interactions causing diseases. Prerequisites: PHC 6315 or PHC 6312 or by instructor's permission and IDS 3189 or IDS 3183.
PHC 6443 Ethical Issues in Public Health (3). This course provides an overview of ethical principles, perspectives, and decision-making in public health. (F,S)
PHC 6500 Foundations of Public Health Practice (3). Philosophy, nature, and scope of public health; organization and administration; principles of disease prevention and health promotion; current issues and trends; socioeconomic and political forces. Prerequisites: Public Health major or permission of the instructor. (F,S,SS)
PHC 6504 Introduction to Public Health Education and Wellness (3). Primarily intended to introduce graduate students to concepts and principles underlying the use of Public Health and Behavioral Strategies to positively influence behavioral patterns. Prerequisites: Public Health major or permission of the instructor. (S)
PHC 6520 Public Health Aspects of Foodborne Diseases (3). Examines the scope of the foodborne disease problem; factors that contribute to outbreak of foodborne disease; strategies for the prevention and control of these diseases are explored. Prerequisites: PHC 6000, PHC 6065, and PHC 6315. (SS)
PHC 6530 Principles of Maternal and Child Health (3). Covers the scope of the field of maternal and child health with emphasis on the needs of infants, children, youth, women and families in the reproductive cycle and programs designed to meet these needs. Prerequisites: Public Health major or permission of the instructor. (S)
PHC 6536 Health Demography (3). The study of basic population structure, composition, trends and relationship to health status. Implications of demographic trends, policies for public health; population growth, immigration, infant mortality. Prerequisites: PHC 6065 or permission of the instructor. (SS)
PHC 6537 Case Studies in Maternal and Child Health Programs, Policies and Research (3). Seminar course focused on intended and unintended impact of programs and policies on the health of women and children from a life course perspective, identifying research gaps and needs. Prerequisite: PHC 6530 or permission of the
instructor. Corequisite: If student has not taken PHC 6530, should be taken concurrently.
PHC 6538 Genetic Issues in Public Health (3). Genetic issues and topics that impact on Public Health will be covered such as HW gene frequencies and HUGO. A public health perspective with a field of study.
PHC 6580 Contemporary Issues in Health Promotion (3). Current problems and findings in health promotion content areas such as smoking, alcohol, and drug misuse, family health, safety, physical fitness, communicable and chronic diseases will be discussed. Prerequisites: PHC 6000 and PHC 6065. (SS)
PHC 6589 Health Promotion in Institutional Settings (3). This course will investigate the role, methods and techniques used to promote health in diverse settings such as clinic and community agencies, schools, universities and workplaces. (SS)
PHC 6591 Reproductive Health Epidemiology (3). This course focuses on current research, methodological issues, and discusses case studies in the epidemiology of reproductive and perinatal health from domestic and international setting. Prerequisites: PHC 6000 and PHC 6065.

PHC 6595 Genetic Epidemiology (3). This course provides a background to genetic epidemiologic methods, and focuses on design, execution, analysis and interpretation of genetic association studies. Basic genetics will also be covered. Prerequisites: PHC 6000 or approval by instructor.
PHC 6600 Health Promotion Communication Theory and Design (3). Theory, design, and implementation of health education communication utilized in reaching the public. Emphasis on the critical analysis of the communication processes; group techniques and media methods; and the consultation process. Prerequisites: Health Promotion Concentration or by permission of the instructor. ( F )
PHC 6601 Emerging Issues in Public Health (3). Investigation of emerging public health issues, such as public health informatics, genomics, global health, policy and law, and public health ethics, within the framework of ecological model.
PHC 6602 Theoretical Foundations of Health Promotion (3). The course will emphasize the use of psychosocial theories in understanding and addressing public health problems. Prerequisites: PHC 6410, PHC 6065.

PHC 6604 Current Issues in Health Policy (3). This course is an intervention of current public health policy issues, such as chronic disease, health disparities, and healthcare reform within a policy analysis framework.
PHC 6700 Methods and Analysis in Epidemiological Research (3). This course provides understanding of principles, methods and analytical techniques applied in epidemiologic research using multimedia and interpersonal approaches of instructions to motivate and explain with real life examples. Prerequisite: PHC 6000.
PHC 6703 Epidemiology Methods: Experimental Design (3). Introduction to clinical and community trial design and conduct, randomization, blinding, recruitment,
data collection, assessment of adverse effects, compliance with therapy, and analyses. Prerequisites: PHC 6013, PHC 6xxx - Public Health Statistics II.
PHC 6706 Research Methods in Public Health (3). Study of scientific research, inductive and deductive thinking, research methods and design as applied to the field of Public Health. Prerequisite: Undergraduate statistics course.
PHC 6709 Quantitative Research Analysis in Health Urban Affairs I (3). Application of quantitative techniques used for research analysis in health and urban affairs research and practice settings. Prerequisites: STA 3145 or STA 6166 or equivalent.
PHC 6710 Qualitative Research Methods in Public Health (3). Critical issues, theoretical and practical applications for conducting qualitative research explored as they relate to health, social service and public administration environments. Prerequisite: Graduate Research Methods.
PHC 6715 Survey Research in Public Health (3). Health survey design, implementation and analysis, and interpretation of data. Emphasis on practical aspects of conducting health surveys. Study of existing health surveys. Prerequisites: PHC 6000 and PHC 6065. (F,S)
PHC 6750 Program Development and Evaluation in Health Promotion (3). Focuses on the development, implementation, and evaluation of health promotion programs to improve health outcomes. Prerequisites: PHC 6000 and PHC 6065. (SS)
PHC 6751 Community Organization for Health Promotion (3). Emphasis is on the diagnosis of community health problems and various organizational strategies utilized for effective solution. Review and analysis of community organization process; resources; and the role of health promotion specialist. Prerequisites: Health Promotion Concentration or permission of the instructor. (F)

PHC 6754C Analytic Methods in Maternal and Child Health (3). Enhances skills in independent data analysis using free software (Epi Info, OpenEpi) and publicly available data in local and state health agency professionals and students preparing for MCH practice.
PHC 6762 International Public Health (3). This course describes international differences in the distribution and determinants of disease and health, and examines interventions aimed at improving health status. (F)
PHC 6763 Global Perspectives of Environmental Health in Caribbean and Latin America (3). The course describes the relationship between human health and the environment in developing countries of the Caribbean and Latin America. Prerequisite: PHC 6315.
PHC 6900 Environmental Public Health Genomics and Molecular Toxicology Journal Club (1). Students will learn to read, evaluate, present and discuss papers. Papers will be presented on a diverse set of topics related to genetics of environmental human diseases and molecular toxicology.
PHC 6901 Readings in Public Health (1-3). Individual advanced study in a comprehensive overview of Public Health or in-depth advanced study of a specialty.

Prerequisites: Permission of instructor and Advanced standing in the graduate program.
PHC 6907 Independent Study: Public Health (1-3). Allows student investigations of special topics and issues utilizing literature searches, analysis, or active performance in public health settings under the direction of faculty supervision. Prerequisite: Permission of the faculty advisor.
PHC 6914L Current Topics in Environmental and Occupational Health Science Research Lab (1-9). To conduct laboratory based analytical research and collect data.
PHC 6917 Environmental and Occupational Health Sciences Pre Doctoral Research (1-6). This course is designed to provide the Pre-Doctoral student with experience in the conduct of a research project with guidance from appropriate environmental and occupational health faculty.
PHC 6920 Special Topics in Environmental and Occupational Health (3). This course is designed to impart in depth knowledge of emerging issues in the area of environmental and occupational health.
PHC 6921 Environmental Health and Toxicology Seminar (3). Designed to develop critical and analytical thinking skills in the environmental and occupational health research.
PHC 6930C Integrative Seminar in Public Health (3). Integrative Seminar serves as the culminating experience for MPH degree and the final assessment of the public health competencies required of MPH graduates. Prerequisites: PHC 6945 or instructor consent, if exempt from PHC 6945.
PHC 6931 Special Topics in Biostatistics (1-3). This is a series of $1-3$ credit hour offerings, on topics of considerable interest to advanced masters and doctoral students in public health, not limited to statistical methods. Prerequisites: PHC 6052, PHC 6091, or permission of the instructor.
PHC 6934 Scientific Writing and Oral Presentations in Epidemiology and Biostatistics (3). Covers the planning and execution of written and oral presentations in epidemiology/biostatistics by critically evaluating published articles and preparing a manuscript and an oral presentation. Prerequisites: PHC 6000 and PHC 6065.
PHC 6935 Special Topics in Health Promotion (3). A detailed exploration into particular research methodologies, approaches and techniques relevant to Health Promotion. Topic will vary depending upon the instructor. Course may be repeated. Prerequisite: Permission of the instructor.
PHC 6939 Special Topics in Cardiovascular Disease Epidemiology (3). The purpose of this course is designed to impart in-depth knowledge of a particular cardiovascular disease or risk factor that is affecting populations nationally and or internationally. Prerequisites: PHC 6000, PHC 6065, or permission of the instructor.
PHC 6945 Practicum in Public Health (3). This course is a preceptor-guided experience in public health organization. It provides an opportunity for graduate students in Public Health to bridge the gap between theory
and practice. Prerequisite: Permission of the faculty advisor. (F,S,SS)
PHC 6971C Master's Thesis in Public Health (1-6). The Master's Thesis is a scholarly manuscript resulting from a long period of research and related preparation, undertaken to fulfill partially the requirements of an advanced degree.
PHC 6977 Master's Research Project (3). Course provides the student with an opportunity to pursue research in an area pertaining to Public Health.
PHC 7011 Advanced Current Research in Epidemiology (3). The purpose of this course is to examine and critically review current areas of research in Epidemiology with focus on observation studies. Prerequisites: PHC 6000, PHC 6013, PHC 6065 or equivalent.
PHC 7015 Advanced Research Methods-Experimental Design (3). A course on methods in experimental epidemiologic studies, including randomization, blinding, assessment of adverse effects, compliance, and intent-totreat, survival and subgroup analyses. Prerequisites: PHC 6000, PHC 6065, PHC 6013.
PHC 7017 Advanced Epidemiology for Health Disparity (3). Provides advanced understanding of health disparity - disparity indicators, complex measurement methods and applications, theoretical frameworks, and analysis and evaluation of programs/policy. Prerequisites: PHC 6055 and PHC 6065 or equivalent.
PHC 7018C Advanced Environmental Health (3). The objective of this course is to teach students advanced toxicology principles such as toxicokinetics, polymorphisms of metabolizing enzymes, toxicogenomics, and biomarkers of toxic exposure. Prerequisite: PHC 6310.

PHC 7050 Advanced Biostatistics I (3). Application of linear statistical model to public health data held in the Public Health Informatics Laboratory. Utilizes various statistical software. Prerequisites: PHC 6052 or permission of the instructor.
PHC 7051 Advanced Biostatistics II (3). Design and analysis of experiments for public health data. ANOVA and mixed model analysis, testing assumptions diagnostics, uses the Public Health Informatics Laboratory. Utilizes various statistical software. Prerequisites: PHC 7050 or permission of the instructor.
PHC 7054 Advanced Biostatistics III (3). Generalized linear model and estimating equation approaches for nonlinear public health data. Held in the Public Health Informatics Laboratory utilizing various statistical software. Prerequisites: PHC 7050, PHC 7051, or permission of the instructor.
PHC 7095C Advanced Methods for Health Systems Research (4). This course focuses on quantitative research methods using secondary data and introduces students to a wide spectrum of national and global health policy databases. Prerequisite: PHC 6091.
PHC 7162 Grant Writing in Public Health (3). Course covers proposal writing political/social aspects of "grantmanship" identifying sources of grant funding doing research to support the application, and tailoring the
proposal to specific audiences. Prerequisites: PHC 6091, PHC 7705, PHC 7981.
PHC 7198 Advanced Qualitative Methods in Public Health (3). Advanced research design, data analysis and writing findings in qualitative research. Prerequisites: PHC 6706, PHC 6710, PHC 6715, or equivalent advanced research methods.

PHC 7300 Biological Basis of Environmental Public Health (3). This course will discuss current research and biomedical advances in the field of environmental and occupational health, disease prevention, diagnosis, control, and treatment.

PHC 7327 Scientific Advances Influencing Environmental Health Decisions (3). This course will explore emerging scientific discoveries to understand environmental human disease and how the emerging technologies can be applied to environmental health and regulatory decisions.
PHC 7372 Signal Transduction in Environmental Health and Toxicology (3). Designed to develop critical and analytical thinking about how hazardous agents interfere with normal signaling while others may mimic endogenous stimulants and mediators.

PHC 7374C Advances in Cellular and Environmental Toxicology (3). This is a doctoral level advanced course covering the toxicological basis of human disease and the recent progress made in the field. Course provides coverage of environmental agents and experimental approaches. Prerequisite: PHC 6310.
PHC 7437C Applied Economic Evaluation for Health Systems Research (4). This course is an advanced methods course focuses on the economic evaluation of health policies, programs, and systems. Prerequisites: PHC 6091, PHC 7095C.
PHC 7502 Health Promotion in the Workplace (3). This course emphasizes program design, management, and evaluation of health promotion in corporations. Issues in health assessment, fitness, wellness, and stress will be covered. Prerequisites: PHC 6589, PHC 6410.

PHC 7583 Policy and Practice in Health Promotion (3). Intensive exploration of health promotion policies with critical analysis. Preparation to develop effective policies and to assess the appropriate practice of health promotion or different levels.
PHC 7584 Advanced Research Designs (3). This course reviews and critically evaluates multiple research methods of analysis from disciplines such as psychology and sociology as they apply to health promotion research and ethics. Prerequisites: PHC 6750 and PHC 6146 or permission of the instructor.

PHC 7587 Theory Development in Health Promotion (3). Discussion and critique of the structural components and research processes related to the origination and construction of health promotion theories. Prerequisites: PHC 5409 and PHC 6602.
PHC 7588 History and Foundations of Public Health (3). This course reviews the evolution of the public health profession and the principles and practices of health promotion. Prerequisites: PHC 6710 and advanced standing.

PHC 7606 Tobacco Use: Causes, Consequences, and Control (3). The course will utilize a broad approach to provide a comprehensive overview of the history, epidemiology, health effects, and policy aspects of the tobacco epidemic. Prerequisites: None for PhD students, and core courses for MPH students.
PHC 7702 Advanced Measurement in Public Health (3). Advanced course in measurement and evaluation in public health. Computer applications for public health practice emphasized. Prerequisites: PHC 6065, PHC 6715, PHC 6750.

PHC 7705 Methods in Evidence Based Public Health (3). Review of methods in evidence based public health; study designs addressing patient reported outcome measures; health status measures, area-based health intervention evaluation, quality of life and survival measures in health interventions. Prerequisite: PHC 6065.
PHC 7711 Methodological Issues in Scientific Inquiry of Public Health Research (3). Understanding and application of analytical methods in the philosophy of science in order to explore systematically the critical methodological issues underlying public health research. Prerequisite: Doctoral standing.
PHC 7713 Advanced Environmental and Occupational Epidemiology Research Methods (3). Students will emerge from the course with an appreciation and knowledge of how to apply epidemiologic principles to the design and analysis of environmental and occupational health case studies. Prerequisites: PHC 6001, PHC 6065, Ph.D. standing or advanced MPH student with departmental approval.
PHC 7716 Advanced Research Methods: Survey Research (3). Conceptualization of survey research including how to conduct a survey and present results for professional publication. Prerequisites: PHC 6706, PHC 6065.

PHC 7719 Quantitative Multivariate Analysis in Health Sciences Research (3). Application of quantitative techniques used for research analysis in health and urban affairs practice settings with focus on statistical modeling. Prerequisites: PHC 6052, PHC 6091, or permission of the instructor.

PHC 7723 Survey Research in Public Health (3). This course facilitates the systematic identification, interpretation, and understanding of survey research concepts, principles, and practices in public health. Prerequisites: PHC 6000, PHC 6065, PHC 6410, PHC 6706.

PHC 7909C Health Systems Research Readings 2 (3). This is the second of a two-semester course sequence for doctoral students covering the main components of health systems in the U.S. and abroad, and the diverse ways in which researchers analyze them. Prerequisite: Permission of the instructor.

PHC 7933 Seminar in Biostatistics (1-6). Course emphasis on the biostatistical methods used in research. Various biostatisticians will present their current research and lead class discussions on the development of their research agenda. Prerequisites: PHC 7050, PHC 7051, PHC 7054.

PHC 7980 Dissertation (1-12). Research for doctoral dissertation under the supervision of a major professor and a doctoral committee. Prerequisites: Permission of instructor and doctoral candidacy.
PHC 7981 Research Concepts and Proposal Development (3). The purpose of this course is to present the basic general components of research, to describe methods, and to present perspectives specifically and directly applicable to the field of public health. Prerequisites: PHC 6091 or equivalent.
PHC 7982 Public Health Pre Dissertation Research (16). This course is designed to provide Doctoral students with the guidance necessary to prepare for comprehensive examination and dissertation proposal under the guidance of the dissertation chair. Prerequisites: Admission into the Ph.D. program, instructor consent, completion of coursework.
SOW 5105 Human Behavior and the Social Environment I (3). Study of individuals and families with emphasis on the analysis of biopsychosocio-cultural factors (including racial/ethnic and gender variables) affecting human development and social functioning through the life cycle. Prerequisites: 12 semester hours of college-level courses in the social and behavioral sciences and one college-level course in biology (including coverage of human biology).
SOW 5109* Crises in the Lives of Women (3). An overview of special experiences in the lives of women which might lead women to seek professional assistance. Topics include pregnancy, domestic violence, rape, abortion, childbirth, sex discrimination, AIDS, climacteric, widowhood. Prerequisites: Senior or graduate standing.
SOW 5155* Social Work Practice with Sexual Problems (3). Skills applicable to sex-related concerns encountered in social work practice. Presents theories of the etiology of common sexual problems and explores treatment intervention modalities. Prerequisites: Graduate or senior level practice course or permission of the instructor.
SOW 5235 Social Welfare Policy and Services I (3). This course analyzes major social welfare policies and programs in the United States, their emergence, development, contemporary operations and how they shaped the development of the Social Work profession.
SOW 5240* Advanced Interventions in Child Maltreatment (3). This course will examine best practices in the health, mental health, and socio-emotional development of children and adolescents within the child welfare system. Prerequisites: SOW 5105 and SOW 5342 or advanced standing status.
SOW 5241* Advanced Child Welfare Policy and Practice (3). This course will explore professional practice and policy issues in child welfare, with emphasis on intervention in child maltreatment. Prerequisites: SOW 5235 and SOW 5105 or advanced standing status.
SOW 5324 Theory and Practice With Groups (3). Study and application of biopsychosocial, cultural dimensions, theories, techniques and intervention strategies for social work group practice. Prerequisite: SOW 5342. Corequisite: SOW 5532.

SOW 5342 Social Work Practice with Individuals and Families (3). This course is an overview of social work practice with individuals and families placing emphasis on professional values, interviewing skills, assessment, intervention, and outcome evaluation, all within a crosscultural perspective. Pre/Corequisite: SOW 5105. Corequisite: SOW 5379L.
SOW 5344 Theory and Practice with Communities and Organizations (3). Study and application of biopsycho-socio-cultural dimensions, theories, techniques and intervention strategies for communities and organizations. Focuses on empowerment of populations at risk and promotion of social and economic justice.
SOW 5354* Crisis Intervention in Social Work Practice (3). This course examines the etiology, structure, theory, and application of crisis intervention in social work practice. It provides assessment criteria for assignment to this form of treatment and techniques for intervention. Prerequisites: Senior or graduate level practice course, or permission of the instructor.
SOW 5365* Behavior Therapy in Social Work Practice (3). Overview of the principles, clinical foundations, and applications of socio-behavioral approaches relevant to social work practice. Emphasis on behavioral change methods and problem solving in assessment, intervention, and evaluation.
SOW 5379L Interviewing Skills Lab (2). Competencybased course providing graduate students with basic interviewing skills for social work practice. Emphasis is on acquisition of interviewing behavior rather than theory. Corequisite: SOW 5342.
SOW 5404 Social Work Research Methodology (3). This course provides information on the principles and methods of basic social work research. The ethical conduct of research is taught within the context of social work purposes and values. The formulation of problems for study that address the social needs of diverse population groups is emphasized. Prerequisite: Statistics.
SOW 5455* Writing and Managing Grants for Social Service Programs (3). Prepare students to write, develop and manage grants for social services programs. Develop knowledge of grant sources, the grant making, writing and management of grant funded social welfare services. Prerequisite: SOW 5344.
SOW 5532 Field Practicum I (4). The first masters-level field practicum and seminars that provide students with the opportunity to apply and integrate generalist social work knowledge and skills. Prerequisites: SOW 5105, 5235, 5342, 5404, 5379L. Pre/Co-Req: SOW 5629, 5344. Corequisite: SOW 5324.
SOW 5541* Advanced Standing Seminar (2). This course examines the integration of academic knowledge and social work skills that develop the profession's critical thinking foundation. Prerequisites or Corequisites: SOW 6125, SOW 5324.
SOW 5605* Medical Social Work (3). Principles of medical social work practice in hospitals and communities. Focuses on the social worker as part of the health care team, with basic knowledge of medical problems of patients and their families. Prerequisites: Graduate or senior standing.

SOW 5607* Social Work Practice and Psychopharmacolocy (3). Social work practice, research, and policy in relation to psychotropic drugs including effectiveness and limitations of main drug classes and ethical, professional, legal, scientific and cultural issues. Prerequisites: Graduate or senior standing.
SOW 5614* Social Work Practice with Persons Affected by Domestic Violence (3). Course prepares students to appropriately identify, assess, and intervene with persons affected by domestic violence utilizing assessment and intervention strategies in practice. Prerequisites: Graduate or Senior standing with the permission of the instructor.
SOW 5621* Social Work with Refugees, Immigrants, and Migrants (3). Provides skills and knowledge responsive to the needs of immigrants and refugees and addresses influences of cultural, ethnic, gender, age, and class differences in acculturation and service delivery. Prerequisites: Graduate or Senior standing with the permission of the instructor.
SOW 5624* Feminist Therapy in Social Work (3). Reviews basic principles of feminist therapy and focuses on the application of feminist therapy in clinical social work practice. Prerequisites: Graduate standing or permission of the instructor.
SOW 5629 Social Work Practice with Diverse Populations (3). Prepares students for responsive practice with diverse populations, with emphasis on South Florida. Includes knowledge and skills in interviewing, assessment interventions, termination, and follow-up. Prerequisite: SOW 5342.
SOW 5635* School Social Work Practice (3). Designed to assist students in developing knowledge and skills necessary for effective social work practice in school settings. Promotes understanding of social work practice to improve the functioning of children. Prerequisites: Graduate or permission of instructor.

SOW 5640* Foundations in Gerontology for Health Professions (3). Implications for health professions of the biological, cross-cultural, physiological, psychological, social, and societal contexts of aging.
SOW 5641* Understanding the Process of Aging (3). Study of the physical, psychosocial, and cultural factors affecting human development in late life, from a social work perspective. Prerequisites: Graduate or senior standing and permission of the instructor.
SOW 5672* Animal Assisted Treatment for Social Work (3). An introduction to the human animal bond and animal assisted treatment. There will be illustrations of programs using small animals, horses, and dolphins. Prerequisites: Graduate or permission of instructor.
SOW 5710* Current Issues in Addiction Practices (3). An overview of chemical dependency in the social service delivery system including policy and program approaches, client assessment, treatment techniques and prevention issues. Prerequisites: Graduate or Senior standing.

SOW 5805C* Counseling the Elderly (3). Applied gerontological knowledge to counseling skills required for independent as well as frail elderly clients. Course focuses on long and short term interventions in a range of practice settings. Prerequisites: Graduate or senior standing.

SOW 5905* Individual Study (1-3). Individually selected program of advanced supervised study related to specific issues in social work and social welfare. Prerequisite: Permission of the instructor.
SOW 5932* Seminar in Social Work (3). An exploration of various critical issues of concern to the social work profession. Prerequisites: Graduate or senior standing.
SOW 6114C* Assessment and Treatment of Addiction and Related Problems (3). Course provides increased understanding of treatment for addictive disorders including assessment, therapeutic techniques and supportive aftercare as well as community consultation and referral skills. Prerequisite: SOW 5710.
SOW 6125 Human Behavior and the Social Environment II-Psychopathology (3). Study of the psychosocial aspects of client problems, including psychopathology, frequently encountered by social workers in direct practice with attention to differential treatment issues. Prerequisites: SOW 5105 and 2nd year or advanced standing status.
SOW 6236 Social Welfare Policy and Services II (3). This course offers students the opportunity to gain indepth knowledge about social welfare policy-making processes and their impact on the social service delivery system. Prerequisite: SOW 5235 and 2nd year or advanced standing.
SOW 6243* Child and Family Social Policy Issues (3). A comprehensive overview of the range of children and family policies, programs and issues in the U.S.A. in the context of comparing residual and institutional approaches to social service delivery, and policy implications for use of each approach.

SOW 6245* Social Welfare Policies and Services to the Elderly (3). The content of the course will center around the federal/state policies affecting the quality of life of the older person. Among the areas to be considered are an overview of the situation of the aged, specific public and private social welfare policies, including the origin of policy making, and problems involved in the process of implementation of social welfare policies for the elderly.

SOW 6281* Legal Aspects of Social Work Practice (3). Introduction to legal aspects of social work practice including client and agency rights, malpractice issues, legal research, and practice interaction with legal counsel, legal services, and the courts.
SOW 6351 Clinical Intervention in Couple and Family Social Work Practice (3). Provides students with a critical and culturally sensitive understanding and application of the major models of social work intervention with couples and families. Prerequisite: SOW 6533 and SOW 6425 Assess. And Intervention. Corequisite: SOW 6534.
SOW 6359* Social Work Treatment with Families of the Elderly (3). Preventive and treatment approaches in social work practice with families of the elderly. Focus on aging family as client-system; knowledge, skills needed for a range of interventions are provided.

SOW 6372* Supervision, Consultation and Staff Development (3). Key aspects of the social services supervisory situation are explored. This course emphasizes supervisory competence, issues facing
supervisor and supervise. Also explores consultation and staff development.

SOW 6386* Social Program Planning and Development (3). Theory and practice of social program planning and development for organizations and communities. Social services to families, children and elderly, especially service needs for which programs do not exist will receive special emphasis.
SOW 6387* Social Services Management Skills (3). Learning units in which students practice and demonstrate, through simulation and participation, skills in major aspects of social services management.
SOW 6425 Clinical Assessment and Intervention Planning (3). Critical analysis of assessment models, the current issues, skills of assessment and intervention planning, including the evidence basis of assessment practice. Prerequisites: SOW 5324 and SOW 5532 or advanced standing. Corequisite: SOW 6533.
SOW 6435 Evaluating Empirically Based Social Work Practice (3). This course focuses on research designs and measurements for evaluating social work practice building on empirically-based approaches. Prerequisites: Admission to concentration or permission of the instructor.
SOW 6436* Empirically-Based Practice in Social Work (3). Advanced utilization of intervention effectiveness research results and techniques in social work practice with individuals, families and groups. Prerequisites: SOW 6435 and an advanced practice course.
SOW 6533 Field Practicum II (3). The first part of two masters-level advanced field practicum courses and integrative seminars that provide students with the opportunity to apply and integrate advanced clinical knowledge and skills. Prerequisites: A BSW/BSSW degree and advanced standing status or satisfactory completion of SOW 5532, 5344, 5629, 5324. Pre/Co-Reqs: SOW 6125, 6435, 6236. Corequisite: SOW 6425.
SOW 6534 Field Practicum III (6). The second part of two masters-level advanced field practicum courses and integrative seminars that provide students with the opportunity to apply and integrate advanced clinical knowledge and skills. Prerequisites: SOW 6533, 6435, 6125, 6236, PHC 5108. Corequisite: SOW 6351.
SOW 6611* Advanced Practice with Family Systems (3). Advanced clinical skills in working with families and couples. Focus will be given to non-traditional change strategies such as family sculpting, family reenactment, family choreography and dramatization. Extensive use of videotaped case simulations, co-therapy, live supervision and peer evaluation models. Prerequisites: SOW 6351 or permission of the instructor.
SOW 6646* Social Work Practice with the Elderly (3). The knowledge and skills necessary for advanced social work practice in social agencies which deal with problems and issues of the aging population in contemporary society.
SOW 6647* Advocacy in Social Work Practice (3). This course covers skills and knowledge necessary for the practice of advocacy on behalf of individuals and groups, including political, legislative, and organizational perspectives.

SOW 6649* Social Work Practice in Long Term Care and the Elderly (3). This course focuses on direct practice with the frail elderly and their families within the rapidly changing system of community and institutional long term care.

SOW 6655* Clinical Intervention in Child and Adolescent Social Work Practice (3). This course will provide students with the opportunity to select, apply and evaluate appropriate intervention strategies in working with children and adolescents. Specific attention to sociocultural, gender and racial differences in understanding development issues and in critically assessing the applicability of practice theories. Prerequisites: SOW 5324, SOW 5532, or advanced standing program.
SOW 6656* Decision-Making in Child Placement (3). This course will stress decision-making and interventions when substitute care is considered or carried out. Termination of parental rights and the choice and timing of placements of children will be considered.
SOW 6711* Prevention of Addiction and Related Problems (3). Course provides increased understanding of substance abuse prevention including history and effective approaches as well as skills to reinforce healthy lifestyles and identify early potential problems. Prerequisite: SOW 5710.
SOW 6914* Independent Research (1-6). Individually selected program of supervised data collection and analysis on specific topics in social work and social welfare. Prerequisites: SOW 5404 and permission of the instructor.
SOW 7216 Social Welfare Policy (3). Using a systemic approach and focusing on high-risk populations, this course analyzes the social welfare policy-making process and its impact on public and private social service delivery systems. Prerequisites: Admission to Ph.D. program or permission of the instructor.
SOW 7237 Micro-Practice Theory and Research (3). Analysis of research priorities in the development of effective interventions in the social welfare field. Prerequisites: Admission to Ph.D. program or permission of the instructor.
SOW 7238 Macro-Practice Theory and Research (3). This course focuses on intervention theory research and methods at the community, organizational and societal level. Prerequisites: Admission to Ph.D. program or permission of the instructor.
SOW 7406 History and Systems of Social Work Research (3). Development, dissemination, and utilization of Social Work Research; the social work research tradition; types of research questions in Social Welfare; past and current contextual influences on social work research.
SOW 7492 Theory Development and Research Methods in Social Welfare (3). The logic of social research, role of theory in social welfare research, range and limitations of research methods, ethical issues. Students begin work on their doctoral research proposal. Prerequisites or Corequisites: STA 6166 or equivalent. Prerequisites: Admission to Ph.D. program or permission of the instructor.

SOW 7493 Research Methods in Social Welfare II (3).
This second course in a two-semester sequence focuses primarily on design, measurement, and analysis issues in ethno-graphic field studies, surveys and group experiments for the evaluation of intervention technology in social welfare. Prerequisites: SOW 7492 and STA 6166, or equivalent.
SOW 7916 Supervised Research (3). Directed experience in the conduct of research in social welfare and social work under the guidance of a faculty member. Must be taken twice for a total of six credits. Prerequisite: Completion of first year.
SOW 7932 Interdisciplinary Seminar on Social Welfare Within an Urban Milieu (3). Academics from social work and allied disciplines and professions will discuss their theoretical interests and research activities. Prerequisite: Successful completion of first year of Doctoral program.
SOW 7936 Dissertation Seminar in Social Welfare (3). This course focuses on helping students with the development of the dissertation prospectus. Emphasis is placed on development of an acceptable research protocol in the students' specialization area. Prerequisites: SOW 7215, SOW 7237, SOW 7238, SOW 7492, and SOW 7493.

SOW 7980 Ph.D. Dissertation (1-12). This course provides dissertation guidance to doctoral candidates in the Ph.D. program in Social Welfare. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
*Social Work Electives
For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/students/advising/index.html.

## Robert Stempel College of Public Health and Social Work

Dean
Interim Associate Dean, Academic Affairs
Associate Dean, Research
Interim Assistant Dean, Student and Alumni Affairs
Assistant Dean, Continuing Education
MPH Program Director
Chairs and Directors:
Biostatistics
Dietetics and Nutrition
Environmental and Occupational Health
Epidemiology
Health Policy and Management
Health Promotion and Disease
Prevention
School of Social Work

## Faculty

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For additional and updated information about degrees offered, entrance requirements, and services, please visit our website:
http://stempel.fiu.edu/faculty-and-staff/index.html.

# Chaplin School of Hospitality and Tourism Management 

Mike Hampton, Dean
Terry Lease, Associate Dean of Academics
Rocco M. Angelo, Associate Dean of Alumni Relations
Mohammed A. Qureshi, Associate Dean of
Administration and Facilities
Diann R. Newman, Associate Dean of Student Services
Eric Beckman, Assistant Professor
Lisa N. Cain, Assistant Professor
Patrick J. Cassidy, Instructor
Howook "Sean" Chang, Assistant Professor
Michael Cheng, Professor and Director, Food and
Beverage Program
Joseph M. Cilli, Director of Distance Learning
M. Nancy Del Risco, Lecturer

Joel Feigenheimer, Visiting Instructor
Barry Gump, Visiting Professor
Miranda Kitterlin, Assistant Professor
Jumyong "Stephen" Lee, Assistant Professor
Carolin Lusby, Assistant Professor
Steven V. Moll, Associate Professor and Vice Provost, Biscayne Bay Campus
Elisa Moncarz, Professor Emeritus
Michael J. Moran, Instructor
Roger Probst, Instructor
Joan S. Remington, Professor
Nancy Scanlon, Associate Professor
Pablo Simon, Assistant Professor
Eunju Suh, Associate Professor
Mary L. Tanke, Associate Professor
John H. Thomas, Assistant Professor
Aaron Welch, Visiting Assistant Professor
Judith Williams, Visiting Instructor
Jinlin Zhao, Professor and Director, Graduate Programs
The Chaplin School of Hospitality and Tourism Management offers Bachelor and Master Degrees in Hospitality Management that combine practical experience with classroom theory to assist the student in gaining the understanding, skills, and techniques needed to qualify for progressively responsible job opportunities and to achieve his or her career goals in the hospitality and tourism industries.

With the cooperation of industry executives, the School has created an internship program which literally utilizes the hotels, resorts, restaurants, clubs, airlines, travel agencies, and cruise lines as practice labs for students.

An Industry Advisory Board - which includes outstanding executives in the lodging, food service and tourism industries - works regularly with the faculty, staff, and students of the School to formulate and update a curriculum that is current, flexible, and related to the needs of the hospitality and tourism industries.

The School was designated a Program of Distinction by the former Florida Board of Education.

Note: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review, in order to serve the needs of the University's various publics, and to respond to the mandates of the Florida Board of Education and the Florida Legislature. Changes may be made without advanced notice. Please refer to the General Information section for the University's policies, requirements, and regulations.

## Location

The School is located on 200 tropical acres in a resort-like setting at the scenic Biscayne Bay Campus at Biscayne Boulevard and Northeast 151 Street, North Miami, Florida. The graduate program is available in person and completely online. Some courses available in the evening.

## Admission

Applicants to the School must submit a graduate application for admission to the University and must follow the regular University admission procedures described in the Admission section of the catalog. Applicants must be eligible for admission to the University before admission to the School.

Admissions standards for the Master of Science degree in Hospitality Management are an earned four year bachelor's degree with a 3.0 grade point average (GPA) on a 4.0 scale. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL (with no subscore below 52), 80 on the internet-based TOEFL (iBT) (with no subscore below 17) or 6.5 overall on the IELTS (with no subscore below 5.5).

An applicant with a GPA (as calculated by our admissions office) of less than 3.0 should submit scores of at least the $50^{\text {th }}$ percentile on the Graduate Record Examination (GRE) or at least 500 on the Graduate Management Admission Test (GMAT) which will be taken into consideration by the admissions committee in its evaluation of the application. Students who have earned a Master's degree from an accredited institution with a minimum 3.0 GPA (as evaluated by the University Graduate Admission's office) may be waived from the GRE or GMAT requirement.

International students may be required to pass an assessment in English comprehension, speaking and writing skills.

A maximum of six semester hours of related graduate credit may be transferred from another university or from the graduate programs of this University provided they meet University requirements.

There is a requirement that all students complete 1000 hours of practical work experience in the hospitality or tourism industry in addition to the Graduate Internship of 300 hours. A minimum of 800 hours of the total 1300 hours must be completed while enrolled at FIU. Work experience documentation is required.

## Degree Requirements

To be eligible for a Master's degree, a student must:

1. Satisfy all University requirements for a Master's degree.
2. Complete a minimum of 33 semester hours of graduate level course work in the Hospitality Management curriculum. (Exception: Executive Hospitality Management Track).
3. Earn a minimum grade point average of 'B' (3.0) in all approved courses in the student's graduate program of study.
No courses, in which a grade below ' $C$ ' is earned, may be counted toward the Master's Degree in Hospitality Management. However, all approved work taken as a
graduate student will be counted in computing the grade point average, including courses graded ' $D$ ' or ' $F$ '.
4. Pass an English Assessment Examination given by the University's Writing Center.

## Non-Degree Seeking Students

Individuals who do not have the educational requirements to meet degree admission standards may be interested in enrolling in certain specific courses to improve their skills and to enhance their chances for promotion. A person may register as a Non Degree Seeking Student for a maximum of 12 semester hours. These credits and grades will not be considered for admission to our degree programs.

## Distance Education Programs

The School of Hospitality Management offers the following programs via distance learning:

1. Executive Master of Science in Hospitality Management
2. Master of Science in Hospitality Management

## Master of Science in Hospitality Management

Core Requirements: (33)
HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies 3
HMG 6225 Multicultural Human Resources Management for the Hospitality Industry 3 or
HMG 6246 Organizational Behavior in the Hospitality Industry
HMG 6296 Strategic Management for Hospitality and Tourism
HMG 6257 Contemporary Global Issues in Hospitality and Tourism
HMG 6477 Financial Management of the Hospitality Industry
HMG 6476 Feasibility Studies for the Hospitality Industry
or
HMG 6478
HMG 6916
Restaurant Development 3

HMG 6697 Hospitality Law Seminar 3
HMG 6946 Graduate Internship* 0
HMG 6466 Hospitality Revenue Management 3
HMG $6596 \quad$ Marketing Management 3
Elective Course 3

## Industry Experience Requirement: 1300 hours*

The zero credit Graduate Internship (HMG 6946) involves 300 hours of hospitality work experience and is required for all graduate students unless prior experience warrants a waiver of this requirement (see advisor for information). Prior to registering for Internship, students are required to complete 1000 hours of hospitality related practical work experience. The total work hours required is 1300 hours. A minimum of 800 hours must be completed while enrolled in the graduate program at FIU and up to 500 hours may be completed prior to enrolling at FIU. Work experience documentation is required. If the candidate provides
documentation of 1300 hours of work experience requirement is waived.

## Master of Science in Hospitality Management: Executive Masters Track

## Management Experience

A minimum of five years hospitality related management experience is required for acceptance into this track. Applicants must currently hold a management position in the hospitality or tourism industry. A Bachelor's degree from an accredited institution is required.

## Core Requirements: (30)

HMG 6225 Multicultural Human Resources Management for the Hospitality Industry 3 or
HMG 6246 Organizational Behavior in the Hospitality Industry
HMG 6257 Contemporary Global Issues in
HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies 3
HMG $6296 \quad \begin{array}{ll}\text { Strategic Management for Hospitality } \\ \text { and Tourism }\end{array}$
HMG $6296 \quad \begin{array}{ll}\text { Strategic Management for Hospitality } \\ \text { and Tourism }\end{array}$
HMG $6296 \quad \begin{array}{ll}\text { Strategic Management for Hospitality } \\ \text { and Tourism }\end{array} \quad 3$
HMG 6446 Hospitality Enterprise Technologies 3
HMG 6476 Feasibility Studies for the Hospitality Industry
or
HMG 6478 Restaurant Development 3
$\begin{array}{ll}\text { HMG } 6477 & \text { Financial Management for the } \\ & \text { Hospitality Industry }\end{array}$
HMG 6596 Marketing Management 3
HMG 6697 Hospitality Law Seminar 3
Elective Graduate Course 3

## Master of Science in Hospitality Management: Thesis Track

## Course Requirements (33)

HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies
HMG 6225 Multicultural Human Resources Management for the Hospitality Industry 3 or
$\begin{array}{ll}\text { HMG } 6246 & \begin{array}{l}\text { Organizational Behavior in the } \\ \text { Hospitality Industry }\end{array}\end{array}$
HMG 6296 Strategic Management for Hospitality and Tourism
$\begin{array}{ll}\text { HMG } 6257 & \text { Contemporary Global Issues in } \\ & \text { Hospitality and Tourism }\end{array}$
HMG 6596 Marketing Management 3
$\begin{array}{ll}\text { HMG } 6477 & \text { Financial Management for the } \\ & \text { Hospitality Industry }\end{array}$
HMG 6697 Hospitality Law Seminar 3
HMG 6586 Research and Statistical Methods 3
HMG $6916 \quad$ Hospitality Industry Research Project
HMG 6972 Thesis 3
Elective Course 3

## Master of Science in Hospitality Management: Specialization in Hospitality Real Estate

This specialization is based on the competencies required of today's hospitality executives due to the evolving organizational structure of the hospitality industry as it has moved from an owner-operator model to one with discrete enterprises; one developing the real estate and another managing the completed operating unit. This specialization will provide interested students the opportunity to achieve success in the growing field of hospitality real estate development and finance.

## Required Courses

In addition to the 33 credit Master's degree in Hospitality Management, the following (3) courses are required for this specialization (one of these courses may be used for the one hospitality elective in the program):

| HMG 6429 | Hospitality Asset Management | 3 |
| :--- | :--- | :--- |
| HMG 6607 | Hospitality Real Estate Development | 3 |
| HMG 6486 | Investment Analysis for the Hospitality |  |
|  | Industry | 3 |

## Combined BS/MS in Hospitality Management

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than 12 graduate credits may be applied toward both degrees. Students must earn a "B" or higher grade in these 4 courses in order to apply towards the Master's degree.

## Admission Requirements

1. Current enrollment in the Bachelor's Degree program in Hospitality Management at FIU.
2. Completed at least 75-90 credit hours of course work.
3. Current GPA must be 3.2 or higher.

## General Requirements

1. Complete the separate $4+1$ application.
2. Applications should be submitted in the first semester of the student's senior year.

## Required: ( 33 credits)

HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies 3
HMG 6225
Multicultural Human Resources
Management for the Hospitality Industry 3
or

HMG 6246

HMG 6296 Strategic Management for Hospitality and Tourism
HMG 6257 Contemporary Global Issues in Hospitality and Tourism
HMG 6477 Financial Management of the Hospitality Industry
HMG 6476 Feasibility Studies for the Hospitality Industry
or
HMG 6478 Restaurant Development 3
HMG 6916 Hospitality Industry Research Project 3
HMG $6697 \quad 3$
HMG 6946 Graduate Internship 0
HMG 6466 Hospitality Revenue Management 3
HMG 6596 Marketing Management 3
Elective Course

## Overlap

Up to 4 courses ( 12 credits) may be used to satisfy both the bachelor's and master's degree requirements. Courses must be 5000- or 6000- level School of Hospitality and Tourism Management Graduate Courses and students must earn a grade of a " B " or higher.

## Master of Science in International Real Estate/Master of Science in Hospitality Management

The Hollo School of Real Estate and the Alvah H. Chapman Jr. Graduate School of Business along with the Chaplin School of Hospitality and Tourism Management at Florida International University have a joint degree program culminating in both a Master of Science in International Real Estate (MSIRE) degree and Master of Science in Hospitality Management (MSH) degree. Under the joint degree program, a student can obtain both degrees in less time and at a lower cost than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on their application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already completed their degree. MSIRE and MSH students must apply and be admitted prior to or concurrent with the last semester in which they are expected to complete their original degree requirements.
3. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
4. The joint degree program will apply to the on-line versions of both degree programs. The joint degree does not include the Executive MSHM degree.
5. Candidates must satisfy all requirements for each degree. To obtain the MSIRE degree, student will be required to take ten (10) courses totaling thirty (30) credit hours. These courses include the real estate courses in the MSIRE core, finance courses in the MSIRE core, plus real estate (REE prefix) or other electives (FIN prefix, for example) for a total of 30 credit hours. The eight core REE and FIN courses include:

| REE 6045 | Real Estate Markets, Institutions and <br> Practices |
| :--- | :--- |
| REE 6200 | Real Estate Finance |
| REE 6305 | Advanced Real Estate Investment |
|  | Valuation |
| REE 6435 | Real Estate Law |
| REE 6935 | Seminar in International Real Estate |
| FIN 6406 | Corporate Finance |
| FIN 6644 | Global Financial Strategy |
| FIN 6246 | Financial Markets and Institutions |

Typical electives include:
REE 6715 Real Estate Development
REE 6147 Real Estate Market Analysis
The Faculty Director of the MSIRE may substitute other suitable courses for these electives.
6. To obtain the MSH degree, the student will have to fulfill all MSH program requirements, including eleven (11) hospitality courses totaling thirty-three (33) credit hours. The student can follow with the standard track or the thesis track. There are ten (10) core hospitality (HMG) courses along with an elective. The following core classes are required in the standard track:
HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies

HMG 6225 Multicultural Human Resources Management for the Hospitality Industry or
HMG 6246 Organizational Behavior in the Hospitality Industry
HMG 6296 Strategic Management for Hospitality and Tourism
HMG 6257 Contemporary Global Issues in Hospitality and Tourism
HMG 6477 Financial Management for the Hospitality Industry

HMG 6476 Feasibility Studies for the Hospitality Industry
or
HMG 6478 Restaurant Development
HMG 6916 Hospitality Industry Research Project HMG 6697 Hospitality Law Seminar
HMG 6466 Hospitality Revenue Management HMG 6596 Marketing Management
There are ten (10) core hospitality (HMG) courses along with an elective class. The following core classes in the "thesis" track:
HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies

HMG 6225 Multicultural Human Resources Management for the Hospitality Industry or
HMG 6246 Organizational Behavior in the Hospitality Industry

HMG 6296 Strategic Management for Hospitality and Tourism
HMG 6257 Contemporary Global Issues in Hospitality and Tourism
HMG 6596 Marketing Management
HMG 6477 Financial Management for the Hospitality Industry
HMG 6697 Hospitality Law Seminar
HMG 6586 Research and Statistical Methods
HMG 6916 Hospitality Industry Research Project
HMG 6972 Hospitality and Tourism Thesis
7. To facilitate the joint degree program, the following courses will be considered as sufficient substitutes for the joint degree students. The relations are one way based on the initial program within which a student enrolls. This means that students starting in the MSH program will take the HMG classes and the students in the MSIRE will take the FIN and REE classes. By considering these classes as sufficient substitutes, the joint degree program will reduce time to degree and cost. The two degrees will potentially have 4 common or substitute courses.
HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies
FIN 6644 Global Financial Strategy
HMG 6477 Financial Management for the Hospitality Industry
FIN 6406 Corporate Finance
HMG 6697 Hospitality Law Seminar
REE 6435 Real Estate Law
HMG 6478 Restaurant Development
or
HMG 6476 Feasibility Studies for the Hospitality Industry
REE 6715 Real Estate Development
The elective class in the MSH can be a REE class provided that it is approved by the MSH Faculty Director. In no case will more than four (4) classes concurrently count for both degree programs.
8. A minimum of seventeen (17) courses will be required to earn the two degrees: four (4) substitute courses, six (6) specific to the MSIRE program, and seven (7) specific to the MSH program. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. The Faculty Directors of the MSIRE and MSH degree programs may adjust these exact course requirements as a result of future changes to the MSIRE or MSH curriculums, subject to the approval of the Dean of the College of Business in consultation with senior administrators Chapman Graduate School and Hollo School of Real Estate as well as the Dean of the Chaplin School of Hospitality and Tourism Management.

## Course Descriptions

## Definition of Prefixes

FSS - Food Service Systems; HFT - Hotel, Food, Tourism; HMG - Hospitality Management Graduate.
Courses that meet the University's Global Learning requirement are identified as GL.

FSS 5755 International Food Production Management (3). Study of international commercial food production management designed for hospitality graduate students. This course includes instruction on international cooking principles as well as hands-on food preparation in the food laboratories. This course includes weekly interactive lectures and a laboratory experience to allow the learner to develop skills required in food preparation and management.

FSS 6108 Purchasing and Menu Planning (3). Advanced information on sources, grades and standards, criteria for selection, purchasing and storage for the major foods, including development of specifications. Consideration of the menu pattern with particular emphasis on costing, pricing, and the work load placed on the production staff. Item analysis and merchandising features are emphasized.

FSS 6365 Food Service Systems (3). Principles of system analysis applied to the food service industry. Attention is given to the organization of modern food production, preparation, and distribution systems. Case study problems require application of economic and management principles for solution.
FSS 6452 Advanced Food Service Design Operations (3). Advanced planning, programming, and project documentation for commercial food service facilities. Spatial, environmental, and electro-mechanical design factors are stressed, with particular emphasis on efficiency modulation and investment aspects. Recommended: HFT 4343.

FSS 6834 Food Service Research (3). The planning, executing, and reporting of an individual research project dealing with significant problems in food service. Students demonstrate an understanding of research techniques through data collection, evaluation, and interpretation.
HMG 5000 Hospitality Pathway to Success (0). A comprehensive overview of academic policies, requirements, and career portfolio development as required for graduation from the Chaplin School of Hospitality and Tourism Management graduate program.
HMG 5485 Financial Accounting and Analysis for the Hospitality Industry (3). This course will introduce students to the basic accounting framework in the hospitality and tourism industries, including an understanding of the recording of transactions and the structure of hospitality financial statements based on the Uniform System of Accounts for the Lodging Industry (USAL).
HMG 5547 Leadership Training for Team Building (3). Students will learn leadership skills to facilitate team building activities in order to improve group communication, trust, problem-solving, and productivity.

HMG 5655 Franchising and Management Contracts (3). A comprehensive course designed to examine the
franchise/franchiser, franchisee and owner/manager relationships in hotel and food service operations and the mutual obligations created by each type of contract.
HMG 5719 Implementation and Management of Tourism Projects (3). Practical development, implementation, and management of tourism projects and programs with emphasis on developing tour packages for international and developing nation's situations. Prerequisites: HFT 3700 or equivalent.
HMG 5877 Wine Technology (3). This course is an introduction to the appreciation and management of wine, successful operators merchandising wines in restaurants, retail stores, supermarkets, and wholesale companies. Students learn the economies of buying and selling wine, how to taste and evaluate wines of the great vineyards around the world.
HMG 5878 Wine, Culture and Society (3). A survey of the renowned old and new world wine regions, their evolution in western culture and their role in contemporary society. Grape Varieties/celebrated vineyards; wine classification systems; influence of media on wine consumption. Detailed focus on the restaurant industry in Miami and the U.S. Management of restaurant wine lists. Prerequisite: Must be at least 21 years of age.
HMG 5901, 5906, 5911 Independent Studies (VAR). With permission from the Associate Dean, students may engage in independent research projects and other approved phases of independent study. Prerequisite: Permission.
HMG 5945 Graduate Hospitality Management Internship (0-3). Managerial experience in one of the major phases of hospitality operations and visitor industry. Reports are required. Prerequisite: Permission of the instructor.

HMG 5957 Study Abroad: Hospitality and Tourism (3). An integrated program of learning conducted in foreign environments for hospitality management majors. They will be exposed to different cultures and taught how to manage businesses in other countries.
HMG 6208 Hospitality Industry Consulting (3). Provides in-depth analysis of hospitality consulting. Includes opportunities techniques and methodologies used in practice. Lectures, case studies, projects and site visits are used. Prerequisites: HFT 4464 or HFT 4465.
HMG 6225 Multicultural Human Resources Management for the Hospitality Industry (3). A study of personnel, consumer relations, and diversity in the hospitality industry within a multicultural, multiracial, and multi ethnic society through an examination of value systems and cultural characteristics.
HMG 6226 Motivation and Leadership (3). Study of motivation, perception, learning, attitude formation, incentive theory, and job satisfaction, with emphasis on leadership and group task performance.
HMG 6227 Hospitality Management Training Systems (3). A course designed to develop and provide applications of proven training systems and methods for managers in the hospitality industry. The case study method will be used.

HMG 6228 Managing Self and Others in the Hospitality Industry (3). Students will increase managerial effectiveness by learning and applying a model for enhancing self-esteem and integrating that model into their managerial philosophy for the hospitality industry.

HMG 6245 Hospitality/Tourism Service Operations Management - GL (3). Application of techniques to create, operate, staff, and evaluate service systems for hospitality/tourism enterprises. Emphasis on queues, forecasting demand, route and scheduling and quality management. Prerequisites: HFT 3505 or HFT 4509.
HMG 6246 Organizational Behavior in the Hospitality Industry (3). A survey of the concepts of organizational behavior and industrial psychology theory, from both the research and practical points of view. The course is designed to assist students in making sound decisions in the hospitality area by making them sensitive to the organizational parameters which influence their decisions.
HMG 6256 International Hotel Operations (3). A consideration of various environments within which the international hospitality firm operates. Organizational, financial, and marketing factors are of major concern. Emphasis is placed on those problems and constraints which are uniquely different from problems of firms engaged in domestic operations of a similar nature. Prerequisites: HFT 2401, HFT 3503.

HMG 6257 Contemporary Global Issues in Hospitality and Tourism (3). Contemporary Global Issues in Hospitality and Tourism offers students an opportunity to explore the major emerging issues or problems that impact the domestic and global hospitality and tourism industry. Students will learn to use content analysis and other methodologies to identify and analyze relevant industry problems and issues facing management and personnel in the global and domestic hospitality and tourism industry.
HMG 6278 Timeshare Management (3). Course covers management, marketing, sales legislation, financing, and budgeting of timeshare and vacation ownership properties. Opportunity to gain AEI certification.
HMG 6280 Globalization and Competitive Methods of Multinational Hospitality Companies (3). Course synthesizes theories and concepts of globalization, multinational strategy and international business studies and applies them in the analysis of multinational hospitality companies.
HMG 6291 Entrepreneurship in the Hospitality and Tourism Industry (3). This course will help students understand the rationale and methods leading to a major acquisition and the problems and solutions that go along with the decision. Prerequisites: HFT 2401 and HFT 4464.

HMG 6296 Strategic Management for Hospitality and Tourism (3). Developing competitive advantage in the Hospitality Industry including a strategy project where an incumbent faces off against a new entrant. Team will develop strategic business plans. Prerequisite: Must have completed 27 graduate credit hours.
HMG 6297 Seminar in Management Methods (3). Class will be divided into small groups, each of which will meet regularly with the executive committee of an area hotel or restaurant. Each group will be, in reality, the junior
executive committee for the property. The groups will come together periodically for analysis and discussion of their experiences, and to relate their experiences to principles of modern management.
HMG 6299 Case Studies in Hospitality Management (3). Case studies are used to analyze and integrate the various disciplines of hospitality management and the visitor industry. A critical attitude toward all administrative and management thought is encouraged. Prerequisite: HMG 6477.

HMG 6325 Hospitality Facilities Engineering and Management (3). Hospitality facilities management from value-oriented system engineering perspective emphasizing management responsibilities for efficiency in building design, operations and utilities systems. Prerequisite: HFT 2401.
HMG 6346 Design and Planning of Restaurants and Hotels (3). Advanced level of study of all aspects considered in designing and planning a restaurant or hotel. Includes lectures, case studies, and laboratory drawing exercises. Scheduling and cost controls considered. Prerequisite: HFT 3263.
HMG 6404 Non Commercial and Contract Food Service Management (3). Advanced management of food service operations in noncommercial facilities, self operated and contract managed. Includes business and industry, health care, campus dining, correctional, and food service vending.
HMG 6429 Hospitality Asset Management (3). This course will present an overview of the role of hospitality industry asset managers as well as an in-depth study of the techniques and practices employed by them in their representation of ownership.
HMG 6446 Hospitality Enterprise Technologies (3). Advanced course in information technology in the hospitality industry. Includes study of ERP software and data. Prerequisites: HFT 2441 or permission of the instructor.
HMG 6447 Hotel Information Systems (3). A seminar on computer systems and their applications within the hotel industry. An intensive study of a computerized property management system. All computer applications are examined, from reservations to the back office through a series of assignments and projects. Prerequisites: HFT 2441 or HMG 6446.
HMG 6448 Advanced Hospitality Computer Applications (3). Importing financial data, international features, linking workbooks, mapping geographical data, scenario manager, goal seeking and optimization problems will be covered. Prerequisites: HFT 2441 or equivalent.
HMG 6466 Hospitality Revenue Management (3). Introduce and develop the student's understanding of the scope and application of revenue management in service companies of the hospitality and tourism industries. Prerequisites: HFT 3503 or HFT 4509.
HMG 6472 Feasibility Studies for Tourism Projects (3). In-depth study of the tools and techniques available for evaluating financial feasibility and cost-benefit analysis of tourism projects. Prerequisites: ECO 2013 and HFT 4465.

HMG 6476 Feasibility Studies for the Hospitality Industry (3). In-depth study of the tools and techniques available for evaluating financial feasibility of a hospitality investment. Feasibility study required. Prerequisite: Must have completed 27 graduate credit hours.

HMG 6477 Financial Management for the Hospitality Industry (3). A study of financial management and its application in the Hospitality Industry. Topics include capital investment analysis, mergers and current financial issues. Emphasis is placed on maximizing shareholder value. Prerequisites: HMG 5485 or equivalent course.
HMG 6478 Restaurant Development (3). A study of the procedures to research and develop a restaurant from concept to opening. Emphasis will be on market research, site development, financial feasibility, and the formulation of an operating plan for an individual restaurant. Prerequisite: Must have completed 27 graduate credit hours.

HMG 6486 Investment Analysis for the Hospitality Industry (3). Advanced investment methods and opportunities with emphasis on securities of the hospitality industry, financing techniques, syndication, negotiations. Prerequisites: HMG 6446 and HFT 4464.
HMG 6494 Restaurant Information Systems (3). An indepth study of principles relating to use of computer systems in the restaurant and food service industry. The student is required to implement a simulated restaurant on computer systems. This simulation includes personnel files, daily management, menu explosion and analysis, and inventory tracking. A research project will be assigned. Prerequisites: HFT 2441 or HMG 6446.
HMG 6507 Tourism Marketing on the Internet (3). An indepth study of Internet Web site Hosting for tourism managers, including a detailed examination of the current practices of on-line tourism marketing and tourism destination management systems. Prerequisites: HFT 3503, HMG 6555.
HMG 6525 Sales Tactics for Hospitality Industry (3). Advanced course investigating sales tactics and procedures used in hospitality sales environment. Practical application role plays and skill rehearsals used. Prerequisite: HFT 3503.
HMG 6526 Sales Management for the Hospitality Industry (3). Analyzes strategic processes for competitive sales management in hospitality industry. Uses critical thinking models, decision-making simulations and field operation assessments for managing sales function. Prerequisite: HFT 3503.
HMG 6555 e-Commerce for Hospitality and Tourism (3). Planning and managing e-Commerce for hospitality global distribution systems, including major opportunities, limitations, issues and risks from managerial perspectives. Prerequisites: HFT 2441 or permission of the instructor.
HMG 6562 Global Destination Marketing Organizations (3). An advanced study of the evolution and growth, mission, structure, funding, and roles of the different types of Destination Marketing Organizations worldwide. Prerequisites: HFT 4509 or equivalent.
HMG 6567 Entrepreneurial Marketing for Hospitality and Tourism (3). This class offers hands-on tools for business success and a vehicle for redefining products
and markets in innovative ways that produce sustainable competitive advantage. Database management will be used.
HMG 6586 Research and Statistical Methods (3). A study of basic research and statistical methodology applied to a variety of hospitality industry research projects. Techniques for data collection, interpretation and methods of reporting are the focus.
HMG 6596 Marketing Management (3). Team-work analysis and recommended solution of an actual marketing problem and development of a marketing plan for hospitality business.
HMG 6605 Legislation and the Hospitality Industry (3). An advanced study of the legislative requirements imposed upon hospitality industry operators. Special emphasis is placed on the minimum wage law, sales tax, uniform provision and maintenance, tip credit, the determination of what constitutes hours worked for the various job categories, discrimination, and sexual harassment.
HMG 6607 Hospitality Real Estate Development (3). This course will examine/analyze how hotels, resorts, condo-hotels, vacation properties are developed from concept to planning, analysis, financing and management. Will be conducted in a seminar environment.
HMG 6609 Negotiating Strategies for the Hospitality Industry (3). Students study and practice negotiating strategies to reach more satisfactory outcomes from a business point-of-view. The hospitality industry requires skilled negotiations regarding management contracts, supplier agreements, alliance and franchise agreements.
HMG 6697 Hospitality Law Seminar (3). New laws and their impact on the hospitality industry are examined. Students research current legal issues and problems and explore the impact of new legislation on the hospitality industry.
HMG 6704 Contemporary Issues in Tourism (3). An indepth study of current issues and trends confronting the fast development of the tourism activity at national and international levels.
HMG 6705 Management of Nature-Based Tourism (3). Exploration of research methods and findings related to eco-tourism. Review of effective management strategies for controlling nature-based tourism operations.
HMG 6706 Environmental Management Systems for Tourism (3). An in-depth examination of the environmental cost of tourism development. The effective implementation of international models as well as environmental practices for sustainable tourism development will be studied.

HMG 6712 Tourism Planning and Regional Development (3). An in-depth examination of the process of identifying needs, objectives and strategies for tourism development. The formulation and evaluation of tourism policies and plans will be studied. Prerequisites: HFT 3713 or permission of the instructor.
HMG 6715 Problem Solving for Travel and Hospitality (3). Practical discussion and exploration of issues pertaining to the operation and management in the travel and hospitality industry. The course provides creative
problem solving solutions utilizing today's information technologies.
HMG 6746 Cultural Behavior in Tourism (3). The course introduces the major cultural groups of overseas visitors to the U.S. and identifies the cultural differences in preferences for specific tourism products and services between these groups and the main stream of the U.S. population.
HMG 6747 Tourism Marketing Research Methods and Applications (3). The nature and characteristics of tourism research are presented, elements of tourism research process examined, and the importance and strategic application of research to tourism decision making highlighted.
HMG 6756 Convention and Meeting Management (3). Advanced study of planning, arranging, marketing, implementing, and managing conventions and meetings. Prerequisite: HFT 3503.
HMG 6816 The Production, Management, and Merchandising of Craft Beers (3). Technical and practical aspects of craft brewing and microbrewery technology. Relevant chemical, biological and physical processes will be examined. Aspects of the management of micro-breweries and brewpubs. Prerequisites: Must also take accompanying Lab. Minimum age 21.
HMG 6816L The Production, Management, and Merchandising of Craft Beers Lab (1). A hands-on overview of the scientific principles and techniques of craft brewing. A sampling of craft beers will be made from basic malt extract kits, partial mash recipes and all-grain techniques. Prerequisite: Minimum age 21.
HMG 6858 Advanced Catering Management and Research (3). This course focuses on research and examination of catering practices used in the catering profession. It includes an in-depth analysis of all components of the catering profession including management, legal aspects, catering contracts, menus and food displays, beverage service, catering equipment, catering logistics, human resources, etc.
HMG 6863 World of Wine and Food (3). An intensive study of wines from around the world and how they pair with foods. Guest chefs will prepare tapa size portions of food to be paired with local and specific wines. Prerequisite: 21 years old.
HMG 6872C Commercial Beverages of the World (3). An overview of basic aspects of production and serving a variety of beverages involved in hospitality commerce. This course will include presentations from industry procedures as well as tasting and evaluation of commercial products. Prerequisite: Students must be 21 years old.
HMG 6876 Emerging Topics in Food and Beverage (3). An in-depth study of current issues and topics confronting the food and beverage industry and how they impact future business practices. Management implications addressed.

HMG 6879 Components of Wines for Beverage Managers (3). Designed for beverage management students to learn some basic language and scientific concepts employed in wine making. The chemical structures, as well as the aromas and tastes of various
specific components in wines will be investigated. These components will include those derived from the grape, the process of fermentation and storage, and will include common wine flaws. Prerequisite: Must be 21 years old.
HMG 6908 Directed Study in Tourism Studies (3). An opportunity for individuals interested in various aspects of planning, development, marketing, management and research in tourism to work on their own under the close supervision of an advisor. Prerequisites: Permission of the instructor and if the directed study is of a research nature, HMG 6586 is required.
HMG 6916 Hospitality Industry Research Project (3-9). Focuses on research methods of business oriented research projects dealing with current problems in the hospitality and tourism industry. Research proposal is the focus.
HMG 6946 Graduate Internship (0-9). Structured hospitality practical training work experience involving training program and job rotations not previously performed. Ten week/300 hour minimum. Report and management project required. Prerequisites: Documented completion of 1000 hospitality related work hours of which at least 500 hours must be completed while enrolled at FIU. Permission of the instructor.
HMG 6972 Hospitality and Tourism Thesis (1-3). Design and preparation of an original research investigation in the hospitality and tourism discipline. Prerequisites: STA 5206, STA 6166, and STA 6167 and permission of the instructor.
HMG 7252 Advanced Contemporary Issues in the Hospitality Industry (3). Explores the major emerging issues or problems that impact the domestic and global lodging industry. The students will learn to use content analysis and other methodologies to identify and analyze relevant industry problems and issues facing management and personnel in the lodging industry.
HMG 7909 Advanced Independent Study (3). With permission from the Associate Dean, students may engage in independent research projects and other approved phases of independent study. Prerequisite: Permission of the instructor.

## Chaplin School of Hospitality and Tourism Management

Dean
Associate Dean of Academics
Associate Dean
Associate Dean of Administration and Facilities Mohammed A. Qureshi
Associate Dean of Student Services Diann R. Newman

## Faculty

Angelo, Rocco M., M.B.A. (University of Miami), Professor and Associate Dean, Management
Beckman, Eric, Ph.D. (University of Tennessee), Assistant Professor, Events and Economic Impact
Cain, Lisa N., Ph.D. (University of Nevada, Las Vegas), Assistant Professor, Organizational Behavior, Marketing, Foodservice Management
Chang, Howook "Sean", DBA (Sejong University), Assistant Professor, Strategic Management
Cheng, Michael, Ph.D. (Iowa State University), Professor and Director, Food and Beverage Program, Hospitality Management
Cilli, Joseph M., Visiting Assistant Professor and Interim Director of Distance Learning
Del Risco, M. Nancy, Ph.D. (University of Paris), Lecturer, Tourism Studies
Gump, Barry, Ph.D. (University of California, Los Angeles), Eminent Scholar and Visiting Professor, Beverage Management
Herbank, William, B.A. (University of Illinois), Instructor, Wine Technology
Kitterlin, Miranda, Ph.D. (University of Nevada, Las Vegas), Assistant Professor, Organizational Behavior
Lease, Terry, Ph.D. (University of Southern California), Associate Dean of Academics, Accounting
Lee, Jumyong "Stephen", Ph.D. (University of Central Florida), Assistant Professor, Conventions, Meetings, and Events
Lusby, Carolin, Ph.D. (University of Florida), Assistant Professor, Tourism Studies
Moll, Steven V., M.S. (Florida International University), Associate Professor, Lodging Operations and Management and Vice Provost, Biscayne Bay Campus
Moncarz, Elisa, Professor Emeritus
Newman, Diann R., Ed.D. (Nova Southeastern University), Associate Dean of Student Services, Human Relations
Qureshi, Mohammed A., M.P.A. (Florida International University), Instructor, Food Operations Management
Remington, Joan S., J.D. (Willamette University), Professor, Legal Studies
Scanlon, Nancy A., Ph.D. (University of Delaware), Associate Professor, Facilities and Environmental Sustainability
Simon, Pablo, M.P.A., C.P.A., C.I.A. (University of Miami), M.S. Management (Florida International University), Assistant Professor, Accounting
Suh, Eunju, Ph.D. (University of Nevada, Las Vegas), Associate Professor, Gaming Operations and Marketing
Tanke, Mary L., Ph.D. (Purdue University), Associate Professor, Management

Thomas, John H., J.D. (University of Miami), Assistant Professor, Hospitality Law
Welch, Aaron, Ph.D. (The John Hopkins University), Visiting Assistant Professor
Williams, Judith, M.S. (Florida International University), Visiting Instructor, Culinary Arts
Zhao, Jinlin, Ph.D. (Virginia Polytechnic Institute and State University), Professor and Director, Graduate Studies, Management

# Steven J. Green School of International and Public Affairs 

Founding Dean<br>Associate Dean, Graduate Studies and Innovation<br>John F. Stack, Jr. Associate Dean, Planning, Administration and Student Services<br>Senior Director, Operations and Strategic Initiatives<br>\section*{Shlomi Dinar}<br>\section*{Jeff Gonzalez}<br>\section*{Pedro Botta}

Educating tomorrow's leaders in the fields of international and public affairs, the Steven J. Green School of International and Public Affairs (Green School) produces scholarship that advances the understanding of critical global issues, contributes to policy solutions and promotes international dialogue.

The Green School brings together FIU's internationally oriented disciplines to provide cutting-edge research, firstrate teaching and innovative training necessary for the globalized world of the $21^{\text {st }}$ century. The academic core of the school is comprised of eight major departments, including Criminal Justice, Economics, Global and Sociocultural Studies, Modern Languages, Politics and International Relations, Public Administration, and Religious Studies. The Green School also houses many of FIU's most prominent international centers, institutes and programs. With more than 200 full-time faculty, the Green School offers innovative interdisciplinary research and teaching at the BA, MA, and PhD levels. The quality of its faculty and innovative programs has earned the school affiliate membership in the Association of Professional Schools of International Affairs (APSIA).

Through its efforts and accomplishments in teaching and scholarship, the Green School is fulfilling part of FIU's greater mission to become a major international education center that fosters mutual understanding throughout the world.

## Graduate Programs

The Green School has academic programs leading to Master's degrees in African and African Diaspora studies, Asian studies, disaster management, global and sociocultural studies, criminal justice, economics, global affairs, history, international studies, Latin American and Caribbean Studies, political science, public administration, religious studies, and Spanish.

The Green School offers academic programs leading to the Ph.D. in global and sociocultural studies, economics, history, international crime and justice, international relations, political science, public affairs, and Spanish.

## Master of Arts in Disaster Management

The Master of Arts in Disaster Management is a 30 credit graduate program featuring coursework in emergency preparedness, disaster management and humanitarian assistance. This one-year graduate program has been developed in response to the growing recognition and need for graduate level education in disaster management. The program's curriculum is interdisciplinary in nature and scope and designed to develop and improve
the skills of disaster practitioners and those interested in entering the exciting field of disaster management. Broadly speaking, the general learning outcome of the program is to take students beyond the core competencies needed by practitioners, to a deeper understanding of the reasons behind the practice and cultivate in them an ability to develop and implement integrated solutions to problems. Upon successful completion students will:

- possess sufficient knowledge of the history of disasters
- be well-versed in the definition, mission, concepts and terminology applied in emergency management and humanitarian assistance
- demonstrate a solid grounding in social, political, cultural and ecological issues in the social construction of disasters
- possess a firm grasp of the statutory and regulatory basis of disaster management
- identify and define areas of disaster management responsibility including mitigation opportunities, planning, training, exercises, warning, evacuation, sheltering, damage assessment, feeding, and medical care
- recognize the importance of public, private and nongovernmental organization networking to facilitate collaboration and cooperation; understand the importance of communication, coordination and collaboration in disasters
- be able to identify the resources needed and how to obtain those resources to assist survivors
- describe the various hazards and the organization needed to reduce the threat
- identify the core requirements to effective planning
- demonstrate how to perform vulnerability analysis
- be able to recognize and apply the appropriate decision making models; be able to isolate and apply strategic planning
- demonstrate recognition of the social and ethical considerations unique to the practice of disaster management.


## Admission Requirements

All applicants for graduate study at FIU must have a:

1. Baccalaureate degree from an accredited institution for higher education, or equivalent degree from a foreign institution.
2. 3.0 undergraduate GPA.
3. Foreign students must submit official Test of English as a Foreign Language (TOEFL) scores and must have a minimum scores: 550 Paper and Pencil, 213 Computer-based, 80 Internet-based.
The above admission requirements are minimums, and not all students meeting them are assured admission. Students with a grade-point average below the above minimums may still apply and request a waiver of those scores. The student must provide an explanation of why the waiver should be approved.

## Graduation Requirements

In order to graduate, a student must maintain a 3.0 GPA and complete satisfactorily the prescribed curriculum.

## Required Courses

This 30 -credit professional master's program requires completion of the following 10 courses:
FES 6846 Comparative Disaster Management Systems
FES 6826 Disaster Preparedness and Planning Methodologies
FES 6857 Introduction to Vulnerability Analysis and Hazard Mitigation
FES 6806 Disaster Response and Recovery 3
FES 6848 Disaster Health Readiness 3
FES $6847 \quad$ Foundations in Humanitarian Assistance and Coordination
FES 6805 Disaster Field Operations 3
ISS 6387 Analytical Writing and Presentation Skills
PAD 6434 Leadership and Decision-making 3
PHC 6374 Environmental Disasters and Human Health

Note: Courses not included on the approved list of required courses may count toward meeting the requirement of this degree only with the permission of the Director or Dean.

## Online Master of Arts in Disaster Management

The online Master of Arts in Disaster Management is identical to the existing face-to-face program offered at the Modesto Maidique campus. The online program will offer the same 30 credit curriculum focusing studies in emergency preparedness, disaster management, and humanitarian assistance. Students enrolled in the online program will be required to travel to Miami to participate in a 3-day disaster field exercise, which is part of the Disaster Field Operations course (FES 6805).

## Admission Requirements

All applicants for graduate study at FIU must have a:

1. Baccalaureate degree from an accredited institution for higher education, or equivalent degree from a foreign institution.
2. 3.0 undergraduate GPA.
3. Foreign students must submit official Test of English as a Foreign Language (TOEFL) scores and must have a minimum scores: 550 Paper and Pencil, 213 Computer-based, 80 Internet-based.
The above admission requirements are minimums, and not all students meeting them are assured admission. Students with a grade-point average below the above minimums may still apply and request a waiver of those scores. The student must provide an explanation of why the waiver should be approved.

## Graduation Requirements

In order to graduate, a student must maintain a 3.0 GPA and complete satisfactorily the prescribed curriculum.

## Required Courses

This 30-credit professional master's program requires completion of the following 10 courses:
FES 6846 Comparative Disaster Management Systems

FES 6826 Disaster Preparedness and Planning
Methodologies 3 Introduction to Vulnerability Analysis and Hazard Mitigation

3
Disaster Response and Recovery 3
Disaster Health Readiness 3
Foundations in Humanitarian Assistance and Coordination

3
FES 6805 Disaster Field Operations 3
ISS 6387 Analytical Writing and Presentation Skills

3
PHC 6374 Environmental Disasters and Human Health

3
SYG 6932 Special Topics in Disaster Studies 3
Note: Courses not included on the approved list of required courses may count toward meeting the requirement of this degree only with the permission of the Director or Dean.

## Master of Arts in Global Affairs

The Master of Arts in Global Affairs (MAGA) is a two-year (36 credits) skills based program enhanced by an interdisciplinary curriculum that will allow students to compete for and excel in employment opportunities in the global marketplace. The program is designed to provide students with the ability to understand and negotiate successfully across societies and borders. Students are trained for careers in the public and private sectors, international organizations, government agencies, nongovernmental as well as not-for-profit organizations.

MAGA offers two separate tracks of study. The Globalization and Security track explores the nexus between globalization has broadened and intensified the scale and character of modern-day security challenges (e.g. transnational crime, natural disasters and environmental change, migration and refugee flows, and surveillance and intelligence). The Corporate Citizenship track aims to train a new cadre of managers who understand the issues at the nexus of global business and society. Emphasizing corporate social responsibility, the program will provide students with the knowledge and the skills needed to craft strategies that promote socioeconomic development and safeguard the environment, while strengthening relationships with key stakeholders and enhancing shareholder wealth.

All MAGA students take the same core courses. Each track has its own set of specialty courses. One of the highlights of the program is a core Capstone course, whereby students work on a policy relevant research topic with a mentor from a government agency, corporation, not-for-profit, or international organization. In addition to the mentor, students are also teamed up with a FIU faculty supervisor with expertise on the topic. Non-credit professional development seminars (on topics such as career development, handling the media, conflict resolution, negotiation skills, leadership, grant writing, etc.) also make up a part of the program. Finally, optional language instruction is also available through the Green School's Strategic Language Institute.

## Admission Requirements

1. Baccalaureate degree from an accredited institution for higher education, or equivalent degree from a foreign institution.
2. 3.0 GPA in the last 60 upper division credits of undergraduate degree.
3. Two letters of recommendation (professional and academic recommendations only; at least one letter needs to be from a faculty member; a professional letter should come from a supervisor).
4. Curriculum Vitae.
5. A statement of purpose ( 750 words) describing the candidate's academic and professional background as well as proposed track of study and career aspirations.

In addition, foreign students must:
Official TOEFL scores (Note: unofficial scores will not be taken into consideration)

1. Paper and Pencil: 550
2. Internet-based: 80

The above admission requirements are minimums and not all students meeting them are assured admission. Students with a grade-point average below the above minimums may still apply and request a waiver of those scores. The student must provide a justification as to why the waiver should be approved.

## Degree Requirements

The MAGA requires a total of 36 credits. All MAGA students take 18 credits of course courses. The remaining 18 credits are specialty courses associated with each track.
Core Courses: (18 credits)

| ISS 6216 | Foundations of Globalization | 3 |
| :--- | :--- | :--- |
| ECO 6025 | Economic Policy Analysis for Global |  |
|  | Governance | 3 |
| ISS 6307 | Research Tools for Global Studies | 3 |
| ISS 6387 | Analytical Writing and Presentation |  |
|  | Skills | 3 |
| SYA 6655 | Program Design and Evaluation | 3 |
| PAD 6306 | or |  |
| ISS 6926 69 | Capstone | 3 |

Track 1: Globalization and Security (18 credits)
Specialty courses include (additional courses selected by the program administration may also be included):
DSC 6020 Terrorism and Homeland Security
GIS 5620 Surveillance, Intelligence, and International Relations
INR $6338 \quad$ Seminar in Strategic Studies
CCJ 6676 Transnational Crime and National Security
INR $5012 \quad$ Global Issues and Human Rights
INR $5352 \quad$ Environment and Security
INR $5066 \quad$ Global and Human Security
INR $5935 \quad$ Topics in International Relations
REL 5149 Religion, Violence, and Conflict
ISS $6327 \quad$ Global Security Risks and the Private Sector
ISS $6249 \quad$ Migration, Security and Globalization
ISS 6XXX Disasters, Security, and Globalization
ISS 6219 International Law and Global Security
Track 2: Corporate Citizenship (18 credits)
Specialty courses include (additional courses selected by the program administration may also be included):
ISS $6259 \quad$ Peace Through Commerce

ISS 6246

ISS 6248
ISS 6247
ISS 6409
ISS 6327

Global Economy and Industrial Sustainability Public-Private Partnerships for Social Impact Social Enterprise and Grassroots Innovation Capstone Reporting Global Security Risks and the Private Sector

## Internships

MAGA students are highly encouraged to secure an internship during the summer between year 1 and 2 of the program. The internship should be relevant to the track of study and may take place at a corporation, non-profit organization, international institution, or government agency.

## Course Descriptions

## Definition of Prefixes

ECO-Economics; FES-Fire and Emergency Services; ISSInterdisciplinary Social Sciences; SYA-Sociological Analysis

ECO 6025 Economic Policy Analysis for Global Governance (3). Designed for MA students in the Global Governance program, the course provides training in applied microeconomic and policy analysis.
FES 6000 Command and Control in Disasters (3). To teach students how to manage disasters through systematic processes and methods.
FES 6805 Disaster Field Operations (3). Provides students with the knowledge and skills to engage in disaster work in field settings.
FES 6806 Disaster Response and Recovery (3). Designed to expose students to the principles and practices that promote effective disaster response and recovery operations.
FES 6826 Disaster Preparedness and Planning Methodologies (3). Provides a fundamental understanding about the importance of preparedness and planning, reasons for planning and identifies the people and organizations that may be involved in the planning process.

FES 6846 Comparative Disaster Management Systems (3). Introduction to the disaster management system applied in the U.S. and systems used to prepare and respond to international disasters.
FES 6847 Foundations in Humanitarian Assistance and Coordination (3). Focused on the role and responsibilities of the organizations engaged in humanitarian assistance.

FES 6848 Disaster Health Readiness (3). This course examines the efforts to provide humanitarian assistance from the perspective of the humanitarian agency and professional health worker in the field.
FES 6856 Introduction to Disaster Logistics (3). Focus on the process of planning, implementing and controlling the flow and storage of goods and materials from the point of origin to the point of consumption or use.

FES 6857 Introduction to Vulnerability Analysis and Hazard Mitigation (3). How to develop a community vulnerability analysis and implement mitigation and risk reduction initiatives to reduce future damage and build greater hazard resilient communities.

FES 6858 Crisis Communications (3). This course introduces students to the principles and practical tools of crisis communications during emergencies.
ISS 5135 National Security Essentials (3). An examination of the U.S. national security structure, current security-related controversies and potential U.S. responses to security threats.
ISS 5388 Communicating Analytically (3). Improves analytic communications for government professionals, enhancing research and effective writing skills and developing briefing techniques.
ISS 6216 Foundations of Globalization (3). Advanced course to introduce students in the M.A. in Global Governance to the many nuances of globalization.
ISS 6219 International Law and Global Security (3). This course examines the relationship between international law and global security. Particular attention is paid to laws of war and international military intervention, international criminal law.
ISS 6246 Global Economy and Industrial Sustainability
(3). Development paradigms and international economic evolution paths are analyzed in light of sustainability and institutional citizenship frameworks.
ISS 6247 Social Enterprise and Grassroots Innovation (3). This course introduce students to the theory and practice of social enterprise and grassroots innovation and how to devise sustainable, market-driven solutions to pressing socioeconomic challenges.
ISS 6248 Public-Private Partnerships for Social Impact (3). This course examines how governments are partnering with for-profit and non-profit organizations to shape public policy and solve some of the world's most intractable social problems.
ISS 6249 Migration, Security and Globalization (3). Migratory flows associated with globalization, their benefits, effects and impact on security. It will examine the problems posed by new presences and the policies and practices that can resolve them.
ISS 6259 Peace Through Commerce (3). This course examines whether cross-border business transactions can serve as vehicles for achieving peace and socioeconomic development in formerly conflictive areas.
ISS 6307 Research Tools for Global Studies (3). Designed for MA students in the Global Governance program, the course provides qualitative and quantitative research methods in Global Studies. Prerequisite: Graduate standing.
ISS 6327 Global Security Risks and the Private Sector (3). This course will consider the nature of the contemporary risks facing firms operating in the global marketplace and what strategies can be implemented by the global companies to minimize vulnerability.
ISS 6387 Analytical Writing and Presentation Skills (3). Designed for MA students in the Global Governance
program, the course provides training in communication skills by applying appropriate strategies for different types of writing and presentation.
ISS 6409 Capstone Reporting (3). This course provides methods and tools to communicate objectives, results, challenges and recommendations of capstone projects as well as of social responsibility initiatives in general.
ISS 6926 Capstone (3). This course is designed to allow students to apply the skills and methods acquired throughout the program to a significant policy-relevant case study or issue. Prerequisite: Graduate standing.
SYA 6655 Program Design and Evaluation (3). Designed for MA students in the Global Governance program, the course provides training in program design and evaluation. Prerequisite: Graduate standing.
SYG 6932 Special Topics in Disaster Studies (3). Case studies of major disasters used to explore topics such as impact of gender, class, ethnicity, and age on vulnerability, response, and outcome; effects of larger political and economic systems; and relationship to social change. May be repeated with change of topic.

## Interdisciplinary Courses

The Green School has several interdisciplinary programs which are not based in a specific academic department. The courses offered by these programs, therefore, are not found in the departmental listings in the Catalogs, but are included here.
LBS 5155 Workplace Diversity (3). Students examine theoretical debates surrounding workforce participation of women and minorities; historical position of these groups in labor force; social phenomena that contribute to discriminatory practices and development of policies to eliminate discriminatory practices.
LBS 5215 Women in the Workplace (3). Students explore women's changing role in the U.S. and global economy. Special attention is given to the role of race, class, and ethnicity within the context of gender and work.

LBS 5406 Collective Bargaining and Labor Relations (3). A comprehensive study of major issues and themes in American collective bargaining. Includes origins of collective bargaining, labor law, unionization, contract negotiation, patterns in contract content, impact of external laws, public sector unions, grievance arbitration and interest arbitration. Prerequisite: Permission of Instructor.
LBS 5464 Labor Arbitration (3). Study of labor dispute resolution with emphasis on grievances, fact-finding, and arbitration.

LBS 5465 Mediation Techniques (3). Examines the role of mediation in resolving civil, commercial, family, public, and workplace disputes. Incorporates mediation principles and skills, different approaches to mediation, and current research in mediation. Prerequisite: Permission of Instructor.
LBS 5466 Family Mediation (3). Provides a comprehensive understanding of conflict resolution, power and balances, emotional and psychological issues, negotiation techniques as well as the development of practical skills in the field of family mediation. Prerequisite: Permission of Instructor.

LBS 5467 Civil Mediation (3). A comprehensive understanding of the field of civil mediation as well as the development of the practical skills to be a civil mediator. Prerequisite: Permission of Instructor.
LBS 5485 Fundamentals of Conflict Resolution (3). Survey of the major contemporary theories of organizational functioning and the management of conflict within and among organizations in a globalized world. Theories that center primarily within the fields of dispute resolution, sociology, and social interaction/ group theory will be emphasized. Prerequisite: Permission of Instructor.
LBS 5486 The Dynamics of Conflict Management (3). Investigate conflict and violence, and help students to develop strategies to defuse them in the classroom.
LBS 5507 Labor and Employment Law (3). Familiarizes the student with the legal issues and rules regarding unionization of employees, the collective bargaining process, the relationship between the employee and his/her union, and the administration of collective bargaining agreements. Examines the legal framework within which collective bargaining occurs and also familiarizes students with additional issues of rights in employment. Prerequisite: Permission of Instructor.
LBS 5658 Labor Movements and Economic Development (3). Relationships between union and economic development strategies in developing/recently developed countries; emphasis on social movement unionism and unions in Latin America and Asia. Prerequisite: Permission of Instructor.
LBS 5930 Topics in Labor Studies (1-3). Selected topics or themes in Labor Studies. Themes will vary from semester to semester. With a change in content, course may be repeated. May include field work. Prerequisite: Graduate standing.
LBS 5931 Topics in the Philosophy and Methods of Conflict Resolution (3). Provides an examination of the philosophy, methods, and research in the field of conflict resolution. The particular content and orientation of the course may vary according to the particular focus examined. Prerequisite: Permission of Instructor.
LBS 6906 Directed Individual Study (3). Specialized intensive study in areas of interest to student. Student plans and carries out independent study project under the direction of faculty member. Topics must relate to content of Labor Studies or ADR. Prerequisite: Permission of instructor.
LBS 6945 Internship Labor Studies/Alternative Dispute Resolutions (3). Practical training and experience in organization according to students needs and interests. Reports and papers required. Prerequisite: Permission of instructor.

# African and African Diaspora Studies 

Iqbal S. Akhtar, Assistant Professor, Religious Studies
Pascale Bécel, Chair and Associate Professor, Modern Languages
Ferial Maya Boutaghou, Assistant Professor, Modern Languages and Women's and Gender Studies
Jean-Robert Cadély, Associate Professor, Modern Languages and African and African Diaspora Studies
Phillip Carter, Assistant Professor, English and Linguistics
John Clark, Professor, Politics and International Relations
Danielle Pilar Clealand, Assistant Professor, Politics and International Relations
Alexandra Cornelius-Diallo, Lecturer, History and African and African Diaspora Studies
Jenna M. Gibbs, Assistant Professor, History
Brittany VanderBerg Glimer, Assistant Professor, Criminal Justice
Robert (Ted) Gutsche, Jr., Assistant Professor, Journalism and Mass Communication
Tometro Hopkins, Associate Professor, English
Hilary J. Jones, Associate Professor, History and African and African Diaspora Studies
Assefa Melesse, Associate Professor, Earth and Environment
April R. Merleaux, Assistant Professor, History
Aurora Morcillo, Professor, History and Women's and Gender Studies
Roderick Paul Neumann, Chair and Professor, Global and Sociocultural Studies
Ulrich Oslender, Assistant Professor, Global and Sociocultural Studies
Okezi T. Otovo, Assistant Professor, History and African and African Diaspora Studies
Vrushali B. Patil, Associate Professor, Global and Sociocultural Studies and Women's and Gender Studies
Tudor Parfitt, President Yitzhak Navon Professor of Sephardic-Mizrahi Studies, Religious Studies
Valerie L. Patterson, Clinical Associate Professor, Public Administration
Andrea J. Queeley, Assistant Professor, African and African Diaspora Studies and Global and Sociocultural Studies; and Director, African and African Diaspora Graduate Programs
Jean Muteba Rahier, Professor, Global and Sociocultural Studies and African and African Diaspora Studies
David Rifkind, Associate Professor, Architecture
Heather Russell, Associate Professor, English
Derrick Scott, Instructor, Global and Sociocultural Studies
Moses Shumow, Assistant Professor, Journalism and Mass Communication
Vicky Silvera, Head, Special Collection, Library
Linda Spears-Bunton, Associate Professor, College of Education
Juan Torres-Pou, Professor, Modern Languages
Chantalle F. Verna, Associate Professor, History and Politics and International Relations
Eric Von Wettberg, Assistant Professor, Biology
Donna Weir-Soley, Associate Professor, English
Kirsten E. Wood, Associate Professor, History

Albert Kafui Wuaku, Associate Professor, Religious Studies

## Master of Arts in African and African Diaspora Studies

The M.A. degree in African \& African Diaspora Studies provides interdisciplinary, graduate level education and prepares students to develop and employ theoretical, analytical, and methodological approaches to researching critical issues pertaining to the African continent and its diasporas. The M.A. program aims to develop scholars in preparation for professional positions in a range of fields and for further study at the Ph.D. level. Multidisciplinary in scope and diverse in approach, the M.A. program in AADS is ideal for candidates interested in a wide array of subjects pertaining to continental Africa and the African diaspora, which include: Social and Public Policy, Cultural Studies, International Relations, Gender and Sexuality Studies, Literary Study, History, Globalization Studies, Education, Religious Studies, Trans-Atlantic Studies, Critical Race Studies, Sociology, and Anthropology. Both the terminal M.A. and the combined M.A./Ph.D. programs in partnership with International Relations, Atlantic History, and Global \& Sociocultural Studies attract students from around the world interested in subjects that are both geographically and disciplinarily diverse, including but by no means limited to: transnational policy analysis; African, African American and Caribbean history and culture; African environmental politics; transnational migrations; African and African diaspora nationalist struggles, and the Asian diasporas in Africa and the Caribbean. Our major emphasis on African diaspora cultural studies facilitates research in Gender and Sexuality, Literatures, Popular Culture, and Religious syncretism. In addition, FIU's strong connections with Latin America make it an ideal place to study Afro-Latin cultures, from Miami to Cuba to Brazil to the Andean nations.

## Admission Requirements

Each applicant to the African \& African Diaspora Studies Graduate Program (AADS) must complete an online graduate application form and arrange to send transcripts of all prior college (undergraduate and graduate) work and official reports of the Graduate Records Exam (GRE) and TOEFL (if applicable) to the FIU's Office of Graduate Admissions. Each applicant should also send a separate letter of application to the director of the AADS Graduate Programs, along with copies of the above material. The letter of application should include a statement expressing the applicant's academic and professional objectives. Applicants are strongly encouraged to include examples of academic or other relevant professional work that may support their application. Applicants must request three letters of recommendation from professors able to comment on their academic ability. The letters of recommendation should be sent directly to the Director of the African \& African Diaspora Studies Graduate Programs.

The application file must be complete before the African \& African Diaspora Studies Graduate Committee will consider the applicant for admission. The deadline for receipt of application--including all supporting materials and letters of recommendation--is February 1st. To be admitted into the AADS a student must meet the

University's graduate admission requirements (which can be found in Florida International University's Graduate Catalog), and the following minimum standards:

1. Applicants must have a baccalaureate degree from an accredited college or university.
2. Applicants must have an undergraduate grade point average (GPA) of 3.0 or higher and submit official scores for the Graduate Record Examination (GRE). Applicants must submit both grade transcripts and GRE scores for consideration. The student must also have a GPA of 3.5 on any previous graduate work.
3. Applicants should request that three letters of recommendation from individuals able to judge their academic potential be sent directly to the Director of the African \& African Diaspora Studies Graduate Programs. For the exact street address, please consult our website at http://africana.fiu.edu.
4. Applicants are encouraged to submit examples of written work and other supporting materials.
5. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Financial Aid

Each academic year a limited number of graduate students are hired as graduate assistants. Graduate assistantships are allocated on a competitive basis and typically pay a substantial portion of tuition expenses and provide a stipend. To be considered for an assistantship the applicant must make such a request in writing to the Director of AADS Graduate Programs. The Director of the AADS Graduate Programs will make the awarding of teaching assistantships in consultation with the AADS Director. Students receiving an assistantship are required to perform approximately (but not more than) 20 hours of teaching and research related duties per week and are required to participate in a one-hour seminar related to teaching at the beginning of their first semester.

## Graduation Requirements

Candidates must obtain a grade of "B" or higher in all courses and achieve a cumulative point average of at least 3.0 (based on a 4.0 scale) and present a satisfactory research paper, internship report, or research proposal, scholarly citation styles admitted in the discipline. The selection of the citation style must be made with the research paper/report advisor.

## Research Paper/Proposal Option

To fulfill this requirement, a student must compose a research paper/proposal committee (three members) with a least two AADS graduate faculty members. The student will work closely with the chairperson of the committee, who must be chosen from the list of AADS graduate faculty (all either AADS Core or Affiliate Faculty). The submission of the final draft subsequently to the other members of the committee will logically follow the approval of the committee chairperson.

The FIU faculty eligible to serve on a thesis or research paper/proposal or internship reports committee are the faculty members who have achieved graduate faculty standing as established by the University Graduate

School. Other FIU faculty not identified in that list may be considered to serve on a committee (but not as chairperson of that committee) based on research, identified interest, and publications after approval from the Director of AADS Graduate Programs.

The MA in African \& African Diaspora Studies is cohortbased and only admits students to begin their studies in the fall semester. The MA in AADS curriculum unfolds over three terms: fall, spring, and summer C. The full curriculum comprises 30 credits. To graduate on time, students are expected to enroll in courses for 10 credits every term. During the AFA 6920 sessions (AADS Graduate Colloquium; three times 1 credit), enrolled students work closely with the AADS faculty of their choice to prepare their exit requirements (internship report, or research paper, or research proposal). Students will be assigned such as faculty mentor by the AADS Graduate Program Director (GPD) upon admission. Students may request to work with a specific AADS faculty member. Such selection must be requested by the third week of the fall semester. Before placing such request to the AADS GPD, a student must approach and get the approval of the chosen AADS faculty member. That AADS faculty member will serve as the chairperson of the student's research paper/proposal or internship report committee.

## Required Credits

## Total: $\mathbf{3 0}$ credit hours

Term 1 (Fall)
AFA $5005 \quad$ African and African Diaspora Studies Theory

| AFA 5855 | Research Methods and Scholarly |
| :--- | :--- |
|  | Writing in Africana Studies |

One Elective from the list of Humanities or Social Sciences
AFA $6920 \quad$ African and African Diaspora Studies Graduate Colloquium

## Term 2 (Spring)

One Elective from the list of Humanities or Social Sciences
One Elective from the list of Humanities or Social Sciences
One Elective from the list of Humanities or Social Sciences
AFA $6920 \quad$ African and African Diaspora Studies Graduate Colloquium

## Language Requirement

Students will be asked to demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests. Credit hours earned in meeting language requirement will not count toward the 30 credit hours required for the degree.

## List of Electives I: The Humanities

Students must choose between 9 and 15 credits from the list below
With approval of the Graduate Director, students may also select other courses not listed below after submitting the appropriate syllabus.
AFA 5932 Special Topics in African and African Diaspora Studies
AFA 5107 Teaching the African American Experience

AFA 5341
AFA 5600

AFA 6851
AFH 5905
AFH 5935
FRE 5508
HAI 5235
LAH 5465
LAS 6025
LIN 6602
LIT 5359
LIT 5358
MUH 5025
MUH 5067
RLG 5122
RLG 5372
RLG 5384
RLG 5488
SPN 5536
SPN 5539
SPW 5776
SPW 6368
WOH 5236

WOH 5237 The African Diaspora Since the End Of the Slave Trade
List of Electives II: The Social Sciences
Students must choose between 6 and 15 credits from the list below
ANG 6473 Diasporas, Migration, and Globalization
ANG 5397 Advanced African Diaspora Cultures and Performativity
ANG 5396 Representations of Africa and Africans in Films
ANT 6319 The African Diaspora: Anthropological Perspectives
CPO 5325
CPO 6350
CPO 6376
CPO 6206
CYP 6766
ECS 5406
ECS 6436
ECS 7435
INR 5087
INR 5255
INR 6936
SYD 6705
Health Issues in the African World
National and Transnational Policy
Analysis: The African Diaspora
Advanced Seminar in African and
African Diaspora Studies
Readings in African History
Topics in African History
La Francophonie
Haitian Creole Seminar
Peoples, Culture and Politics of Haiti
Seminar: The Humanities in Cuba
Language Contact
African Diaspora Women Writers
Black Literature and Literacy/Cultural
Theory
History of Popular Music in the United
States
Music of the Caribbean
African American Religion
The Globalizing of African Spirituality
Rasta, Vodou, Santeria
Theology and Liberation Movements
Afro-Cuban Culture
Special Topics in Afro-Hispanic Culture
Black Literature in Latin America
19th Century Spanish-Caribbean
Narrative
The Transatlantic Slave Trade and the
Making of the African Diaspora, 1441-
1807
The African Diaspora Since the End Of
the Slave Trade

## M.A. in African and African Diaspora Studies/Ph.D. in Global and Sociocultural Studies Combined Degree Program

The combined African \& African Diaspora Studies MA/Global \& Sociocultural Studies PhD program allows qualified graduate students to pursue both degrees at the same time. Students can develop an expertise in African \& African Diaspora Studies while progressing toward a PhD in one of the three majors in the Global and Sociocultural Studies PhD: geography, sociology, or anthropology.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the internetbased TOEFL (equivalent to 550 on the paper-based version) or a 6.5 overall on the IELTS is required.

## Admission Procedure

To be accepted into this program, students must submit an application to the PhD in Global and Sociocultural Studies with a sub-plan for a MA in African \& African Diaspora Studies. This designation will appear in the menu of programs in the graduate application. To be accepted into this program, students must submit an application by January 1 in the year in which they wish to begin their studies.
The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

The following must be submitted as part of the on-line application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable;
5. Statement of purpose explaining his/her interest for enrolling in both the AADS MA program and in the PhD program in GSS. The statement of purpose must clearly address the applicant's academic and professional objectives for enrolling in both fields of inquiry. The statement of purpose must also indicate the intended major (anthropology, geography, or sociology) the applicant plans to select while engaged in the PhD in GSS;
6. Three letters of recommendation from university professors who are able to comment on the various aspects of the student's academic ability;
7. A curriculum vitae; and
8. Writing samples and other relevant professional work that may support their applications.

## Degree Requirements for M.A. in African and African Diaspora Studies

The 36 credits earned for the M.A. in AADS will count toward the 75 credits required for the Ph.D. in GSS.

MA in AADS Core ( 6 credits)

| AFA 5005 | African \& African Diaspora Studies <br> Theory (Fall Yr1) |
| :--- | :--- |
| AFA 6920 | African \& African Diaspora Studies <br> Graduate Colloquium (3 credits) |

## Methods (12 credits)

SYA $6127 \quad$ Theory and Inquiry (Fall Yr 1)
ISS 6317 Social Research Quantitative Methods I (Fall Yr 2)
ISS 6305 Research Methods and Design (Spring Yr 1)
SYA $6959 \quad$ Writing Research Proposals
Electives (18 credits)

- 12 credits of elective courses with a clear AADS focus from within the Department of Global and Sociocultural Studies
- 6 credits of elective Courses from outside that Department and within the Green School and/or the College of Arts \& Sciences (see the AADS Humanities and Social Sciences lists of graduate courses).

Note: students are advised to take at least 9 of these elective credits in their chosen major discipline for GSS (anthropology, geography, or sociology).

## MA in AADS Research Proposal option

To graduate from the MA in AADS, students enrolled in this combined MA/PhD program must elect the research proposal option and take the proposal writing course SYA 6959 Writing Research Proposals.

## MA in AADS Language Requirement

Students must demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests.

## Application for Graduation from MA in AADS

Students should apply for graduation for the MA in AADS as soon as they have completed all requirements for the degree - including the exit option. Ordinarily, the MA will be conferred before the student advances to candidacy for the PhD in Global and Sociocultural Studies.

## Matriculation to PhD in GSS

All students must undergo a successful M.A. review upon completion of the AADS Masters Program requirements in order to continue toward the Ph.D. in GSS. The GSS Graduate Committee, along with an appointee from AADS, conducts these reviews. The purpose of the M.A. review is to determine the ability of the student to do Ph.D. level work with the department's faculty. Among the information considered during the review are students' performances and grades in courses, and faculty recommendations.

## Degree Requirements for Ph.D. in Global and Sociocultural Studies

The doctorate in Global and Sociocultural Studies requires a minimum of 75 credits beyond the baccalaureate including a dissertation based on original research. 36 credits of the MA in AADS will count toward the 75 -credit minimum. Thus, a minimum of 39 credits must be earned beyond the MA.

## Major Courses (33 credits)

All doctoral students will choose a major in Anthropology, Geography, or Sociology. The following distribution of coursework is required.
a). Major theory (3)
b). Major methods (3)
c). Major course electives (6 minimum)
d). Exam and dissertation credits and GSS and non-GSS Department electives

- Doctoral Exam Preparation (6 maximum)
- Doctoral Dissertation (15 minimum)


## General Electives (6 credits)

GSS and non-GSS Department electives

## Ph.D. General Examination

After successfully completing the common core requirements, the major's course requirements, and electives, a student prepares for the Ph.D. General Exam by enrolling in a maximum of six credits of exam preparation for their major. In preparation for the exam, a student forms a dissertation committee according to the regulations published on the University Graduate School web page (http://gradschool.fiu.edu). The Ph.D. General Exam addresses the student's anticipated dissertation topic, and is conducted according to the University Graduate School Policies and Procedures Manual and the Department's Ph.D. General Exam guidelines.

## The Dissertation Proposal and Defense/Candidacy Exam

After passing the Ph.D. General Exam, a student works under the guidance of the dissertation committee to prepare a dissertation proposal and defend it orally before the committee. The chair of the dissertation committee must hold Dissertation Advisor Status from the University Graduate School. The proposal defense serves as the doctoral candidacy exam for the Ph.D. program in Global and Sociocultural Studies. Upon passing the proposal defense, a student is admitted to candidacy status.

## The Dissertation and Dissertation Defense

After successfully defending a dissertation proposal, a student conducts the proposed research and completes a dissertation under the guidance of a dissertation committee. Only after successfully defending the dissertation proposal may a student register for dissertation hours (ANG 7980, GEO 7980, or SYA 7980). The Ph.D. program requires a student to be continuously enrolled in a minimum of 3 hours of Doctoral Dissertation each semester from the time of advancement to candidacy until completion of the dissertation, including summers. Upon completion of the dissertation manuscript and authorization by the committee, a student defends the dissertation before the committee and the University
community. The University Graduate School's regulations governing the dissertation are described at http://gradschool.fiu.edu.

## MA in African and African Diaspora Studies/Ph.D. in History Combined Degree Program

The Combined African and African Diaspora Studies MA / Ph.D. in History program allows qualified graduate students to complete the MA in Combined African and African Diaspora Studies (MA in AADS) en route to the Ph.D. in History. This program will train doctoral students within the discipline of Atlantic History while giving them area studies expertise in African and African Diaspora Studies in order to help them stay competitive in seeking careers with an international focus in today's global, cultural and intellectual environment. In tandem, these two programs can offer students an unusually close fit and remarkably beneficial synthesis in interdisciplinary approaches to both the Atlantic world and the African diasporic experience.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.0 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.25 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the IBT TOEFL (equivalent to 575 on the paper-based version of the Test of English as a Foreign Language) is required.

## Admission Procedure

To be accepted into this program, students must submit an application to the PhD in History with a sub plan for a MA in African and African Diaspora Studies. This designation will appear in the menu of programs in the graduate application. Applicants should prepare all application materials in time for the Department of History and the Office of Graduate Admissions to receive them no later than December 1 for the following year's fall admissions. Applicants will be notified of the Department's recommendation regarding their application no later than March 15.
The following documents must be submitted as part of the application. They will be reviewed by the Admissions Committee from both units.

1. Official transcripts of all prior college-level work (undergraduate Bachelor's degree and any graduate transcripts);
2. Official GRE scores or equivalent;
3. Official TOEFL scores, if applicable;
4. A curriculum vita;
5. A detailed statement of research interests, reasons for seeking the MA/ PhD, future career goals, a summary of scholarly and extra-curricular activities, and the names of History Department faculty members who would be appropriate dissertation advisors (Note: Consult the department website for information about faculty members)
6. A writing sample (such as a seminar paper) which demonstrates the ability to conduct research and write effectively; and
7. Three letters of reference from academic sources or others able to judge academic abilities and potential.
In addition, an interview (in person or phone) with members of the MA in AADS Program and/or appropriate faculty in the Department of History is highly recommended.

## MA in African and African Diaspora Studies (MA in AADS)

Thirty-six graduate credits are required for the MA in AADS, including 9 credits of core courses, 12 credits within a concentration, 12 credits of electives and 6 credits for the directed research paper exit option. There is also a Foreign Language Requirement.

## MA in AADS Core Courses: (9 credits)

HIS 6059 Historical Methods
AFA $6920 \quad$ AADS graduate colloquium (3 credits)
AFA 6911 Research Paper/Proposal Writing in African and African Diaspora Studies

## MA in AADS Elective Courses: ( $\mathbf{2 4}$ credits)

15 credits of elective courses with a clear AADS focus from within the Department of History, such as those on the following list. This should include at least one twosemester research seminar ( 6 credits).
AFA $6851 \quad$ Advanced Seminar in African and African Diaspora Studies
AFH $5905 \quad$ Readings in Asian History
AFH 5935 Topics in African History
AFH 6915 Research in African History
AFH 6932 Research Seminar in African History I
AFH 6933 Research Seminar in African History II
WOH 5236 The Transatlantic Slave Trade and the
WOH 5237 The African Diaspora Since the End of the Slave Trade
9 credits of elective courses from outside the History Department and within the Green School and/or the College of Arts \& Sciences. At least 6 of these credits will be from the Social Sciences list of AADS courses (see the Humanities and Social Sciences lists of AADS graduate courses).

## MA in AADS Research Proposal Option

To graduate from the MA in AADS, students enrolled in this combined MA/PhD program must elect the research proposal option and take the proposal writing course AFA 6911 Research Paper/Proposal Writing in African and African Diaspora Studies.

## MA in AADS Language Requirement

Students must demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests.

## Application for Graduation from MA in AADS

Students should apply for graduation for the MA in AADS as soon as they have completed all requirements for the degree - including the exit option. Ordinarily, the MA will be conferred before the student advances to candidacy for the PhD in History.

## Ph.D. in History

Students will begin study toward the Ph.D. in History immediately following their satisfactory completion of MA in AADS degree requirements. Students are expected to meet all the degree requirements for the Ph.D. in History, which requires a total of 75 credits.

Courses required in addition to the degree requirements for the MA in African and African Diaspora Studies (minimum 39 credits)

| HIS 6906 | Advanced Readings in Atlantic |
| :--- | :--- | :--- |
|  | Civilization |

HIS 6918 Research in Atlantic Civilization 3
3 credits outside of AADS and Atlantic Civilization (also excluding Methods), 3 credits of which must be in a comparative course (HIS or WOH prefix)
Electives
HIS 7890 Dissertation

## Language Requirements

All students must acquire reading competence in two languages other than English. The language requirement may be fulfilled in one of two ways: 1) achieving a High Pass on the department examination in one language, and at least a Pass on the second; or 2) achieving a Pass or High Pass in departmental examination in one language, and competency in social science quantitative skills, demonstrated by receiving a grade of "B" or "B+", for Pass, and "A" or "A-", for High pass, in an appropriate course approved for this purpose by the Graduate Program Director. At least one High Pass must be received. Language requirements vary, according to the concentration fields. In cases where the dissertation will be in the history of US or English-speaking countries, one language plus the quantitative skill is sufficient. In Latin American history, either Spanish or Portuguese, and a second language appropriate to the student's field are required. Language exams will be graded on a High Pass, Pass, and Fail basis; a High pass is required in the student's primary language. Students should check with the Department's Graduate Program Director to determine which languages are appropriate for their program of studies.

## Comprehensive Examinations and the Dissertation

Following completion of all course work, satisfaction of language requirements, and the constitution of $a$ dissertation committee, students will be required to pass a written and an oral comprehensive examination. After the completion of their comprehensive examinations and the approval of a dissertation proposal by their dissertation committee, students will write a doctoral dissertation. The time needed for the research and writing of dissertations in History is variable, although doctoral candidates normally spend one year engaged in continuous field research and a second year in full-time writing.

## Restrictions

1. The grade of " $B$ " or better is required for graduate credit.
2. At the end of the second semester of residence, or upon completion of the first 18 credit-hours of work, the Graduate Committee will examine and evaluate the student's progress and prospects. Professors will provide detailed written evaluations of the work of all first-year Ph.D. students they have taught. Students whose progress is deemed insufficient will be advised to withdraw from the program.
3. No more than 6 semester-hours of Topics (5935) courses toward meeting the degree requirements, without permission of the Graduate Program Director.
4. No more than 6 semester-hours of HIS 5908 (Independent Study) toward meeting the degree requirements, without permission of the Graduate Program Director.

## M.A. in African and African Diaspora Studies/Ph.D. in International Relations Combined Degree Program

The combined African and African Diaspora Studies M.A./International Relations Ph.D. program allows qualified graduate students to pursue both degrees at the same time.

## Admission Requirements

To be accepted into this program, students must simultaneously submit applications for the M.A. in African and African Diaspora Studies and the Ph.D. in International Relations by January 15 in the year in which they wish to begin their studies.

To be considered for admission, students must meet the following requirements:

1. Minimum cumulative grade point average of 3.2 in undergraduate work.
2. Minimum cumulative grade point average of 3.5 in any prior graduate work.
3. Official Graduate Record Exam (GRE) scores.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the iBT TOEFL (equivalent to 575 on the paper-based version of the Test of English as a Foreign Language) is required.
Applicants must follow the admission procedures for both programs (see the appropriate sections in this graduate catalog). Only applications to begin studies in the fall semester will be considered. This designation will appear in the menu of programs in the graduate application, and students must indicate their intention to apply for this combined program.

Each applicant must complete an online graduate application form and arrange to send transcripts of all prior college (undergraduate and graduate) work and official reports of the Graduate Records Exam (GRE) and TOEFL (if applicable) to FIU's Office of Graduate Admissions.

Each applicant should also submit a separate statement of purpose, along with copies of the above
material. The letter of application should include a statement expressing the applicant's academic and professional objectives. Applicants must include writing samples and other relevant professional work that may support their applications. Applicants must request three letters of recommendation from university professors who are able to comment on the various aspects of the student's academic ability. The letters of recommendation should be sent directly to the Director of the African and African Diaspora Studies Graduate Programs. AADS will photocopy the recommendation letters once they are all in and send them to the International Relations Graduate Program Director.

The application file must be complete before the African and African Diaspora Studies/International Relations Graduate Program Committees will consider the applicant for admission. We encourage applicants to send their application material sooner.

## Required Credits

Students must fulfill the requirements for both programs. The 36 credits for the M.A. in AADS earned by students will count toward the 75 credits required for the Ph.D. in INR.

## Prescribed Required Courses and Other Requirements

In addition to the requirements for the two degrees, during their first two years of enrollment in this combined degree program, students will enroll in the following course which fulfills the African and African Diaspora Studies M.A. methods requirement:
$\begin{array}{ll}\text { INR } 5615 & \begin{array}{l}\text { Research Design in International } \\ \text { Relations }\end{array}\end{array}$
The following International Relations courses will also be taken by African and African Diaspora Studies M.A. students during the first two years of the program and will count toward the M.A.:
INR 5609 Contemporary Dynamics of International Relations
INR $6706 \quad$ Political Economy of International Relations

## Language Requirement

Students must demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests. The Director of AADS Graduate Programs will ask a university faculty member fluent in the language of interest to the student, to evaluate the student's fluency by asking her/him to summarize or synthesize the content of a text of between 10 to 20 pages, published in that language, in no more than one page. That exercise will have to take place at the university during a limited period of time. The text will be given to the student at the beginning of the exercise. The chosen text will have some connection to the student's research interest. Once a student has demonstrated proficiency for the M.A. in African and African Diaspora Studies, that proficiency will be recognized by the International Relations Ph.D. program. Therefore, proficiency in a foreign language will not be part of the candidacy exam. Credit hours earned in meeting the language requirement will not count towards the 36 credit hours required for the M.A. degree.

Students should apply for graduation with the M.A. in African and African Diaspora Studies as soon as they have completed all requirements for the degree including the exit requirements, as specified for the M.A. in African and African Diaspora Studies. Ordinarily, students will complete these requirements and earn their M.A. before advancing to candidacy for the Ph.D. in International Relations. The research paper/proposal option is the only option available for students enrolled in this combined M.A./Ph.D. program.

## Masters of Arts in African and African Diaspora Studies Requirements

( 36 credits Research Paper/Proposal Option)
Courses to be taken in addition to INR 5615, INR 5609, and INR 6706 (for a total of 24 credits):
AFA 5005 African and African Diaspora Studies Theory
AFA 6911 Research Paper/Proposal Writing in
AFA $6920 \quad$ African and African Diaspora Studies Graduate Colloquium
1 semester of graduate colloquium
18 credits of elective from the lists of elective courses (see M.A. in AADS):
6 to 12 credits from the Humanities list
and
6 to 12 credits from the Social Sciences list
Total credits for the M.A.: 36

## Doctor of Philosophy in International Relations ( 75 credits)

The following courses in addition to all 36 M.A. credits: GEO 6473 Space, Place, and Identity 3 INR 6604 International Relations Theory I 3
INR 6608 Contemporary International Relations Theory

## Major and Minor Fields: (12 credits)

Major field of study
Minor field of study 3

## Electives: (3 credits)

Additional elective course work according to the specific information about elective courses indicated in the Ph.D. in INR section of the catalog.

## Comprehensive Examinations

Once students have achieved 60 credits of course work, they must sit for written examinations on the core sequence of their fields as per the Ph.D. in INR section of the catalog.

## Dissertation: ( $\mathbf{1 5}$ credits)

See the university catalog for relevant sections of the Ph.D. Program in International Relations for details.

## Course Descriptions <br> Definition of Prefixes <br> AFA-African and African Diaspora Studies

AFA 5005 African and African Diaspora Studies Theory (3). Explores the emergence of three fields of inquiry in Africana Studies: African Studies, African Diaspora Studies, and African-American Studies. Focus
on major themes, ideas, and diverse conceptual and theoretical perspectives. Prerequisite: Graduate standing.

AFA 5107 Teaching the African-American Experience (3). Teachers Institute on literature, culture, history, politics designed to meet Florida State Teachers Certification requirements. Includes instruction on pedagogy, practical teaching methods, and FCAT.

AFA 5302 Africana Visual Arts (3). A study of Africana, African, and/or African Diaspora Visual aesthetics. It examines relationships between Africana Visual arts and other creative forms. Prerequisite: Graduate standing.
AFA 5341 Health Issues in the African World (3). Examination of the history of the biomedicine system and its relationship to African populations, and the evolution of this relationship with respect to disease in the contemporary world. The course is organized to promote awareness of the impact of culture, ethnicity, racism, class on public health research.

AFA 5600 National and Transnational Policy Analysis: The African Diaspora (3). Analysis of national and transnational policies as they directly relate and impact the African Diaspora. Prerequisite: Graduate Standing.
AFA 5855 Research Methods and Scholarly Writing in Africana Studies (3). This proseminar addresses research methods for the multi- and inter-disciplinary study of sociocultural realities to African and African Diaspora peoples, globally.
AFA 5932 Special Topics in African and African Diaspora Studies (3). An examination of different features of Continental Africa and the African Diaspora not normally offered in the basic curriculum or otherwise offered. May be repeated. Prerequisite: Graduate standing.
AFA 5934 Special Topics in Black Transnationalism (3). A course designed to give groups of students special studies in the black experience transnationally. Prerequisite: Graduate Standing.

AFA 6217 Sex, Race, and Power in European Colonialisms (3). Critical examination of sexual intimacy in colonial contexts between European colonizers and colonized people. An exploration of the intersection between racialization and sexualization. Prerequisite: Graduate standing.
AFA 6245 The African Diaspora in Latin America (3). Advanced exploration of the historical, socioeconomic, and political realities of African diasporic communities in Central America, the Caribbean, and South America. Corequisite: Graduate standing.
AFA 6851 Advanced Seminar in African and African Diaspora Studies (3). Reflections on the global diversity of black subjectivities and African and African diasporic communities and experiences. A research paper/research proposal writing seminar. Prerequisite: Graduate standing.
AFA 6905 Independent Study (0-6). Student generated research projects in African and African Diaspora Studies. Independent investigation, reports on individual and assigned reading with AADS core and affiliated faculty.
AFA 6911 Research Paper/Proposal Writing in African and African Diaspora Studies (3). Development of skills
in writing research papers and/or proposals. Prerequisite: Graduate standing.

AFA 6920 African and African Diaspora Studies Graduate Colloquium (1-3). Colloquia, symposia, lectures, conferences presented by faculty, visiting scholars, and graduate students on topics of current research interest. May be repeated with departmental approval. Prerequisites: Graduate standing, graduate advisor approval.
AFA 6940 Community Project/Internship Research in African and African Diaspora Studies (1-6). Qualitative and quantitative research using a variety of sources. Research projects conducted in the field by students under faculty supervision. May be repeated with departmental approval. Prerequisites: Graduate standing, graduate advisor approval.
AFA 6971 Thesis Research in African and African Diaspora Studies (1-6). Quantitative and qualitative research using a variety of sources, e.g. primary and secondary documents, filed research under faculty supervision. May be repeated with departmental approval. Prerequisites: Graduate standing, graduate advisor approval.
LAH 5465 Peoples, Culture and Politics of Haiti (3). Advanced study of the cultures and history of the Haitian people from Africa to the New World, including life, cultures of the Indians of the Caribbean: Taino, Arawak and Caribs.

## Asian Studies

Steven Heine, Director, Asian Studies

Affiliated Faculty:
Thomas A. Breslin, Politics and International Relations
Matthew David Marr, Global and Sociocultural Studies
Amy Bliss Marshall, History
Eric T. Messersmith, Asian Studies
Oren B. Stier, Religious Studies
Lidu Yi, Chinese Art \& Art History
Jin Zeng, Politics and International Relations

## Master of Arts in Asian Studies

The M.A. degree in Asian Studies is an interdisciplinary program that draws on faculty from the Steven J Green School of International and Public Affairs and professional schools at FIU. The courses are coordinated by Asian Studies, which also sponsors workshops, lectures, cultural events, and study abroad programs.

The master's program provides students with a rich learning experience about a fascinating and increasingly important region of the world, and is intended to enhance the student's competitiveness upon graduation. The program provides a multidisciplinary approach covering the philosophy, religion, art history, language and literature of Asia as well as issues in history, politics, geography, sociology/anthropology, and international relations.

The M.A. has two concentrations: International Political Economy of Asia, which emphasizes social scientific studies involving economics, international relations, politics, and sociology; and Asian Cultural Studies, which emphasizes the humanities and arts disciplinary approaches.

For further information please contact the Asian Studies office, located at SIPA 505, at asian@fiu.edu or at (305) 348-1914. Also, visit our website at: http://asian.fiu.edu.

## Admission Requirements

Applicants must meet one of the following minimum requirements for admissions to the MAAS program:

1. 3.5 GPA in upper level undergraduate coursework;
2. 3.0 GPA in upper level undergraduate course work and 151 score on the verbal portion of the GRE;
3. MA in the humanities or social sciences from an accredited institution;
4. 3.0 GPA in upper level undergraduate course work and with appropriate language or study abroad background as determined by written examination or evaluated by the program faculty committee;
5. 3.0 GPA in upper level undergraduate course work and a 3.0 GPA or above in 9 hours of graduate courses as a special student in the program. (These nine hours may not be in Independent Study courses.); and
6. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
The above admission requirements are minimums and not all students meeting them are assured admission.

Students with either a grade-point average or GRE score below the above minimums may still apply and request a waiver of those scores.

## Degree Requirements (both concentrations)

The MAAS program offers two graduation exit options:

1. 30 credits - Completion of thesis project
2. 33 credits - Completion of a master's essay

## Language Requirements

Students choosing the Master's Thesis option will be asked to demonstrate competence in an Asian language relevant to their thesis project when appropriate (e.g. for pre-modern studies or fieldwork research). Proficiency requirements will be determined by the thesis committee. Credits earned in meeting the language requirement will not count towards the credit hours required for the degree.

## Core Courses: ( 6 credits)

| ASN 5315 | Topics in Modern Asia |
| :--- | :--- |
| ASN 5050 | Methods in Asian Studies |
|  | or |
| An equivalent | course based on approval of Program |
| Director |  |

## Advanced Research: (3 credits)

Choose one of the following in the first year of graduate study:
ASN 5213 Asian Studies Colloquium
ASN 5910 Independent Research in Asian Studies
ASN 6930 Seminar in Asian Studies
ASN $6940 \quad$ Internship in Asian Studies

## Other Coursework: ( 15 credits)

A minimum of 9 credits are required in the main concentration. Students may receive credit through independent study, study abroad, or internship approved by the program advisor.

An additional research methods course in a discipline related to the student's primary area of study may be taken as an elective, such as HIS 6059 (Historical Methods), INR 5615 (Research Design in International Relations), POS 5706 (Research Methodology), RLG 6013 (Modern Analysis of Religion), RLG 6935 (Seminar in Sacred Texts), SYA 6305 (Research Methods I), or equivalent.

## Master's Thesis Option: (6 credits)

## ASN 6972 Thesis

Please visit the FIU Graduate School website for up to date information on thesis guidelines and deadlines.

## Non-Thesis Option: Master's Essay ( 9 credits)

1. ASN 6912 Master's Essay in Asian Studies 3 credits
2. 6 credits in either concentration

Please visit the Asian Studies website for up to date information on guidelines and deadlines for the master's essay.

Important Note about Program Options: At mid-course in the program ( 15 credits) the student must meet with the Program Director or Graduate Director who will determine whether the student is recommended for the thesis option or the non-thesis option.

[^2]ECP 5707
International Economic Problems and Policies
INR 5086 Islam in International Relations
INR $5315 \quad$ Foreign Policy Analysis
INR 5544
INR 6205
INR 6706
SYD 6655

The New Asian Century
World Politics
Political Economy of International Relations
Seminar on Social Change in Asia

Asian Cultural Studies Concentration Electives:
ASH 5446 Readings in Japanese History
ASH $5905 \quad$ Readings in Asian History
HIS $5289 \quad$ Comparative History
IDS 6938 Great Ideas Seminar: Human Nature
MUH 5057 Music of the World
MUH 5575 Survey of Asian Music
RLG 5331 Religions of India
RLG 5346 Seminar on Buddhism
RLG 5352 Religions of East Asia
RLG 6319 Seminar in Asian Religions
For more information, contact the Asian Studies office, SIPA 505. Email: asian@fiu.edu; phone: (305) 348-1914; website: http://asian.fiu.edu.

## Combined BA/MA in Asian Studies

The combined BA/MA degree program allows highly qualified undergraduate students to pursue an accelerated MA degree in Asian Studies. Students accepted into this program will be able to complete the MA degree as early as one year sooner than would otherwise be possible. Students accepted into the Asian Studies Honors track are particularly encouraged to apply for this program.

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only $5000-l e v e l$ or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees. A complete application requires:

1. Current enrollment in BA program in Asian Studies at FIU
2. Completion of 75-90 credits of undergraduate coursework
3. Overall GPA of 3.2 (including undergraduate and graduate courses)
4. One letter of recommendation
5. Statement of purpose discussing interests in the field

Students should consult the graduate catalog and the Asian Studies website for a more comprehensive discussion of admission requirements (http://asian.fiu.edu).

The program gives students the opportunity to take up
to 9 credits of graduate coursework in the second semester of their senior year that will count towards both the BA and the MA. Students may take up to three 5000level or higher graduate courses in the second semester of their senior year and follow the regular MA curriculum after they earn their BA degree.

## Undergraduate Senior Year

Fall Semester - apply to the program by the end of the semester
Spring Semester - take 12 credits, including 9 graduate credits in 5000-level or higher courses

## Graduate Program

Summer Semester - take 3 graduate credits (5000-level or higher)
Fall Semester - take 9 graduate credits (5000-level or higher)
Spring Semester - take 9 graduate credits (5000-level or higher, including thesis or master's essay)

Students in the combined BA/MA program in Asian Studies must complete all other requirements for the MA degree in Asian Studies (please consult the graduate catalog and the program's online graduate handbook). Students in this program have up to a year to complete the master's degree after receipt of the bachelor's degree. Students who fail to meet this year post BA requirement or who elect to leave the combined program at any time and earn only the BA degree will have the same access requirements to regular graduate programs as any other student, but will not be able to use the 9 graduate credits in both the bachelor's and master's degrees.

## M.A. in Asian Studies/Ph.D. in Global and Sociocultural Studies Combined Degree Program

The combined Asian Studies MA/Global \& Sociocultural Studies PhD program allows qualified graduate students to pursue both degrees at the same time. Students can develop an expertise in Asian Studies while progressing towards a PhD in one of the three majors in the Global and Sociocultural Studies PhD: geography, sociology, or anthropology.

## Admission Requirements

Applicants must meet the following minimum requirements of Global and Sociocultural Studies to be considered for admission:

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.5 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the internetbased TOEFL (equivalent to 550 on the paper-based version) or a 6.5 overall on the IELTS is required.

## Admission Procedure

To be accepted into this program, students must submit an application to the PhD in Global and Sociocultural Studies with a sub-plan for a MA in Asian Studies. This designation will appear in the menu of programs in the graduate application. To be accepted into this program, students must submit an application by February 15 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

The following must be submitted as part of the online application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable;
5. Statement of purpose explaining his/her interest for enrolling in both the AS MA program and in the Ph.D. program in GSS. The statement of purpose must clearly address the applicant's academic and professional objectives for enrolling in both fields of inquiry. The statement of purpose must also indicate the intended major (international political economy or Asian cultural studies for the AS MA ,and anthropology, geography, or sociology for Ph.D. in GSS) the applicant plans to select while engaged in the PhD in GSS;
6. Three letters of recommendation from university professors who are able to comment on the various aspects of the student's academic ability;
7. A curriculum vitae or resume; and
8. Writing samples and other relevant professional work that may support their applications.

## Degree Requirements for M.A. in Asian Studies

(30 credits Thesis Option/33 credits Non-Thesis Option)
Up to 33 credits earned for the M.A. in AS will count towards the 75 credits required for the Ph.D. in GSS.

## Core ( 6 credits)

ASN 5050 Methods in Asian Studies
ASN $5315 \quad$ Topics in Modern Asia
Advanced Research: (3 credits)
Choose one of the following in the first year of graduate study:
ASN 5213 Asian Studies Colloquium
ASN 5910 Independent Research in Asian Studies
ASN 6930 Seminar in Asian Studies
ASN 6940 Internship in Asian Studies
Courses required for GSS Track ( 12 credits)
ISS 6305 Research Design and Methods
SYA $6127 \quad$ Theory and Inquiry
ISS 6317 Social Research Quantitative Methods
SYA $6959 \quad$ Writing Research Proposals

## Asian Studies Courses ( 6 credits)

6 credits Asia-specific courses pertaining to main concentration (from courses listed below)

- SYD 6418 Urban Sociology in Global Perspective
- SYD 6655 Seminar on Social Change in Asia
- SYD 6901 Japanese Society in Global Perspective
- SYD XXXX State and Society in China


## Language Requirement

Depending on the research topic students may be required to demonstrate language competency by the Asian Studies Graduate Committee.

## MAAS Exit Options, Thesis or Non-Thesis

Thesis Exit Option (3 credits):

## ASN 6972 Thesis

Non-Thesis Exit Option (6 credits):
Master's Essay (3 credits) and one additional Asia-specific course (3 credits)

## Application for Graduation from MA in AS

Students should apply for graduation for the MA in AS as soon as they have completed all requirements for the degree - including the exit option.

## Matriculation to PhD in GSS

All students must undergo a successful M.A. review upon completion of the AS Master's Program requirements in order to continue toward the Ph.D. in GSS. The GSS Graduate Committee, along with an appointee from AS, conducts these reviews. The purpose of the M.A. review is to determine the ability of the student to do Ph.D. level work with the department's faculty. Among the information considered during the review are student's performances and grades in courses, and faculty recommendations.

## Degree Requirements for Ph.D. in Global and Sociocultural Studies

The doctorate in Global and Sociocultural Studies requires a minimum of 75 credits beyond the baccalaureate including a dissertation based on original research, up to 33 credits of the MA in AS will count toward the 75 -credit minimum. Thus, a minimum of 42 credits must be earned beyond the MA.

## Major Courses (36 credits)

All doctoral students will choose a major in Anthropology, Geography, or Sociology. The following distribution of coursework is required:
a) Major theory methods (3)
b) Major methods (3)
c) Major course electives (9 minimum)

- Doctoral Exam Preparation (6 maximum)
- Doctoral Dissertation (15 minimum)


## General Electives ( 6 credits)

GSS and non-GSS Department electives

## Ph.D. General Examination

After successfully completing the common core requirements, the major's course requirements, and electives, a student prepares for the Ph.D. General Exam by enrolling in a maximum of six credits of exam preparation for their major. In preparation for the exam, a student forms a dissertation committee according to the regulations published on the University Graduate School web page (http://gradschool.fiu.edu). The Ph.D. General Exam addresses the student's anticipated dissertation topic, and is conducted according to the University Graduate School Policies and Procedures Manual and the Department's Ph.D. General Exam guidelines.

## The Dissertation Proposal and Defense/Candidacy Exam

After passing the Ph.D. General Exam, a student works under the guidance of the dissertation committee to prepare a dissertation proposal and defend it orally before the committee. The chair of the dissertation committee must hold Dissertation Advisor Status from the University Graduate School. The proposal defense serves as the doctoral candidacy exam for the Ph.D. program in Global and Sociocultural Studies. Upon passing the proposal defense, a student is admitted to candidacy status.

## The Dissertation and Dissertation Defense

After successfully defending a dissertation proposal, a student conducts the proposed research and completes a dissertation under the guidance of a dissertation committee. Only after successfully defending the dissertation proposal may a student register for dissertation hours (ANG 7980, GEO 7980, or SYA 7980). The Ph.D. program requires a student to be continuously enrolled in a minimum of 3 hours of Doctoral Dissertation each semester from the time of advancement to candidacy until completion of the dissertation, including summers. Upon completion of the dissertation manuscript and authorization by the committee, a student defends the dissertation before the committee and the University community. The University Graduate School's regulations governing the dissertation are described at http://gradschool.fiu.edu.

## Combined Master of Arts in Asian Studies/Doctor of Philosophy in International Relations

The combined M.A. in Asian Studies/Ph.D. in International Relations program allows qualified graduate students to pursue both degrees simultaneously. To be accepted into this program, students must submit an application for the M.A. in Asian Studies/Ph.D. in International Relations by January 15 in the year in which they wish to begin their studies. Applicants must meet the admission eligibility requirements and follow the admission procedures for both programs.

Students must fulfill the requirements for both programs, and up to 33 credits may count for both degrees. To graduate, students must complete the requirements of the International Relations doctoral program, including the required 75 hours.

In addition to the requirements for the two degrees, during their first two years of enrollment in this dual degree program, students will enroll in the following course which fulfills the M.A. in Asian Studies methods requirement:
INR 5615 Research Design in International Relations

The following International Relations courses will also be taken by M.A. in Asian Studies students during the first two years of the program and will count toward the M.A.:
INR $5609 \quad$ Contemporary Dynamics of International Relations
INR 6706 Political Economy of International Relations

## Master of Arts in Asian Studies

## Requirements

(30 credits Thesis Option / 33 credits Non-Thesis Option)

## Core Courses: ( $\mathbf{2 4}$ credits)

- 3 credits Topics in Modern Asia (ASN 5315)
- 3 credits Methods in Asian Studies (ASN 5050)
- 3 credits in Advanced Research
- 9 credits pertaining to main concentration
- 6 credits in other concentration

MAAS offers two exit options, Thesis or Non-Thesis
Thesis Exit Option: (6 credits)
ASN 6972 Master's Thesis
Non-Thesis Exit Option: (9 credits)
ASN 6912 Master's Essay (3 credits and two additional courses ( 6 credits)

## Doctor of Philosophy in International Relations ( 75 credits)

## Core Courses: ( $\mathbf{1 8}$ credits)

GEO 6473 Space, Place, and Identity 3
INR $5609 \quad$ Contemporary Dynamics of International Relations
INR 5615 Research Design in International Relations
INR 6604 International Relations Theory I 3
INR 6608 Contemporary International Relations Theory

## Major and Minor Fields: ( 21 credits)

12 credits in major field of study
9 credits in minor field of study
Electives: (21 credits)
Additional elective coursework

## Comprehensive Exams

Once students have achieved 60 credits, they must sit for written examination on the core sequence of their fields
Dissertation: (15 credits)
INR $7980 \quad$ Ph.D. Dissertation

## Combined Master of Arts in Asian Studies/Doctor of Philosophy in History

The combined M.A. in Asian Studies/Ph.D. in History program allows qualified graduate students to pursue both degrees simultaneously. To be accepted into this program, students must simultaneously submit applications for the M.A. in Asian Studies and the Ph.D. in History. Applicants must meet the admission eligibility requirements and follow the admission procedures for both programs.

Students must fulfill the requirements for both programs, and up to 36 credits may count for both degrees. To graduate, students must complete the requirements of the History doctoral program, including the required 75 hours.

During their first two years of enrollment in this dual degree program, students will enroll in the following coursework which fulfills the Asian Studies M.A. requirements:

## Master of Arts in Asian Studies

## Requirements

(30 credits Thesis Option / 33 credits Non-Thesis Option)

## Core Courses: ( 24 credits)

- 3 credits Topics in Modern Asia (ASN 5315)
- 3 credits in a research methods course in a discipline related to the student's primary area of study
- 12 credits pertaining to main concentration
- 6 credits in other concentration

MAAS offers two exit options, Thesis or Non-Thesis

## Thesis Exit Option: (6 credits)

ASN 6972 Master's Thesis
Non-Thesis Exit Option: ( 9 credits)
ASN 6912 Master's Essay (3 credits and two additional courses (6 credits)
Students will begin study towards the Ph.D. is History immediately following their satisfactory completion of MAAS degree requirements. Students are expected to meet at the degree requirements for the Ph.D. in History, which requires a total of 75 credits.

## Doctor of Philosophy in History

Courses required in addition to the degree requirements for the M.A. in Asian Studies (minimum 39 credits)

- 3 credits Advanced Readings in Atlantic Civilization (HIS 6906 )
- 3 credits Research in Atlantic Civilization (HIS 6918)
- 6 credits outside of Asian Studies and Atlantic Civilization (also excluding Methods), 3 credits of which must be in a comparative course (HIS or WOH prefix)
- 12 credits electives
- 15 credits Ph.D. Dissertation (HIS 7980)


## Course Descriptions

Definition of Prefixes
ASN-Asian Studies; FLE-Foreign Language Education
ASN 5050 Methods in Asian Studies (3). An examination of interdisciplinary methods for studies of Asia covering premodern and modern, language and area studies, fieldwork and deskwork, and qualitative and quantitative approaches.
ASN 5131 Zen and the Arts II (3). Theory, practice, aesthetics and cultural history of Chado the Tea Ceremony of Zen Buddhism.
ASN 5149 Topics in Modern China (3). Advanced studies in contemporary Chinese society from the early period of the People's Republic to the period since economic reforms in 1978.
ASN 5171 International Relations of Contemporary China (3). Survey of the dynamic interaction between external and internal factors on China's international relations.
ASN 5211 Asian Cultures and Influences (3). Examines diverse forms of Asian cultural manifestations and examples of self-expression, and the manner in which these styles have influenced modern Western movements (Transcendentalism and the Beats).

ASN 5213 Asian Studies Colloquium (1-3). Graduate students will develop applied knowledge of various aspects of Asian culture as well as Asia's role in contemporary world affairs.
ASN 5306 Applying Asian Cultural Values in Business (3). Critical survey of traditional Asian values. Topics to include the way they have been applied to the world of entrepreneurship, cultural constructions of the Asian business community and philosophical approaches to the formation of entrepreneurial strategies.

ASN 5315 Topics in Modern Asia (3). Focus on modernization, or the transition from pre-modern (classical and medieval) to elements of the modern, including westernization, industrialization, and the roles of capitalism, communism, imperialism, and colonialism, as well as the impact of post-colonialism and post-modern society in Asia.
ASN 5431 Studies of Women in East Asia (3). Provides a multidisciplinary examination of the experience and representations of women in East Asia with a focus on the traditional and contemporary periods.
ASN 5605 Silk Road: Then and Now (3). Examination of the historical and contemporary significance of the Silk Road as an avenue for commercial and cultural exchange between East and West.
ASN 5815 Studies of East Asian Texts (3). Advanced studies of classical and contemporary East Asian readings, including interpretation and analysis from traditional and contemporary perspectives. Prerequisite: Permission of the instructor.
ASN 5910 Independent Research in Asian Studies (16). Topics will be selected to meet academic needs for students doing research in some specialized area of Asian studies. Prerequisite: Permission of the instructor.
ASN 5932 Special Topics in Asian Studies (3). An examination of specific topics in Asian Studies. The content to be determined by instructor.
ASN 6912 Master's Essay in Asian Studies (3). Supervised research project. Requires prior approval by instructor. Prerequisite: Graduate standing.
ASN 6930 Seminar in Asian Studies (3). Content to be determined by the instructor. May be repeated for credit when content changes.
ASN 6940 Internship in Asian Studies (1-3). Students intern in local, national and international organizations with ties to Asia. The nature of the work to be determined in conjunction with the advisor. Prerequisite: Permission of the instructor.
ASN 6972 Master's Thesis (1-6). Writing and completion of thesis. Students must have completed all other requirements for Master of Arts degree in Asian Studies. Prerequisite: Permission of the Thesis director.

FLE 5855 Pedagogical Methods for Chinese Language (3). Introduction to Chinese language pedagogy, providing knowledge and tools for teaching Chinese language and culture in a classroom and a variety of pedagogical settings. Prerequisite: Permission of the instructor.

## Criminal Justice

Lisa A. Stolzenberg, Professor and Chair
Rosa E. Chang, Instructor
Ellen G. Cohn, Associate Professor
Stewart J. D'Alessio, Professor
Jamie L. Flexon, Associate Professor
Brittany VanderBerg Gilmer, Assistant Professor
Tim Goddard, Assistant Professor
Rob T. Guerette, Associate Professor
Suman Kakar Sirpal, Associate Professor
Ryan C. Meldrum, Associate Professor
Stephen F. Pires, Assistant Professor
Juan M. Saiz, Senior Instructor
Luis P. Salas, Professor
Theodore Shields, Digital Instructor
Carleen Vincent Robinson, Senior Instructor

## Master of Science in Criminal Justice

## Admissions Requirements

1. Bachelor's degree from an accredited institution.
2. GPA of 3.2 or higher in upper division coursework.
3. Grade of " B " or better in both an undergraduate research methods and a statistics course.
4. Letter of application describing your reasons for pursuing an advanced degree and career plans.
5. Example of your written work.
6. Two letters of recommendation from professors or employers familiar with your academic and professional qualifications.
Students seeking funding and those not meeting the minimum admission requirements should submit Graduate Record Exam (GRE) scores taken within the last five years. Students admitted conditionally must complete 12 graduate credits (including CCJ 6705 and CCJ 6706) within two semesters and achieve a 3.2 GPA.

## Degree Credit Requirements

The Master of Science degree in Criminal Justice requires 36 credit hours (12 courses). All students entering the program are required to complete five courses ( 15 credits) of core requirements, four electives ( 12 credits) in criminal justice, and three courses ( 9 credits) in general electives.

## Core Requirements

All candidates must take five core courses ( 15 credits)
CCJ $6025 \quad$ Criminological Theory
CCJ 6676 Transnational Crime and National Security
CCJ 6705 Research Methods in Criminal Justice
CCJ $6706 \quad$ Data Analysis in Criminal Justice 3
CCJ $6485 \quad$ Criminal Justice Policy Analysis 3

## Criminal Justice Electives

Four courses ( 12 credits). All elective credits must be earned at the graduate level in criminal justice (i.e., course numbers of 5000 and higher with the prefixes CCJ, CJC, CJE, CJJ, CJL, DSC).
College teaching preparation: Students interested in college teaching should complete the Graduate Teaching Certificate Program offered by the Center for the Advancement of Teaching and CCJ 6926 Supervised Teaching.

Doctoral studies preparation: Advanced students intending to enroll in a doctoral degree program should complete the college teaching preparation and CCJ 6915 Supervised Research.

## General Electives

Students must select three additional elective courses (9 credits). These courses may be taken outside of criminal justice, if no credits have been transferred in from another degree program or included in a joint degree program. All courses taken from outside fields must be relevant to criminal justice and approved by the Graduate Advisor. All elective credits must be earned at the graduate level (i.e., course numbers of 5000 and higher).

## Graduation Requirements

To receive the Master's degree in Criminal Justice, a student must satisfy all University regulations governing graduate study. All students must complete the five core courses, four electives in criminal justice, and three courses in general electives. A minimum graduate GPA of 3.0 is required.

## Combined BS/MS in Criminal Justice

The combined BS/MS degree program allows qualified students to earn both degrees in a shorter amount of time than typically required for earning degrees sequentially. To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program and meet the admissions criteria for the graduate degree program. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than 12 credits may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor of Science program in criminal justice at FIU.
2. Current GPA of 3.2 or higher.
3. Grade of " $B$ " or better in both an undergraduate research methods and a statistics course.
4. Letter of application describing your reasons for pursuing an advanced degree and career plans.
5. Example of your written work.
6. Current resume.

## Completion Requirements

Completed Bachelor of Science degree in criminal justice at FIU including up to 12 credits (4 courses) of graduate criminal justice courses completed with a " B " or higher grade.

## Juris Doctor/Master of Science in Criminal Justice Joint Degree Program

The faculties of the College of Law and the Department of Criminal Justice at Florida International University have approved a joint degree program culminating in both a Juris Doctor degree (JD), awarded by the College of Law, and a Master of Science in Criminal Justice degree (MSCJ), awarded by the Department of Criminal Justice. Under the joint degree program, a student can obtain the degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. Essential criteria relating to the joint degree program are as follows:

1. Candidates for the program must meet the entrance requirements for and be accepted by both programs. Both programs must be informed by the student at the time of application to the second program that the student intends to pursue the joint degree.
2. The joint degree program is not open to students who have already earned a JD or a MSCJ.
3. For law students, enrollment in the MSCJ program is required no later than the completion of 63 credit hours in the JD program. For MSCJ students, enrollment in the JD program is required no later than the completion of 24 credit hours in the MSCJ program.
4. A student must satisfy the curriculum requirements for each degree before either degree is awarded. The Department of Criminal Justice will allow 12 credit hours of College of Law criminal law and jurisprudence courses to be credited toward both the MSCJ and JD degrees. These 12 credit hours of law classes will be in lieu of four elective courses. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the JD degree for courses taken in the MSCJ curriculum upon completion of the MSCJ degree with a grade point average of 3.0 or higher. Subject to prior approval, law school students are normally allowed 6 credit hours from graduate level courses offered by other units of the University as counting toward the JD degree.
5. A full-time law student enrolled in the joint degree program may spend the first year in either the College of Law or the Department of Criminal Justice. A parttime law student enrolled in the joint degree program may begin the student's studies in either program, but must take the first three semesters of law study consecutively. Students admitted to one program may enter the second program thereafter without once again qualifying for admission so long as they have notified the second program before the end of the first week of the first semester in the second program and are in good academic standing when studies commence in the second program.
6. A student enrolled in the joint degree program will not receive either degree until the student has satisfied all of the requirements for both degrees, or until the student has satisfied the requirements of one of the degrees as if the student had not been a joint degree candidate.
7. Students in the joint degree program will be eligible for the graduate teaching assistantships and research assistantships in the Department of Criminal Justice on the same basis as other MSCJ students, subject to
the guidelines and restrictions set by the Department of Criminal Justice.

## Master of Science in Criminal Justice/Master of Public Administration Joint Degree Program

The Department of Criminal Justice and the Department of Public Administration have a joint degree program culminating in both a Master of Science in Criminal Justice (MSCJ) and a Master of Public Administration (MPA). The joint degree program prepares graduate students for overlapping careers in criminal justice and public management. It is intended to prepare students for positions in public, private, and nonprofit organizations that require both criminal justice and management knowledge. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate in the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applicants for a joint degree will not be accepted from candidates who have already completed either degree. MSCJ or MPA students must apply and be admitted by no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
4. The joint degree requires a total of 60 credit hours (20 courses). Candidates are required to complete the 11 core courses ( 33 credits) included in the MSCJ and MPA programs (completing the graduate level statistics and research method classes as part of the MPA Core or the CJ Core), four criminal justice electives (12 credits), two public administration electives ( 6 credits) and three general electives ( 9 credits) which could be MSCJ, MPA, or other graduate level courses approved by the Graduate Advisor.

## Core Courses

PAD 6053
Political, Social and Economic Context of Public Administration
PAD 6306 Policy Analysis and Program Planning
PAD 6417 Human Resource Policy and Management
PAD $6227 \quad$ Public Finance and the Budgetary Process

3
PAD 6434 Leadership and Decision-making 3
PAD 6056 The Practice of Public Management 3
CCJ $6025 \quad 3$
CCJ 6676 Transnational Crime and National Security

> Criminal Justice Policy Analysis3

CCJ 6705 Research Methods in Criminal Justice 3
PAD 6726 Applied Research Methods for Accountability in Public and Nonprofit Organizations
CCJ 6706
PAD 67013

Data Analysis in Criminal Justice 3 Quantitative Methods in Public Administration

## Electives

Four criminal justice electives*
Two public administration electives
Three general electives (which could be MSCJ, MPA, or other graduate level courses approved by the student advisor
*Advanced students intending to enroll in a doctoral degree program are strongly encouraged to complete CCJ 6915 Supervised Research. General electives taken from outside fields must be relevant to criminal justice or public administration and approved by the Graduate Advisor.

## Doctor of Philosophy in International Crime and Justice

The Ph.D. in International Crime and Justice at FIU prepares graduates to assume leadership roles in public criminal justice agencies, academia and private sector criminal justice companies in the United States and around the world. Its curriculum is sensitive to the importance of analytical skills, balanced with theoretically informed policy analysis, so that graduates of the program can more effectively address the challenges faced by criminal justice organizations in Florida, nationally, and internationally. Students of the program gain the knowledge to apply advanced research methodologies to undertake studies related to crime, law, public policy, and to the administration of the criminal justice system at home and abroad.

## Admission Standards

To be considered for admission to the doctoral program, applicants must fulfill these minimum requirements:

1. A bachelor's degree from an accredited institution.
2. A GPA of 3.2 or higher in upper division coursework or a 3.2 or higher for all master's degree coursework.
3. Graduate Record Exam (GRE) scores taken within the last five years.
4. Two letters of recommendation form professors or employers familiar with your academic and professional qualifications.
5. A 300- to 500-word statement that describes the student's interests in pursuing an advanced degree in international crime and justice, including any specific research interests, as well as your ultimate career goals.
6. Completed research paper or thesis that demonstrates writing skills.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). Minimum required scores is 550 on the paper-based TOEFL, 80 on the internetbased TOEFL (iBT) or 6.5 overall on the IELTS.

## Graduation Requirements

A grade of " B " or higher must be actualized in all courses with a cumulative GPA of 3.0 or higher in the 81 credits. All the program requirements and a dissertation must be completed and approved by the university.
Residency Requirements: Ph.D. students must also establish residency as defined as the completion of a minimum of 18 graduate credit hours within any consecutive 12-month period.
The Ph.D. in International Crime and Justice requires a minimum of 81 credit hours of graduate course work beyond the bachelor's degree, including a comprehensive exam and dissertation based on the student's original research. A maximum of 36 credits are transferable from a completed master's degree program with the approval of the graduate program director.

## Required Courses (36)

CCJ $6025 \quad 3$
CCJ 6705 Research Methods in Criminal Justice 3
CCJ $6706 \quad$ Data Analysis in Criminal Justice 3
CCJ $6741 \quad \begin{aligned} & \text { Advanced Data Analysis in Criminal } \\ & \\ & \\ & \text { Justice }\end{aligned}$
CCJ $6079 \quad$ Geospatial Crime Analysis 3
CCJ $6485 \quad$ Criminal Justice Policy Analysis 3
CCJ $6040 \quad$ Comparative Crime and Criminal Justice Systems 3
CCJ 6047 International Criminal Justice 3
CCJ $6675 \quad$ Human Rights and Criminal Justice 3
CCJ 6676 Transnational Crime and National Security

3
DSC 6020 Terrorism and Homeland Security 3
College teaching preparation: Students must complete CCJ 6926 Supervised Teaching (3) and the Graduate Teaching Certificate Program offered by the Center for the Advancement of Teaching.

## International Crime and Justice Electives (9)

Students must take a minimum of nine credits from courses relevant to international crime justice with the approval of the graduate program director.
CCJ $6620 \quad 3$
CCJ 6696 Human Trafficking 3
CCJ 6935 Special Topics: Relevant to International Criminal Justice

3
$\begin{array}{lll}\text { INR } 6089 & \text { International Relations and Human } \\ & \text { Rights }\end{array}$
LAW 6103 International Criminal Law 3
LAW 6253 Comparative Criminal Law 3
LAW 6260 Public International Law 3
LAW 6263 International Human Rights Law 3
LAW 6280 European Union Law 3
LAW 6506 Foreign Relations and National Security
Law
LAW 6936 Seminars: Relevant to International Crime and Justice

3
PAD 6836 International Public Administration 3
Other course approved by graduate program director.

## General Electives (6)

Students may take up to six credits of general electives outside the department with the approval of the graduate program director.

## Comprehensive Exam and Dissertation (30)

CCJ 7960
Comprehensive Exam
CCJ 7926 Dissertation Prospectus 3

CCJ 7980
Ph.D. Dissertation

## Course Descriptions

## Definition of Prefixes

CCJ-Criminology and Criminal Justice; CJC-Corrections; CJE-Law Enforcement; CJJ-Juveniles; CJL-Law and Process; DSC-Domestic Security

CCJ 5479 Seminar in Administration of Justice (3). This course provides students with a critical understanding of the responses to crime. Emphasis is placed on theory and research relating to the effectiveness of the criminal justice system.
CCJ 5525 Seminar in Juvenile Delinquency (3). This course focuses on the nature, scope, and causes of delinquency and considers problems of assessment and measurement of delinquency.
CCJ 5669 Minorities in Justice Administration (3). This course focuses on current research and theories of racial, ethnic, and gender discrimination within America's criminal justice system.
CCJ 5946 Internship in Criminal Justice (3-6). This course will provide the opportunity for the graduate student to observe the criminal justice system in operation. Corequisite: Student must be a criminal justice graduate student with an overall minimum GPA of 3.0.
CCJ 6025 Criminological Theory (3). The study of theoretical and research issues related to the nature and causes of crime and the administration of justice.
CCJ 6040 Comparative Crime and Criminal Justice Systems (3). This course provides a cross-national survey of crime and criminal justice. Emphasis will be on crime rates, forms of criminality, police, courts, and corrections.
CCJ 6047 International Criminal Justice (3). A study of international crimes, international criminal tribunals, and the prosecution and punishment of persons alleged to have committed international crimes.

CCJ 6056 History of the American Criminal Justice System (3). Focuses on the history and evolution of the American criminal justice system.

CCJ 6079 Geospatial Crime Analysis (3). Exploration and examination of patterns of crime through a geographical lens using the Geographic Information System (GIS) software.
CCJ 6362 Death Penalty (3). This course examines legal, empirical, and policy issues related to the death penalty in the United States.
CCJ 6485 Criminal Justice Policy Analysis (3). An overview of the formation, implementation, quantitative and qualitative evaluation, and ethical aspects of policy making in the criminal justice system. Prerequisite: Must be taken the final semester in the program.
CCJ 6489 Ethics in Criminal Justice (3). This course is designed to introduce students to ethical decision-making in the criminal justice system.

CCJ 6620 Immigration and Crime (3). This course explores the relationship between immigration and crime and the nature and extent of crime in immigrant communities.
CCJ 6665 Victimology and the Criminal Justice System (3). An examination of the relationship between victims and offenders and the manner in which the criminal justice system responds to victims of crime.
CCJ 6675 Human Rights and Criminal Justice (3). Provides an in-depth understanding of human rights and how groups and individuals can seek justice when mass human rights violations are committed, and the basic fundamental rights of the accused during the criminal justice process.
CCJ 6676 Transnational Crime and National Security (3). Examination of the nature of transnational crime and the manner in which it relates to national security.
CCJ 6696 Human Trafficking (3). An investigation of the origins and current trends in the trafficking of humans for profit.
CCJ 6705 Research Methods in Criminal Justice (3). An intensive introduction to the methods used in criminal justice research.
CCJ 6706 Data Analysis in Criminal Justice (3). An applied introduction to multivariate statistical analysis in criminal justice research.
CCJ 6741 Advanced Data Analysis in Criminal Justice (3). An applied introduction to longitudinal analysis in criminal justice research. Prerequisite: CCJ 6706.
CCJ 6915 Supervised Research (3). Graduate students engage in criminal justice research under the direction of a faculty member. May be repeated for a total of six credits. Prerequisites: CCJ 6705, CCJ 6706.

CCJ 6926 Supervised Teaching (3). Graduate students engage in undergraduate teaching in criminal justice under the direction of a faculty member. Prerequisite: 18 graduate credit hours in criminal justice.
CCJ 6935 Special Topics (3). An intensive analysis of a particular topic in criminal justice. May be repeated for different topics.
CCJ 7926 Dissertation Prospectus (3). Doctoral students develop a research proposal under the direction of their major professor (pass/fail grading).
CCJ 7960 Comprehensive Exam (3). Provides students with the opportunity to practice and be assessed on important skills: development of research knowledge base, exercise of critical synthesis and writing skills, execution of an independent research project, and presentation and defense of individual work (pass/fail grading). Prerequisite: Completion of all coursework.
CCJ 7980 Ph.D. Dissertation (3-12). Supervised research on an original research project submitted in partial fulfillment of doctoral degree requirements (pass/fail grading). Prerequisites: Permission of major professor and doctoral candidacy.
CJC 6320 Correctional Administration (3). The course focuses on current critical issues and problems in the administration and management of adjudicated offenders in correctional systems.

CJE 5024 Violent Crime \& Criminal Behavior (3). This course deals with violent criminal behavior and the criminal justice system's reaction to violence.
CJE 6025 Police Administration (3). Analysis of the organization and administration of police departments and their effects on police behavior.
CJE 6446 Seminar on Crime Prevention (3). An in depth study of current approaches and practices in crime prevention, historical trends, and the future of crime prevention policy and practice.
CJJ 6040 Juvenile Justice Administration and Policy Analysis (3). This course is designed to provide students with an understanding of the juvenile justice system administration and the various cases and legislative initiatives that have affected juvenile justice.
CJL 6418 Law and Social Control (3). This course examines law as an instrument of social control. It explores the effectiveness of law in controlling criminal behavior and its impact on the criminal justice system.
CJL 6421 Legal Issues in Criminal Justice Administration (3). This course examines diverse and frequently debated legal topics from both legal and sociological perspectives.
CJL 6422 Advanced Seminar in Criminal Law and Procedure (3). This course presents an intensive study of case law and procedure as they relate to the administration of criminal justice.
CJL 6558 Legal Issues in Juvenile Justice (3). This course covers landmark cases that define the legal rights of youth within the juvenile justice process and then focuses on the legal rights of youth at school.

DSC 6020 Terrorism and Homeland Security (3). This course focuses on the domestic and international threats of terrorism and the basic security issues that surround terrorism today.

## Economics

Ali Cem Karayalcin, Professor and Chairperson
Mahadev G. Bhat, Professor (joint appointment with Environmental Studies)
Prasad V. Bidarkota, Associate Professor
John H. Boyd III, Associate Professor
Jesse L. Bull, Associate Professor
Joel D. Carton, Senior Lecturer and Undergraduate Director
Irma de Alonso, Professor Emerita
Paul Dower, Assistant Professor
Alan Gummerson, Senior Lecturer
Sheng Guo, Assistant Professor
Panagis S. Liossatos, Professor Emeritus
Kaz Miyagiwa, Associate Professor
Pallab Mozumder, Associate Professor (joint appointment with Environmental Studies)
Tobias Pfutze, Assistant Professor
Mihaela Pintea, Associate Professor and Director of Graduate Programs
Alfonso Rodriguez, Instructor
Jorge Salazar-Carrillo, Professor and Director,
Center for Economic Research and Education
Mira Wilkins, Professor Emeritus
Maria F. Willumsen, Associate Professor
Hakan Yilmazkuday, Associate Professor
Demet Yilmazkuday, Instructor
The Department of Economics has a group of faculty who are interested in a variety of applied and theoretical topics. The graduate programs in Economics place strong emphasis on exploiting synergies between fields such as international economics, industrial organization, and technological change, and development economics (including Latin American and Caribbean studies as well as regional development problems). Issues are analyzed using modern economic tools from fields such as econometrics, game theory, and economic dynamics. While these are the department's areas of greatest emphasis, graduate course work in other fields can also be undertaken. The department's graduate programs are further enhanced by the presence of complementary graduate programs in the Green School, College of Arts and Sciences, College of Business, the Robert Stempel College of Public Health and Social Work, and the Kimberly Green Latin American and Caribbean Center.

The Master's Program provides additional training in economics beyond the undergraduate degree. It provides a degree of expertise that would not be obtained in an undergraduate education. This additional expertise enhances your prospects for a successful career in the private sector, and in governmental or international agencies.

The objective of the Doctoral Program is to offer advanced training in economic analysis. It provides an excellent background for a professional career at academic institutions, in the private sector, or in governmental and international agencies.

## Master of Arts in Economics

To be admitted into the Master's degree program in Economics, a student must meet the University's graduate admission requirements and:

1. Have a Bachelor's Degree from an accredited institution.
2. Have a ' $B$ ' average (3.0) or higher during the last two years of undergraduate studies, and submit official Graduate Record Examination (GRE) scores. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
3. Receive approval of the departmental graduate committee.
4. Have taken as prerequisites intermediate macroeconomics, intermediate microeconomics, statistics, calculus 1 and II, and linear algebra. A student who has not fulfilled all these prerequisites may be admitted on a provisional basis. Unless specifically exempted, the student must take these courses as required, obtaining no credit for them in the program.

## Master's Tracks

The Department of Economics offers two tracks: A general economics track, and a track specializing in applied economics. Although the general requirements are the same for both tracks, students opting to follow the applied economics track must write a Master's Thesis, take a fourth core course, and include four of the applied track courses listed below among their electives. The applied track courses are also open to students following the general economics track.

## Degree Requirements

The Master's degree program will consist of 30 semester hours of course work, at a graduate level (course numbers 5000 or above). A maximum of six semester hours may be transferred into the program subject to the approval of the graduate committee. All courses listed below carry 3 credits, except the thesis ( 6 credits). The specific requirements are:

## Core Courses

All Master's students must take the following seven courses
ECO 6112 Fundamentals of Microeconomic Theory 3 ECO 6204 Fundamentals of Macroeconomic

ECO 7206 Microeconomic Theory 3
ECO 7405 Mathematical Methods in Economic
Analysis I
ECO 7424 Econometric Methods I 3
ECO 7425 Econometric Methods II 3

## Research Requirements: (3-6 credits)

Students must either write a thesis for 6 credits (ECO 6971), or take an advanced course in applied economics (7000-level or approved by the Graduate Director) which involves writing a research paper ( 3 credits).

## Electives: (3-6 credits)

A student must take at least one elective in advanced field in economics. The additional course required to complete the Master's program may be taken in Mathematics, International Studies, Social Work, Criminal Justice, Public

Administration, the College of Business Administration, or in the other college or schools of the University. The graduate director must approve courses taken outside the department. ECP 6705 and ECP 6432 do not count as electives.

## Additional Applied Track Courses

An M.A. student wishing to follow the applied economics track will be required to take, in addition to the three core courses above, a fourth core course:
ECO 6416 Applied Quantitative Methods in Economics

Applied track students must choose their remaining four electives from the following courses:
ECP 6305 Advanced Environmental Economics 3
ECS 5027 Economics of Emerging Nations 3
ECP 5704 International Economic Problems and Policy
ECO 6225 Economics of Asset Markets 3
ECO 7236 Money, Banking and Monetary Policy 3

## Graduation Requirements

To receive the Master's degree in Economics, the student must complete 30 hours of course work with a ' $B$ ' (3.0) average or higher; must receive at least a ' $B$ ' (3.0) in the first four core courses (ECO 6112, ECO 6204, ECO 7115, ECO 7206); and must receive a grade of ' $C$ ' or higher in each course. If the student decides to write a thesis, he/she must receive the grade of 'P'(pass) for ECO 6971.

## Combined BA/MA in Economics

The Bachelor of Arts/Master of Arts (BA/MA) degree in Economics program is designed for outstanding undergraduate students. It provides a strong base of knowledge and skills in economics, and at the same time accelerates completion of the Master of Arts degree. Students may take advantage of the overlap of courses in the BA and MA programs to receive their MA degrees in a shorter period than it would otherwise be possible.

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only $5000-l e v e l$ or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

The BA program in economics requires that students take 9 upper division elective courses. Students in the BA/MA program would take elective courses that would satisfy both the BA and MA requirement.

To apply their GPA needs to be significantly above average (3.25). Students would also be required to maintain a high GPA (3.0) to remain in the program. The
grade requirements for an MA in economics would apply to courses that are counted toward the MA degree.

## Admission Requirements

1. Current enrollment in the Bachelor's degree program in economics at FIU.
2. Completed Calculus I (MAC 2311) and Calculus II (MAC 2312) or equivalents.
3. Current GPA of 3.25 or higher.
4. Three letters of recommendation.
5. Approval of the Graduate Committee.
6. Official GRE scores.

## General Requirements

Meet the requirements of both the BA and the MA degree in economics.

Overlap: Up to 4 courses (12 credits) may be used in satisfying both the Bachelor's and Master's degree requirements in economics.

## Doctor of Philosophy in Economics

The admission requirements to the Ph.D. program in Economics are:

1. Have a Bachelor's Degree from an accredited institution.
2. A minimum GPA of 3.0 for the last two years of undergraduate education and submit official Graduate Record Examination (GRE) scores. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
3. Three letters of recommendation, using the form provided by the Department, from people in a position to judge the applicant's suitability for graduate studies in economics.
4. Receive approval of the departmental graduate committee.
5. Completion of the following courses at the undergraduate level: statistics, two semesters of calculus, and a semester of linear algebra. Unless exempted, the student must take these courses as required, obtaining no graduate credit for them in the program.
The GRE and GPA stated above are minimum requirements. All applications are reviewed by the Graduate Studies Committee, which makes the final admission decisions. Since admission to the program is competitive, the committee's requirements are normally higher than the minimum standards. Meeting the minimum requirements does not guarantee admission.

## Degree Requirements

To obtain the Ph.D. in Economics, students must complete the required course work and fulfill dissertation requirements.

Ph.D. students who have satisfied the requirements for the Master's degree are eligible to receive the Master's degree. Ph.D. students who have satisfied the Master's degree requirements should consult with the Graduate Program Director about the necessary paperwork and
procedure to receive the Master's degree in the course of their Ph.D. studies.

## Coursework Requirements

Students must complete 45 hours ( 15 courses) of graduate level course work. Supervised research, independent study, seminars, and dissertation credit do not count towards this objective.

This required minimum of 15 courses consists of eleven courses in the Core and four field courses.

No credit toward a graduate degree is given for any course in which a grade of ' C ' or less is obtained. A graduate student who receives a grade lower than 'B-' in a course must retake that course; if a retake also results in a grade lower than 'B-', the student will not be permitted to continue in the Ph.D. Program. A graduate student who receives a grade lower than ' $B$-' in more than two courses will not be allowed to stay in the Economics Ph.D. Program.

Students are required to maintain a minimum GPA of 3.0 (of 4) in their coursework.

## Core Courses

ECO 6112 Fundamentals of Microeconomic Theory 3
ECO 7115 Microeconomic Theory I 3
ECO 7116 Microeconomic Theory II 3
$\begin{array}{lll}\text { ECO } 6204 & \text { Fundamentals of Macroeconomic } \\ & \text { Theory } & \end{array}$
ECO 7206 Macroeconomic Theory I 3
ECO 7207 Macroeconomic Theory II 3
ECO 7405 Mathematical Methods in Economic Analysis I
ECO 7424 Econometric Methods I 3
ECO 7425 Econometric Methods II 3
ECO 7426 Econometrics III 3

## Core Study

During the first four semesters, students are required to take courses which include the eleven core courses listed above. Following the second semester, students are required to pass a comprehensive qualifying examination on core theory-the first four core courses listed above. A student who fails twice will not be allowed to remain in the program. A student must receive at least a 'B' (3.0) average in the first four courses in order to participate in the comprehensive core theory qualifying examination.

## Field Study

During the fourth and fifth semesters, students will complete course work in four field courses. Students must write a field paper. The field paper must be completed, presented in a workshop, and accepted by the student's field paper committee by the end of the third year. Students who fail twice their field requirements will not be allowed to continue in that field.

## Dissertation Work

Upon completion of field paper requirement, students will be required to choose a specific area of doctoral research. During this phase, which will normally have a total length of two years, the student will:
a. Conduct research and complete a dissertation
b. Continue taking courses to complete a minimum of 12 credits of Advanced Workshop and 18 credits of dissertation.
C. Attend Advanced Workshops by enrolling in ECO 7925 in the dissertation area and present at least one paper a year on the work in that workshop.
Students will normally be required to be enrolled as fulltime students at the University for at least a year during the dissertation period. Except under abnormal circumstances, the maximum number of years during which a student may do dissertation work is five years.

## Graduation Requirements

To graduate, students must complete all course requirements; fulfill workshop presentation requirements, pass the comprehensive examination and have their field paper accepted, and complete the oral defense and acceptance of the Ph.D. dissertation.

## Combined MPH in Health Policy and Management/Ph.D. in Economics

The Robert Stempel College of Public Health and Social Work and the Department of Economics in the Steven J. Green School of International and Public Affairs offer a new track of a Masters of Public Health, with a specialization in Health Policy and Management, and a Ph.D. in Economics. An M.P.H. with a specialization in Health Policy and Management provides students with grounding in public health, health policy analysis, health economics, and public health leadership. The Ph.D. in Economics extends the training in public health by providing advanced training in economics.

Students are admitted to the M.P.H. and the Ph.D. programs simultaneously. Classes begin in the fall semester in the Robert Stempel College of Public Health and Social Work, concentrating on training in the core areas of public health. Students begin doctoral work in the Department of Economics in the second year. Requirements for the M.P.H. are completed at the end of the second year. Nine credit hours (three courses) in Economics can be applied towards the student's M.P.H. degree. The dissertation topic will be related to health economics or health economics and policy. Students will work with faculty in the Department of Economics and the Department of Health Policy and Management to write the dissertation.

Students will be expected to complete 45 credits for the M.P.H., nine credits of which will be in the Ph.D. program. Students will also be expected to complete 60 credit hours for the Ph.D.

## Required Courses

## First Year

## Fall Semester

PHC 6000
PHC 6065
PHC 6315 Introduction to Environmental Health

## Spring Semester

PHC 6013 Epidemiology II: Observational Design
PHC $6190 \quad$ Biostatistical Methods for Survey
PHC $6102 \quad \begin{aligned} & \text { Research } \\ & \text { Introduction to Public Health Policy and }\end{aligned}$ Management

## Summer Semester

PHC 6410 Health Behavior and Public Health

PHC 6155C
Second Year
Fall Semester

| PHC 6190 | Biostatistical Methods for Survey <br> Research |
| :--- | :--- |
| PHC 5430C | Public Health Economics <br> Public Health Management and <br> Leadership |

## Spring Semester

| PHC 6930C | Integrative Seminar in Public Health |
| :--- | :--- |
| ECO 6112 | Fundamentals of Microeconomic Theory |
| ECO 6204 | Fundamentals of Macroeconomic |
|  | Theory |

Summer Semester
ECO $7405 \quad$ Mathematical Methods in Economic Analysis I
Third Year
Fall Semester
ECO $7115 \quad$ Microeconomic Theory I
ECO 7206 Macroeconomic Theory I
ECO 7424 Econometric Methods I

## Spring Semester

ECO 7207 Macroeconomic Theory II
ECO 7116 Microeconomic Theory II
Summer Semester
ECO $7425 \quad$ Econometric Methods II
Fourth Year
Fall \& Spring Semester
Field Courses
Summer Semester
Dissertation

## Course Descriptions

## Definition of Prefixes

ECO-Economics; ECP-Economic Problems and Policy; ECS-Economic Systems and Development.
F-Fall semester offering; S-Spring semester offering; SS Summer semester offering.

ECO 5206 Economics of Asia (3). Overview of the opportunities and challenges presented by the AsianPacific economies.
ECO 5709 The World Economy (3). Designed to give an overview of the crucial issues in the world economy. The course covers trade, capital, labor, and technology flows; transnational economic organizations; current economic crisis; global economic interdependence; and the nature and characteristics of international economic order. Required for MIB Program. (S)
ECO 5735 Multinational Corporations (3). Economic theory and multinational corporations. Economic effects. Consequences of nationalization. Spread of the multinational form. State-owned multinational corporations. Prerequisite: Permission of the instructor for undergraduates. (S)
ECO 5906 Advanced Individual Study (1-6). Supervised readings, individual tutorial, and preparation of report. Requires consent of faculty supervisor and Department Chairperson. Open to seniors and graduate students.

ECO 5945 Internship (3). Directed individual study which assists the student in using economic analysis in his employment. Prerequisite: Permission of the chair.
ECO 6076 Teaching Economics (1). This course, required of all graduate assistants, is designed to introduce students to the pedagogical and practical aspects of teaching economics. It is coordinated with the Academy for the Art of Teaching.
ECO 6112 Fundamentals of Microeconomic Theory (3). Consumer theory, producer theory and the introduction of uncertainty and dynamics. Market equilibrium and welfare properties of perfect competition and monopoly. Public goods and externalities. Prerequisites: One semester of Calculus and Statistics.
ECO 6204 Fundamentals of Macroeconomic Theory (3). Consumption, investment and growth; equity premium puzzle; taxation and social security; monetary policy rules, currency and inflation; the IS-LM model; real business cycles and models with nominal rigidities. Prerequisites: Calculus and Statistics.
ECO 6225 Economics of Asset Markets (3). Economic analysis of the asset markets; risk, return and intertemporal choice; mean variance analysis; asset pricing models and properties of asset returns; market efficiency and market anomalies. Prerequisites: Calculus or permission of the instructor.
ECO 6416 Applied Quantitative Methods in Economics (3). Types of economic data; the WWW as a tool for data collection; database construction and maintenance; use of statistical software for graphical and descriptive methods; large sample inference for one population mean vector; introduction to economic time series and regression models. Prerequisites: One semester of Calculus and Statistics or permission of the instructor.
ECO 6705 International Trade for Global Governance I (3). Designed for MA students in the Global Governance program, the course provides an introduction to the modern theory and application of the economics of international trade. Prerequisite: ECO 6025.
ECO 6716 International Macroeconomics for Global Governance (3). Designed for MA students in the Global Governance program, the course provides an introduction to the modern theory and applications of international macroeconomics. Prerequisite: ECO 6025.
ECO 6936 Special Topics (3). A course designed to give students a particular topic or a limited number of topics not otherwise offered in the curriculum.
ECO 6938 Individual Graduate Study (3-9). Supervised readings, tutorial, and preparation of report. Open only to graduate students. Requires consent of supervisor and approval of Department Chairperson.
ECO 6939 Advanced Seminar in Applied Economics (3). Variable-topic study group in application of economic analysis to specific problems. Open to seniors and graduate students. (S)
ECO 6971 Thesis (1-6). Writing and completion of thesis by candidate for a Master of Arts. Prerequisites: Student must be a Master's degree candidate, have had at least 15 hours of graduate work in economics; have a thesis
topic approved by the Department's Graduate Committee and permission from the instructor.

ECO 7110 Industrial Organization: Firms (3). Theoretical and empirical analysis of firm organization and development. Topics include entrepreneurship, firm survival and evolution, spinoffs, industrial geography and dynamics. Prerequisites: ECO 6112 (or equivalent), ECO 7405 (or equivalent), and ECO 7424 (or equivalent).
ECO 7115 Microeconomic Theory I (3). Game theory. Analysis of static and dynamic games of complete and incomplete information. Introduction to contracts and mechanism design. Prerequisites: ECO 3101 or equivalent, Calculus I; Calculus II recommended. (F)
ECO 7116 Microeconomic Theory II (3). The General equilibrium and welfare economics. Economics of uncertainty. Economic dynamics including capital accumulation, optimal growth, and dynamic equilibrium. Uncertainty and incomplete markets. Prerequisites: ECO 7115 and ECO 7405. (S)
ECO 7118 Graduate Seminar in Economic Theory (3). Variable-topic graduate study group in theoretical problems. Open only to students with graduate standing.
ECO 7135 Growth, Distribution and Prices (3). Alternative theories of growth, income distribution and prices. Basic growth models; neoclassical capital theory and Cambridge controversies; neo/Marxian, neoKeynesian and other approaches. Prerequisites: ECO 7116, ECO 7207, ECO 7405.

ECO 7136 Classical and Marxian Economic Theory (3). Classical and Marxian theories of value and capital in a mathematical mode. The Transformation Problem. Simple and expanded reproduction. The falling rate of profit and other Marxian crises. Prerequisites: ECO 7115, ECO 7206, ECO 7405, ECO 7116.

ECO 7206 Macroeconomic Theory I (3). Analysis of macroeconomic models of income determination and the price level, microeconomic foundations of macro-behavior, macroeconometric models, and basic open economy macroeconomics. Prerequisites: ECO 3203, ECO 4410, or equivalents; Calculus I; Calculus II recommended. (F)
ECO 7207 Macroeconomic Theory II (3). Alternative approaches to macroeconomic theory. Business cycle theories and theories of growth and income distribution. Prerequisites: ECO 7115, ECO 7206, ECO 7405.
ECO 7216 Monetary Theory and Policy (3). Relationship of money supply and interest rate to economic stabilization. Consideration of federal reserve system, money market, and factors determining money supply and demand. Neo-Keynesian, Chicago, and radical policy views.

ECO 7236 Money, Banking, and Monetary Policy (3). Monetary theory and its application. Consideration of central banking in the U.S. and its relation to the international economy, money markets, and financial intermediaries. Survey of current policy views.

ECO 7305 History of Economic Thought (3). Exploration of the evolution of economic thought and analysis in the changing socio/historical, institutional and political setting in which it takes place. Prerequisite: Permission of the instructor. (S)

ECO 7405 Mathematical Methods in Economic Analysis I (3). Application of mathematical methods to economics. The topics and tools of mathematical economics are presented in a rigorous fashion within an economic context. Prerequisites: Calculus I, ECO 3101 and ECO 3203, or equivalents. (F)
ECO 7406 Mathematical Methods in Economic Analysis II (3). Selected topics in dynamic optimization and related topics, focusing on applications to economic problems and covering modeling in both continuous and discrete time. Prerequisites: ECO 6112, ECO 6204, ECO 7405.

ECO 7408 Industrial Organization: Markets (3). Analysis of the structure, behavior, and performance of industries and markets, and core issues in competition and regulatory policy. Prerequisites: ECO 6112 (or equivalent), ECO 7405 (or equivalent).
ECO 7424 Econometric Methods I (3). Formulation, estimation, evaluation of econometric models. Includes: review probability theory, OLS, properties of estimators, asymptotics, hypothesis tests, violations of classical assumptions, IV. Prerequisites: MAS 3105, ECO 7405. (S)
ECO 7425 Econometric Methods II (3). Builds on ECO 7424. Advanced single equation estimation, numerical estimation, maximum likelihood, GMM, test procedures, non-linear models, systems of equations, and simultaneous equations models. Prerequisite: ECO 7424. (F)

ECO 7426 Econometrics III (3). Continuation of ECO 7425. Topics include multivariate models, times series models, panel data models, test procedures and model selection. Prerequisite: ECO 7425.
ECO 7429 Topics in Econometrics (3). Selected topics in econometrics. Intended to acquaint students with current research in the field. Material covered will vary from year to year with instructor. Prerequisites: ECO 7424 and ECO 7425.

ECO 7505 Public Finance (3). Partial and general equilibrium analysis of tax incidence efficiency, public goods, public pricing problems, the social rate of discount, and non-market decision making.
ECO 7617 Seminar in Economic History (3). Topics in economic history, exploration of the economic history literature on a selected theme, student presentations. Prerequisite: Permission of the instructor for undergraduates.
ECO 7705 International Trade (3). Positive and normative aspects of international trade. Theories of comparative advantage, commercial policy, trade and income distribution. Prerequisites: Advanced Microeconomic Theory; Calculus. (F)
ECO 7716 International Money (3). Theory of international monetary equilibrium. Problems of international payments and exchange rate control; their effect on international monetary problems. Analysis of short and long term monetary flows and macroeconomic adjustment. Prerequisites: Advanced Macroeconomics and Calculus. (S)

ECO 7717 Applied International Economics (3). Empirical international finance and international trade.

Includes national accounts, exchange rates, dynamic stochastic general equilibrium models, variable markups, and gravity type methodologies. Prerequisites: ECO 7115, ECO 7206, ECO 7705, ECO 7716.
ECO 7925 Advanced Workshop (3). Enables students to attend advanced workshop presentations and to present the results of their own research. Prerequisite: Completion of field examination requirements. ( $F, S$ )

ECO 7980 Ph.D. Dissertation (1-12). To be taken every semester for research on, and writing of Ph.D. dissertation by candidates for the Ph.D. Prerequisite: Permission of Major Professor and Doctoral Candidacy.
ECP 5707 International Economic Problems \& Policy (3). International trade and comparative advantage; commercial policy; foreign exchange markets; balance of payments; issues in trade \& development. Prerequisites: ECO 2013 or ECO 3011, and ECO 2023 or ECO 3021.
ECP 6305 Advanced Environmental Economics (3). Economics of environmental pollution; theories of exhaustible and renewable resource extraction; issues in environmental valuation and policies. Prerequisites: ECP 3101 and ECP 3302 or ECP 4314 or permission of the instructor.
ECP 6432 Macroeconomic Forecasting for Management (3). Basic macroeconomics concepts as they apply to decision making within the firm. Traditional models of income determination and forecasting analysis. Prerequisite: ECP 6705. (F,S,SS)
ECP 6605 Urban and Regional Analysis (3). Application of economic analysis to urban growth and the urban/regional environment. Consideration of public services, transportation, ghetto problems, and urban organization. Analysis of environmental protection problems and policies. Recommended preparation: ECO 3101, ECO 3203 and ECP 3303.
ECP 6705 Managerial Economics (3). Basic microeconomic concepts as they apply to decision making within the organization; supply and demand; market structure and market behavior in specific industries. Recommended Preparation: Principles of Microeconomics and Calculus. Prerequisites: ECO 3021 and ECO 3011. (F,S,SS)
ECP 7035 Cost-Benefit Analysis (3). This course covers benefit-cost analysis, cost-effectiveness analysis, benefit risk analysis, risk-risk analysis, and systems analysis. All of these techniques are designed to provide guidance to decision makers, particularly in the government sector. Prerequisite: ECO 3101.
ECP 7205 Labor and Human Resources (3). Empirical and theoretical analysis of the factors determining employment and earnings, recent developments in the theory of labor supply, critiques of neoclassical theory, and current issues in public policy. Prerequisite: Calculus.
ECP 7405 Industrial Organization (3). The organization of the industrial economy with particular emphasis as to the type of competition, the bases of monopoly power and the extent of monopoly power. Prerequisites: Advanced Micro and Calculus.

ECP 7606 Urban and Regional Economics (3). The economics of urbanization processes, internal
organization of cities, and regional settlement. Spatial growth models and spatial development planning. Prerequisites: ECO 7115, ECO 5205, ECS 4013 or equivalent; and ECO 6636. (F)
ECP 7636 Location Theory (3). Systematic exposition of urban and industrial location theory. Spatial price theory and spatial competition. Prerequisites: ECO 3101 or equivalent; Calculus I; Calculus II and ECO 7115 recommended. (S)
ECP 7706 Managerial Economics (3). Analysis of the economic decisions of firm managers, emphasizing the practical application of concepts to economic problem solving by managers, public administrators and other decision makers. Prerequisites: Ph.D. or advanced Masters.

ECS 5005 Comparative Economic Systems (3). A critical evaluation of the design, goals, and achievements of economic policies in capitalist and socialist economies. Prerequisite: Permission of the instructor for undergraduates.
ECS 5025 Economic Planning (3). Analysis of planning methods in capitalist and socialist economies. Evaluation of macro and micro economic planning tools (input-output) and programming techniques. Theory and practice of economic development planning of agriculture, industrialization, foreign trade, and manpower. Prerequisites: Graduate standing or permission of the instructor.
ECS 5027 Economic Development of Emerging Nations (3). Specific economic problems of emerging nations and national groupings. Basic approaches to economic development; major proposals for accelerating development. Role of planning. Trade, aid, and economic integration. (F)
ECS 5406 Latin American Economies (3). Economic theory and its applications to current economic issues of Latin America. Examines aggregate demand and supply, fiscal and monetary policies, international trade trends, and economic development. Taught in Spanish. May not be taken for credit towards a degree in Economics.

ECS 6015 Economic Development for Global Governance I (3). Designed for MA students in the Global Governance program, the course provides training in applied development economics. Prerequisite: ECO 6025.
ECS 6016 Economic Development for Global Governance II (3). Designed for MA students in the Global Governance program, the course provides training in applied development economics. Prerequisites: ECO 6025, ECS 6015.
ECS 6436 The Economics of Caribbean Migration (3). The course examines the economic causes and consequences of Caribbean immigration to the United States. Special emphasis on the effects of Caribbean migration on the United States economy.
ECS 7015 Development Economics: Theory (3). Analytical approaches to economic development. Analysis of macro models, specific resources and sectors, and trade and income distributional problems in relation to developing countries. Prerequisites: ECO 7115 and ECO 7116 or equivalents. (F)

ECS 7026 Development Economics: Planning and Policy (3). Planning and policy making in developing economies. Economy/wide planning models; project appraisal; financial, stabilization and trade policies. Prerequisites: ECO 7115, ECO 7116, and ECO 7405. (S)

ECS 7405 Economics of Latin America (3). Dependence, population explosion, urban migration, agricultural reform, industrialization and import substitution, common markets. Prerequisite: Permission of the instructor for undergraduates.

ECS 7435 Economics of the Caribbean (3). Macroeconomic assessment; income distribution, employment and migration; industrial and agricultural development; international trade, multinational and integration attempts. Prerequisite: Permission of the instructor.

ECS 7445 Economics of Central America (3). Recent economic events in the region dealing with institutional background and structure of current economic activities. Special emphasis on problems of growth, social transformation and economic integration. Prerequisite: Permission of the instructor. (F)

# Global and Sociocultural Studies 

Roderick P. Neumann, Professor and Chair
Juliet S. Erazo, Associate Professor and Associate Chair
Aslihan Akkaya, Lecturer
Young Rae Choi, Assistant Professor
Peter R. Craumer, Associate Professor
Jorge Duany, Professor and Director, Cuban Research Institute
Chris S. Girard, Associate Professor
Hugh Gladwin, Associate Professor
Ricardo M. Gonzalez, Senior Lecturer
Guillermo J. Grenier, Professor
Percy C. Hintzen, Professor
Gail M. Hollander, Associate Professor
A. Douglas Kincaid, Associate Professor

Abraham D. Lavender, Professor
Katherine A. Lineberger, Lecturer and Director, Undergraduate Program
Shearon A. Lowery, Associate Professor
Sarah J. Mahler, Associate Professor
Mathew Marr, Associate Professor
Jeffery A. Onsted, Associate Professor
Ulrich Oslender, Associate Professor
Mark B. Padilla, Associate Professor
Vrushali B. Patil, Associate Professor
Marifeli Perez-Stable, Professor
Andrea J. Queeley, Assistant Professor
Jean M. Rahier, Professor
Jason Ritchie, Assistant Professor
Derrick Scott, Lecturer
Benjamin N. Smith, Associate Professor and Director, Graduate Program
Richard S. Tardanico, Associate Professor
Nelson Varas-Dias, Professor
Dennis W. Wiedman, Clinical Associate Professor

## Faculty Emeriti

Janet M. Chernela, Professor Emerita
Ralph S. Clem, Professor Emeritus
Stephen M. Fjellman, Professor Emeritus
Barry B. Levine, Professor Emeritus
Anthony P. Maingot, Professor Emeritus
Betty Hearn Morrow, Professor Emerita
Alex Stepick III, Professor Emeritus
William T. Vickers, Professor Emeritus
The Department of Global and Sociocultural Studies - a core department in FIU's Steven J. Green School of International and Public Affairs - provides a unique opportunity to integrate the disciplinary approaches of anthropology, geography, and sociology with crossdisciplinary theorizing and research. The department's research and teaching revolve around three overlapping themes: identities and inequalities; migrations and diasporas; and nature-society. Utilizing comparative, transnational, diasporic, and global perspectives, the department's faculty and graduate students pursue these themes through a variety of qualitative, quantitative, and applied research methods.

The department's research and teaching themes reflect FIU's location in one of the world's most dynamic regions: the greater metropolitan area of Miami - a hemispheric crossroads of sociocultural, political, economic, and
environmental forces, bridging the United States with the Caribbean and Latin America, the Atlantic region, and the world at large. In this setting, the department's inclusion within the Green School of International and Public Affairs affords students a wealth of research and associated opportunities through FIU's Kimberly Green Latin American and Caribbean Center; Program in African and African Diaspora Studies; Institute for Asian Studies; European Union Center; and Center for Labor Research and Studies, to name a few. The department maintains close relationships with its partner departments within the Green School of International and Public Affairs: Politics and International Relations, Public Administration, and Criminal Justice. Joint faculty appointments and researchteaching collaborations link the department with the Department of Earth and Environment and the Women's Studies Center. The department also maintains close ties with the Department of History.

The graduate program in Global and Sociocultural Studies provides advanced training for myriad careers in higher education and in the government, non-profit, and corporate sectors.

## Admission Process \& Requirements

1. Application forms and fees:
a) University Graduate School: http://gradschool.fiu.edu
b) In the left-hand column please click on "Graduate Admissions."
2. Please send to the University Graduate School:
a) Official transcripts from previous undergraduate and graduate programs. The minimum requirements are a cumulative grade point average of 3.2 in undergraduate courses and a cumulative grade point average of 3.5 in any prior graduate courses.
b) Official GRE verbal and quantitative scores, sent directly by the Educational Testing Service.
c) International graduate student applicants whose native language is not English: TOEFL or IELTS scores, sent directly by the Educational Testing Service. The minimum requirement is a total score 80 on the iBT TOEFL (equivalent to 550 on the paper-based version, or 213 on the computer-based version of TOEFL) or a total score of 6.5 on IELTS.
3. Please send the following to the Department of Global and Sociocultural Studies (c/o Graduate Program Secretary, SIPA 340, Modesto Maidique Campus, Florida International University, Miami, FL 33199):
a) Statement of purpose (maximum of two singlespaced pages): describing your research interests; reasons for seeking an M.A.; career goals; academic and relevant non-academic accomplishments and experience; reasons for applying to our program; the names of departmental (and, if applicable, other) faculty members with whom you wish to study.
b) One or more writing samples: course papers, thesis chapters, or other examples of writing and analytical abilities.
c) Unofficial (such as photocopied) copies of the academic transcripts, GRE scores, and TOEFL or IELTS scores.
4. Please have forwarded to the Department (at the above address) three letters of reference that comment on your potential for success in graduate studies and beyond.
5. Application Deadline: Students are admitted to begin the program in the fall semester only. The application deadline is February 1.

## Financial Aid

Applicants to FIU may qualify for one of several different opportunities to finance their studies:

1. FIU's Presidential Fellowship for outstanding applicants (see http://www.fiu.edu/~ugs/financial.html)
2. Departmental Teaching Assistantships (TAs). Teaching assistantships are allocated on a competitive basis and include a 12-month stipend, tuition waiver, and medical insurance. To be considered for an assistantship, the applicant must make such a request in writing to the Graduate Program Director prior to April 1. The awarding of teaching assistantships will be made by the Graduate Program Committee. Students receiving an assistantship are required to perform approximately 20 hours of teaching related duties per week during the 12 -month appointment. TA positions are renewable on a competitive basis by annual application.
3. There are innumerable additional sources of funding for graduate students best researched by applicants. A good start is the UGS website at http://www.fiu.edu/~ugs/financial.html.
4. Graduate students are routinely employed as research assistants (RA) on faculty grants. Students in their second or later years are particularly encouraged to seek RA positions to enhance their research skills and career options. The hiring of research assistants is at the discretion of the project's principal investigators. While these arrangements vary, they usually cover the student's tuition and provide a stipend.

## Transfer of Credits

Credits may be transferred in accordance with the FIU Graduate Policies and Procedures Manual (consult http://www.fiu.edu/~ugs/gpm). While a student may transfer credits into the program, the substitution of transferred credits for specific core and substantive area requirements is not generally allowed. A student seeking to transfer credits must submit a written petition to the Graduate Program Director detailing the courses and hours of credit s/he is seeking to transfer. In addition, students requesting substitution of transferred credits for program requirements must include supporting documentation as part of the petition. The screening and initial decision regarding transferring of credit and substitution will be made by the Graduate Program Director and the Graduate Program Committee. Final approval will be made by the University Graduate School.

## Master of Arts in Global and Sociocultural Studies (36 credits)

The M.A. program includes common core requirements but does not include disciplinary major track requirements.

To remain in good academic standing and to qualify for graduation, students must maintain a minimum GPA of 3.0 and must receive a minimum grade of " $B$ " in each common core required course.

## Common Core Requirements ( 15 credits)

The core curriculum includes six required courses (this is the same core for the Ph.D. degree):

| SYA 6127 | Theory and Inquiry | 3 |
| :---: | :---: | :---: |
| ISS 6305 | Research Methods and Design | 3 |
| SYA 6959 | Writing Research Proposals | 3 |
| At least one theory course from the following: |  |  |
| ANG 6083 | Theory in Anthropology | 3 |
| GEO 6118 | Theory in Geography | 3 |
| SYA 6018 | Theory in Sociology | 3 |
| At least one methods course from the following*: |  |  |
| ANG 6497 | Qualitative Research Methods | 3 |
| ANT XXXX | Qualitative Data Analysis | 3 |
| SYA 6356 | GIS and Social Research | 3 |
| SYA 6452 | Advanced Topics in GIS and Social Research | 3 |
| SYA 6305 | Research Methods I | 3 |
| SYA 6306 | Research Methods II | 3 |
| Or anot | ed methods course. |  |

## Electives (21 credits)

Seven elective courses*
*Includes a maximum of one directed studies course (3 credits) and two courses (6 credits) taken in other departments, as approved by the graduate director.

## Doctor of Philosophy in Global and Sociocultural Studies

The Ph.D. in Global and Sociocultural Studies is an innovative interdisciplinary degree which combines the theories and practices of three key social science disciplines; geography, sociocultural anthropology, and sociology. All students receive interdisciplinary training and the opportunity to focus their coursework and dissertation research in one of the three disciplines. Of the minimum 75 semester hours required for the doctoral degree, 12 comprise the interdisciplinary core, 33 the major discipline, and 30 the electives inside and outside the Department of Global and Sociocultural Studies.

## Admissions

Applicants are reviewed only in the spring term for fall admission. Admissions to the Ph.D. program are competitive. Meeting minimum requirements does not guarantee admission. See the Admissions Process \& Requirements for the GSS Graduate Program for full details. Students who originally applied to the M.A. program must apply separately to be admitted into the Ph.D. program. A positive evaluation of the student's performance at the M.A. level (hereafter called the M.A. review) will be the most important of the factors considered in evaluating applications to the Ph.D. program. All students, including those who originally applied directly to the Ph.D. program, must undergo a successful M.A. review upon completion of the Masters Program requirements in order to continue toward the Ph.D. The Graduate Committee conducts these reviews. The purpose of the M.A. review is to determine the ability of the student to do Ph.D. level work with the department's
faculty. Among the information considered during the review are students' performance and grades in courses and faculty recommendations.

Students who have obtained a Masters degree at another institution may be admitted directly into the Ph.D. program, but first must undergo the equivalent of the M.A. review.

## The Ph.D. Degree Requirements

The Ph.D. program consists of 75 semester hours of course work (including the 36 hours a student may have earned in the Department's M.A. program). Students acquire competencies in theory, methods and proposal writing during the first two years of the Ph.D. program by successfully completing a common interdisciplinary core curriculum of 12 hours of coursework.

In addition to the common core curriculum, each Ph.D. program student declares a major in Geography, Sociocultural Anthropology, or Sociology. Each major consists of the corresponding disciplinary theory course; one additional theory course from the other departmental disciplines; one approved methods course; a minimum of two discipline-based seminars; and a dissertation supervised by a faculty member from the department. A student may declare only one major. As students progress through the program, they increasingly pursue their own research interests by taking elective courses across the disciplines and by working with their committee to prepare a doctoral dissertation. A student takes a minimum of 30 hours of electives.

A grade of " $B$ " or higher must be earned in all courses and a cumulative average of 3.0 or higher must be maintained. Students may apply to transfer a maximum of 6 graduate credit hours earned in another program or institution. An exception is made for courses contained within an earned master's or doctoral degree.

After completing the common core curriculum and the major's course requirements, and while continuing to take electives, a student typically takes the Ph.D. General Exam at the end of the third year of study. A student then takes the Dissertation Proposal and Defense/Candidacy Exam, prepares a dissertation under the guidance of a faculty committee, and defends the dissertation before the committee and the University community.

## Core Courses ( $\mathbf{1 2}$ credits)

SYA 6127 Theory and Inquiry 3
ISS 6305 Research Methods and Design 3
SYA $6959 \quad 3$
ISS 6317 Social Research Quantitative Methods I 3
Majors' Requirements (33)
Geography Major
GEO 6118 Theory in Geography
One additional theory course taught within the department: SYA 6018 Theory in Sociology 3
or
ANG 6083 Theory in Anthropology 3
One additional methods course taught within the Department, for which GIS may be used. (3 credits) Choose from:
ANG 6480 Ethnohistorical Research Methods 3
ANG 6497 Qualitative Research Methods 3
GIS 5038 Remote Sensing 3

| GIS 5935 | Topics in Geographic Information <br> Systems | 3 |
| :--- | :--- | ---: |
| SYA 5357 | Graduate GIS and Latin American <br> Societies | 3 |
| SYA 6317 | Social Research Quantitative Methods II3 <br> SYA 6356 | GIS and Social Research |
| SYA 6452 | Advanced Topics in GIS and Social <br> Research | 3 |

## Geography course electives (6 minimum)

At least 2 seminars drawn from the following list.
GEA $6409 \quad$ Landscapes of Violence and Healing in
GEO $5415 \quad$ Topics in Social Geography (may be 3
repeated for credit) 3
GEO 5557 Globalization 3
GEO 6473 Space, Place and Identity 3
GEO 6478 Critical Geopolitics 3
GEO $6603 \begin{array}{ll}\text { Cities and Regions in Global } \\ & \text { Perspective }\end{array}$
GEO 5906 Directed Individual Studies 3
GIS 5038 Remote Sensing 3
$\begin{array}{ll}\text { GIS } 5620 & \begin{array}{l}\text { Surveillance, Intelligence, and } \\ \text { International Relations }\end{array} \\ \end{array}$
$\begin{array}{ll}\text { GIS } 5935 & \begin{array}{l}\text { Topics in Geographic Information } \\ \text { Systems }\end{array}\end{array}$
Exam Prep (6 maximum)
GEO 7964 Preparation: Preliminary Doctoral Exam 6
Dissertation ( 15 minimum)
GEO $7980 \quad 15$
Sociocultural Anthropology Major
ANG 6083 Theory in Anthropology 3
One additional theory course taught within the department:
SYA $6018 \quad$ Theory in Sociology 3
or
GEO 6118 Theory in Geography 3
One additional methods course taught within the Department, for which GIS may be used. (3 credits) Choose from:
ANG 6480 Ethnohistorical Research Methods 3
ANG 6497 Qualitative Research Methods 3
GIS 5038 Remote Sensing 3
$\begin{array}{ll}\text { GIS } 5935 & \text { Topics in Geographic Information } \\ & \text { Systems }\end{array}$
SYA $5357 \quad \begin{aligned} & \text { Graduate GIS and Latin American } \\ & \text { Societies }\end{aligned}$
SYA 6317 Social Research Quantitative Methods II 3
SYA 6356 GIS and Social Research 3
SYA 6452 Advanced Topics in GIS and Social Research

Anthropology course electives ( 6 minimum)
At least 2 seminars drawn from the following list.
ANG 5267 Environmental Anthropology
ANG 5396 Representations of Africa and Africans in Films
ANG 5397 Advanced African Diaspora Cultures
ANG 6303 and Performativity 3
ANG 6339 Seminar on Latin America 3
ANG 6472 Anthropology of Globalization 3
ANG 6497 Qualitative Research Methods 3
$\begin{array}{lll}\text { ANT } 6302 & \begin{array}{l}\text { Gender Identity in Comparative } \\ \text { Perspective }\end{array}\end{array}$

| ANT 6319 | The African Diaspora: Anthropological Perspectives |
| :---: | :---: |
| ANT 6469 | Graduate Medical Anthropology |
| ANT 7491 | Contemporary Theory in Social Anthropology |
| Exam Prep (6 maximum) |  |
| ANG 7964 | Preparation: Preliminary Doctoral Exam |
| Dissertation (15 minimum) |  |
| ANG 7980 | Ph.D. Dissertation |

## Sociology Major

SYA 6018 Sociocultural Theories A
One additional theory course taught within the department:
ANG 6083 Theory in Anthropology
3
or
GEO 6118 Theory in Geography 3
One additional methods course taught within the Department, for which GIS may be used. (3 credits) Choose from:
ANG 6480 Ethnohistorical Research Methods 3
ANG 6497 Qualitative Research Methods 3
GIS 5038 Remote Sensing 3
GIS $5935 \quad \begin{array}{ll}\text { Topics in Geographic Information } \\ & \text { Systems }\end{array}$
$\begin{array}{ll}\text { SYA } 5357 & \begin{array}{l}\text { Graduate GIS and Latin American } \\ \text { Societies }\end{array}\end{array}$
SYA 6317 Social Research Quantitative Methods II3
SYA 6356 GIS and Social Research 3
SYA 6452 Advanced Topics in GIS and Social Research

Sociology course electives ( 6 minimum)
At least 2 seminars drawn from the following list.
SYA $7205 \quad$ Foundations of Social Theory Construction
SYA $5135 \quad$ Sociology of Knowledge 3
$\begin{array}{ll}\text { SYA } 6657 & \text { Evaluation of Organizations and } \\ & \text { Programs }\end{array}$
SYA 6941 Internship in Applied Sociology 1-9
$\begin{array}{ll}\text { SYA } 5357 & \text { Graduate GIS and Latin American } \\ & \text { Societies }\end{array}$
SYA 6943 South Florida Area Study 3
SYA $7930 \quad$ Special Topic in Comparative
SYA 7941
SYG 6932
SYD 5045
Field Research

SYD 504
Special Topics in Disaster Studies 3
Population and Society 3
Advanced World Jewish Communities 3
$\begin{array}{ll}\text { SYD } 5708 & \text { Advanced Race, Gender, Sexuality: } \\ & \text { Entanglements Across Time and Space } 3\end{array}$
$\begin{array}{ll}\text { SYD } 5708 & \text { Advanced Race, Gender, Sexuality: } \\ & \text { Entanglements Across Time and Space } 3\end{array}$
SYD 6236 International Migration and Refugees 3
SYD 6325 Seminar in the Comparative Sociology of Gender

3
SYD 6418 Graduate Seminar in Urban Sociology 3
SYD 6427 Seminar in Comparative Urban Issues 3
SYD 6615 Seminar in Comparative Analysis of Selected Regions

3
SYD 6625
South Florida Socio-cultural Systems 3
SYD 6626
SYD 6655
SYD 6796
SYD 6816
Seminar on Social Change in Asia 3
Sex, Race, and Power in Colonial Times3
Advanced Sociological Theories of Gender

3
SYO 6306

Political Sociology

## M.A. in African and African Diaspora Studies/Ph.D. in Global and Sociocultural Studies Combined Degree Program

The combined African \& African Diaspora Studies MA/Global \& Sociocultural Studies PhD program allows qualified graduate students to pursue both degrees at the same time. Students can develop an expertise in African \& African Diaspora Studies while progressing toward a PhD in one of the three majors in the Global and Sociocultural Studies PhD: geography, sociology, or anthropology.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the internetbased TOEFL (equivalent to 550 on the paper-based version) or a 6.5 overall on the IELTS is required.

## Admission Procedure

To be accepted into this program, students must submit an application to the PhD in Global and Sociocultural Studies with a sub-plan for a MA in African \& African Diaspora Studies. This designation will appear in the menu of programs in the graduate application. To be accepted into this program, students must submit an application by January 1 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

The following must be submitted as part of the on-line application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable;
5. Statement of purpose explaining his/her interest for enrolling in both the AADS MA program and in the PhD program in GSS. The statement of purpose must clearly address the applicant's academic and professional objectives for enrolling in both fields of inquiry. The statement of purpose must also indicate the intended major (anthropology, geography, or sociology) the applicant plans to select while engaged in the PhD in GSS;
6. Three letters of recommendation from university professors who are able to comment on the various aspects of the student's academic ability;
7. A curriculum vitae; and
8. Writing samples and other relevant professional work that may support their applications.

## Degree Requirements for M.A. in African and African Diaspora Studies

The 36 credits earned for the M.A. in AADS will count toward the 75 credits required for the Ph.D. in GSS.

## MA in AADS Core ( 6 credits)

AFA $5005 \quad$ African \& African Diaspora Studies Theory (Fall Yr1)
AFA $6920 \quad$ African \& African Diaspora Studies Graduate Colloquium (3 credits)

## Methods (12 credits)

SYA $6127 \quad$ Theory and Inquiry (Fall Yr 1)
ISS 6317 Social Research Quantitative Methods (Fall Yr 2)
ISS 6305 Research Design and Methods (Spring Yr 1)
SYA $6959 \quad$ Writing Research Proposals

## Electives (18 credits)

- 12 credits of elective courses with a clear AADS focus from within the Department of Global and Sociocultural Studies
- 6 credits of elective Courses from outside that Department and within the Green School and/or the College of Arts \& Sciences (see the AADS Humanities and Social Sciences lists of graduate courses).

Note: students are advised to take at least 9 of these elective credits in their chosen major discipline for GSS (anthropology, geography, or sociology).

## MA in AADS Research Proposal option

To graduate from the MA in AADS, students enrolled in this combined MA/PhD program must elect the research proposal option and take the proposal writing course SYA 6959 Writing Research Proposals.

## MA in AADS Language Requirement

Students must demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests.

## Application for Graduation from MA in AADS

Students should apply for graduation for the MA in AADS as soon as they have completed all requirements for the degree - including the exit option. Ordinarily, the MA will be conferred before the student advances to candidacy for the PhD in History.

## Matriculation to PhD in GSS

All students must undergo a successful M.A. review upon completion of the AADS Masters Program requirements in order to continue toward the Ph.D. in GSS. The GSS Graduate Committee, along with an appointee from AADS, conducts these reviews. The purpose of the M.A. review is to determine the ability of the student to do Ph.D. level work with the department's faculty. Among the information considered during the review are students' performances and grades in courses, and faculty recommendations.

## Degree Requirements for Ph.D. in Global and Sociocultural Studies

The doctorate in Global and Sociocultural Studies requires a minimum of 75 credits beyond the baccalaureate including a dissertation based on original research. 36 credits of the MA in AADS will count toward the 75-credit minimum. Thus, a minimum of 39 credits must be earned beyond the MA.

## Major Courses (33 credits)

All doctoral students will choose a major in Anthropology, Geography, or Sociology. The following distribution of coursework is required.
a). Major theory (3)
b). Major methods (3)
c). Major course electives (6 minimum)
d). Exam and dissertation credits and GSS and non-GSS Department electives

- Doctoral Exam Preparation (6 maximum)
- Doctoral Dissertation (15 minimum)


## General Electives ( 6 credits)

GSS and non-GSS Department electives

## Ph.D. General Examination

After successfully completing the common core requirements, the major's course requirements, and electives, a student prepares for the Ph.D. General Exam by enrolling in a maximum of six credits of exam preparation for their major. In preparation for the exam, a student forms a dissertation committee according to the regulations published on the University Graduate School web page (http://gradschool.fiu.edu). The Ph.D. General Exam addresses the student's anticipated dissertation topic, and is conducted according to the University Graduate School Policies and Procedures Manual and the Department's Ph.D. General Exam guidelines.

## The Dissertation Proposal and Defense/Candidacy Exam

After passing the Ph.D. General Exam, a student works under the guidance of the dissertation committee to prepare a dissertation proposal and defend it orally before the committee. The chair of the dissertation committee must hold Dissertation Advisor Status from the University Graduate School. The proposal defense serves as the doctoral candidacy exam for the Ph.D. program in Global and Sociocultural Studies. Upon passing the proposal defense, a student is admitted to candidacy status.

## The Dissertation and Dissertation Defense

After successfully defending a dissertation proposal, a student conducts the proposed research and completes a dissertation under the guidance of a dissertation committee. Only after successfully defending the dissertation proposal may a student register for dissertation hours (ANG 7980, GEO 7980, or SYA 7980). The Ph.D. program requires a student to be continuously enrolled in a minimum of 3 hours of Doctoral Dissertation each semester from the time of advancement to candidacy until completion of the dissertation, including summers. Upon completion of the dissertation manuscript and authorization by the committee, a student defends the dissertation before the committee and the University
community. The University Graduate School's regulations governing the dissertation are described at http://gradschool.fiu.edu.

## M.A. in Asian Studies/Ph.D. in Global and Sociocultural Studies Combined Degree Program

The combined Asian Studies MA/Global \& Sociocultural Studies PhD program allows qualified graduate students to pursue both degrees at the same time. Students can develop an expertise in Asian Studies while progressing towards a PhD in one of the three majors in the Global and Sociocultural Studies PhD: geography, sociology, or anthropology.

## Admission Requirements

Applicants must meet the following minimum requirements of Global and Sociocultural Studies to be considered for admission:

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.5 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the internetbased TOEFL (equivalent to 550 on the paper-based version) or a 6.5 overall on the IELTS is required.

## Admission Procedure

To be accepted into this program, students must submit an application to the PhD in Global and Sociocultural Studies with a sub-plan for a MA in Asian Studies. This designation will appear in the menu of programs in the graduate application. To be accepted into this program, students must submit an application by February 15 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

The following must be submitted as part of the online application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable;
5. Statement of purpose explaining his/her interest for enrolling in both the AS MA program and in the Ph.D. program in GSS. The statement of purpose must clearly address the applicant's academic and professional objectives for enrolling in both fields of inquiry. The statement of purpose must also indicate the intended major (international political economy or Asian cultural studies for the AS MA ,and anthropology, geography, or sociology for Ph.D. in GSS) the applicant plans to select while engaged in the Ph.D. in GSS;
6. Three letters of recommendation from university professors who are able to comment on the various aspects of the student's academic ability;
7. A curriculum vitae or resume; and
8. Writing samples and other relevant professional work that may support their applications.

## Degree Requirements for M.A. in Asian Studies

(30 credits Thesis Option/33 credits Non-Thesis Option) Up to 33 credits earned for the M.A. in AS will count towards the 75 credits required for the Ph.D. in GSS.
Core ( 6 credits)
$\begin{array}{ll}\text { ASN } 5050 & \text { Methods in Asian Studies } \\ \text { ASN } 5315 & \text { Topics in Modern Asia }\end{array}$
Advanced Research: (3 credits)
Choose one of the following in the first year of graduate study:
ASN 5213 Asian Studies Colloquium
ASN 5910 Independent Research in Asian Studies
ASN $6930 \quad$ Seminar in Asian Studies
ASN 6940 Internship in Asian Studies
Courses required for GSS Track ( 12 credits)
ISS 6305 Research Design and Methods
SYA $6127 \quad$ Theory and Inquiry
ISS 6317 Social Research Quantitative Methods
SYA $6959 \quad$ Writing Research Proposals
Asian Studies Courses (6 credits)
6 credits Asia-specific courses pertaining to main concentration (from courses listed below)

- SYD 6418 Urban Sociology in Global Perspective
- SYD 6655 Seminar on Social Change in Asia
- SYD 6901 Japanese Society in Global Perspective
- SYD XXXX State and Society in China


## Language Requirement

Depending on the research topic students may be required to demonstrate language competency by the Asian Studies Graduate Committee.
MAAS Exit Options, Thesis or Non-Thesis
Thesis Exit Option (3 credits):
ASN 6972 Thesis
Non-Thesis Exit Option (6 credits):
Master's Essay (3 credits) and one additional Asia-specific course (3 credits)

## Application for Graduation from MA in AS

Students should apply for graduation for the MA in AS as soon as they have completed all requirements for the degree - including the exit option.

## Matriculation to Ph.D. in GSS

All students must undergo a successful M.A. review upon completion of the AS Master's Program requirements in order to continue toward the Ph.D. in GSS. The GSS Graduate Committee, along with an appointee from AS, conducts these reviews. The purpose of the M.A. review is to determine the ability of the student to do Ph.D. level work with the department's faculty. Among the information considered during the review are student's performances and grades in courses, and faculty recommendations.

## Degree Requirements for Ph.D. in Global and Sociocultural Studies

The doctorate in Global and Sociocultural Studies requires a minimum of 75 credits beyond the baccalaureate including a dissertation based on original research, up to 33 credits of the M.A. in AS will count toward the 75-credit minimum. Thus, a minimum of 42 credits must be earned beyond the M.A.

## Major Courses (36 credits)

All doctoral students will choose a major in Anthropology, Geography, or Sociology. The following distribution of coursework is required:
a) Major theory methods (3)
b) Major methods (3)
c) Major course electives (9 minimum)

- Doctoral Exam Preparation (6 maximum)
- Doctoral Dissertation (15 minimum)


## General Electives (6 credits)

GSS and non-GSS Department electives

## Ph.D. General Examination

After successfully completing the common core requirements, the major's course requirements, and electives, a student prepares for the Ph.D. General Exam by enrolling in a maximum of six credits of exam preparation for their major. In preparation for the exam, a student forms a dissertation committee according to the regulations published on the University Graduate School web page (http://gradschool.fiu.edu). The Ph.D. General Exam addresses the student's anticipated dissertation topic, and is conducted according to the University Graduate School Policies and Procedures Manual and the Department's Ph.D. General Exam guidelines.

## The Dissertation Proposal and Defense/Candidacy Exam

After passing the Ph.D. General Exam, a student works under the guidance of the dissertation committee to prepare a dissertation proposal and defend it orally before the committee. The chair of the dissertation committee must hold Dissertation Advisor Status from the University Graduate School. The proposal defense serves as the doctoral candidacy exam for the Ph.D. program in Global and Sociocultural Studies. Upon passing the proposal defense, a student is admitted to candidacy status.

## The Dissertation and Dissertation Defense

After successfully defending a dissertation proposal, a student conducts the proposed research and completes a dissertation under the guidance of a dissertation committee. Only after successfully defending the dissertation proposal may a student register for dissertation hours (ANG 7980, GEO 7980, or SYA 7980). The Ph.D. program requires a student to be continuously enrolled in a minimum of 3 hours of Doctoral Dissertation each semester from the time of advancement to candidacy until completion of the dissertation, including summers. Upon completion of the dissertation manuscript and authorization by the committee, a student defends the dissertation before the committee and the University community. The University Graduate School's regulations governing the dissertation are described at http://gradschool.fiu.edu.

## M.A. in Latin American and Caribbean Studies/Ph.D. in Global and Sociocultural Studies Combined Degree Program

The combined Latin American and Caribbean Studies M.A. (MALACS)/Global \& Sociocultural Studies Ph.D. program allows qualified graduate students to pursue both degrees at the same time. Students can develop an expertise in Latin American and Caribbean Studies while progressing towards a Ph.D. in one of the three majors in the Global and Sociocultural Studies Ph.D.: geography, sociology, or anthropology.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the internetbased TOEFL (equivalent to 550 on the paper-based version) or a 6.5 overall on the IELTS is required.

## Admission Procedures

To be accepted into this program, students must submit an application to the Ph.D. in Global and Sociocultural Studies with a sub-plan for a M.A. in Latin American and Caribbean Studies. This designation will appear in the menu of programs in the graduate application. To be accepted into this program, students must submit an application by March 1 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

The following must be submitted as part of the on-line application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable.
5. Statement of purpose explaining his/her interest for enrolling in both the MALACS program and in the Ph.D. program in GSS. The statement of purpose must clearly address the applicant's academic and professional objectives for enrolling in both fields of inquiry. The statement of purpose must also indicate the intended major (anthropology, geography, or sociology) the applicant plans to select while engaged in the Ph.D. in GSS;
6. Three letters of recommendation from university professors who are able to comment on the various aspects of the student's academic ability;
7. A curriculum vitae; and
8. Writing samples and other relevant professional work that may support their applications.

## Degree Requirements for M.A. in Latin American and Caribbean Studies

The 36 credits earned for the M.A. in LACC (MALACS) will count towards the 75 credits required for the Ph.D. in GSS.
MALACS Core ( 9 credits)

| LAS 6003 | Survey of Latin America |
| :--- | :--- |
| LAS 6934 | Research Seminar |
| ISS 6305 | Research Methods and Design |
| or |  |
| ISS 6317 | Social Research Quantitative Methods I |
| Courses Required for GSS Track (9 credits) |  |
| SYA 6127 | Theory and Inquiry |
| ISS 6305 | Research Methods and Design |
| or |  |
| ISS 6317 | Social Research Quantitative Methods I |
| SYA 6959 | Writing Research Proposals |
| Electives (12 credits) |  |

- 6 credits of elective courses with a clear MALACS focus from within the Department of Global and Sociocultural Studies
- 6 credits of elective Courses from outside that Department and within the Green School and/or the College of Arts \& Sciences (see the MALACS Humanities and Social Sciences lists of approved graduate courses).


## MALACS Research Proposal

To graduate from the MALACS program, students enrolled in this combined M.A./Ph.D. program must elect the research proposal option and take the proposal writing course SYA 6959 Writing Research Proposals during the semester prior to enrolling in the required exit options in the MALACS program.

## MALACS Exit Options ( 6 credits)

Students may choose any of the exit options offered by the MALACS degree.
LAS 6790 Thesis (minimum 6 credits) See the MALACS program description for more information. The thesis is publically defended and approved by a committee of three graduate faculty members;
LAS 6905 (6 credits) Preparation of two directed research papers. Both papers require an oral presentation, defense and approval by a committee of three graduate faculty members;
LAS 6942 Internship and major research paper ( 6 credits). Supervised internship leading to a major research paper based upon the student's work during the internship. The research paper requires an oral presentation and approval by a committee of three graduate faculty members.

## MALACS Language Requirement

Students must demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests.

## Application for Graduation from MALACS program

Students should apply for graduation for the MALACS degree as soon as they have completed all requirements for the degree - including the exit option. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in GSS.

## Matriculation to Ph.D. in GSS

All students must undergo a successful M.A. review upon completion of the MALACS Program requirements in order to continue toward the Ph.D. in GSS. The GSS Graduate Committee, along with an appointee from LACC, conducts these reviews. The purpose of the M.A. review is to determine the ability of the student to do Ph.D. level work with the department's faculty. Among the information considered during the review are a student's overall performance, grades in courses, and faculty recommendations.

## Degree Requirements for Ph.D. in Global and Sociocultural Studies

The doctorate in Global and Sociocultural Studies requires a minimum of 75 credits beyond the baccalaureate including a dissertation based on original research. 36 credits of the MALACS program will count toward the 75credit minimum. Thus, a minimum of 39 credits must be earned beyond the M.A.

## Major Courses (33 credits)

All doctoral students will choose a major in Anthropology, Geography, or Sociology. The following distribution of coursework is required.
(a) Major theory (3)
(b) Major methods (3)
(c) Major course electives (6 minimum)
(d) Exam and dissertation credits and GSS and non-GSS Department electives

- Doctoral Exam Preparation (6 maximum)
- Doctoral Dissertation (15 minimum)


## General Electives (6 credits)

GSS and non-GSS Department electives

## Ph.D. General Examination

After successfully completing the common core requirements, the major's course requirements, and electives, a student prepares for the Ph.D. General Exam by enrolling in a maximum of six credits of exam preparation for their major. In preparation for the exam, a student forms a dissertation committee according to the regulations published on the University Graduate School web page (http://gradschool.fiu.edu). The Ph.D. General Exam addresses the student's anticipated dissertation topic, and is conducted according to the University Graduate School Policies and Procedures Manual and the Department's Ph.D. General Exam guidelines.

## The Dissertation Proposal and Defense/Candidacy Exam

After passing the Ph.D. General Exam, a student works under the guidance of the dissertation committee to prepare a dissertation proposal and defend it orally before the committee. The chair of the dissertation committee must hold Dissertation Advisor Status from the University

Graduate School. The proposal defense serves as the doctoral candidacy exam for the Ph.D. program in Global and Sociocultural Studies. Upon passing the proposal defense, a student is admitted to candidacy status.

## The Dissertation and Dissertation Defense

After successfully defending a dissertation proposal, a student conducts the proposed research and completes a dissertation under the guidance of a dissertation committee. Only after successfully defending the dissertation proposal may a student register for dissertation hours (ANG 7980, GEO 7980, or SYA 7980). The Ph.D. program requires a student to be continuously enrolled in a minimum of 3 hours of Doctoral Dissertation each semester from the time of advancement to candidacy until completion of the dissertation, including summers. Upon completion of the dissertation manuscript and authorization by the committee, a student defends the dissertation before the committee and the University community. The University Graduate School's regulations governing the dissertation are described at http://gradschool.fiu.edu.

## Course Descriptions

## Definition of Prefixes

ANG-Anthropology Graduate; ANT-Anthropology; GEAGeography: Regional Areas; GEO-Geography: Systematic; GIS-Geography: Information Science; ISSInterdisciplinary Social Sciences; SYA-Sociological Analysis; SYD-Sociology of Demography and Area Studies; SYG-Sociology, General; SYO-Social Organization; SYP-Social Processes
F-Fall semester offering; S-Spring semester offering; SSSummer semester offering.

ANG 5267 Environmental Anthropology (3). Theories of human adaptation, including environmental determinism, possibilism, cultural ecology, materialism, and evolutionary ecology. Credit for both ANT 3403 and ANT 5548 will not be granted. Prerequisites: Graduate standing or permission of the instructor. (SS)
ANG 5396 Representations of Africa and Africans in Films (3). Analyzes representations of Sub-Saharan Africa and Africans in various cinematic traditions (including documentaries) and examines these representations in socioeconomic and political contexts. Prerequisite: Permission of the instructor.
ANG 5397 Advanced African Diaspora Cultures and Performativity (3). Examines different approaches adopted by African diaspora studies scholars in social and cultural anthropology, and recent theoretical texts and debates in Performance Studies. Prerequisite: Permission of the instructor.
ANG 5905 Directed Individual Study (1-20). Supervised readings and/or field research and training. Prerequisite: Permission of the instructor. (F,S,SS)
ANG 5906 Directed Individual Studies (3). Supervised readings and/or field research and training.
ANG 5915 Directed Field Research (1-20). Permission of the instructor required.
ANG 6083 Theory in Anthropology (3). Examines the relationship between theory and research in the social
sciences, focusing on the historical, contemporary, and philosophical foundations of anthropological thought. Prerequisites: Graduate standing in the department or permission of the instructor.
ANG 6303 Comparative Feminisms (3). Course examines feminisms and feminist movements in a global context. Taking several geocultural areas as examples, the course analyzes the discourse of cultures, feminisms, and feminist movements. Prerequisites: One graduate level course on gender or permission of the instructor. (S)
ANG 6305 Queer Lives/Queer Theories (3). Introduces key arguments, theories, and methods of queer studies through an examination of the social, economic, and cultural construction/organization of sexual identities and politics.
ANG 6339 Seminar on Latin America (3). Analysis of Latin American cultures and classes using case studies. Students read a series of anthropological or sociological works and discuss them in a seminar format. Prerequisites: Graduate standing or permission of the instructor. (F)
ANG 6472 Anthropology of Globalization (3). Examination of global economic, political, and cultural processes including the movements of people, commodities, and capital. Study of formation of identities, consumption practices, and gender dynamics.
ANG 6473 Diasporas, Migration, and Globalization (3). Examines a variety of theories of "Diaspora" that have proliferated during the last few decades, as the concept relates to processes of transnational migration and globalization.
ANG 6480 Ethnohistorical Research Methods (3). Ethnohistorical research methods enable the compilation and analysis of a wide array of data sources for the production of sociocultural theories, histories, processes and contexts. Prerequisites: Graduate standing or permission of the instructor.
ANG 6497 Qualitative Research Methods (3). Qualitative research methods in anthropology and sociology. Includes participant-observation, field work, key informants and in-depth interviewing, visual techniques, ethical issues, and reflexivity. (F)
ANG 7964 Preparation: Preliminary Doctoral Exam (19). Preparation for the preliminary doctoral exam under the direction of a faculty member. Hours may vary. Prerequisite: Permission of major professor.
ANG 7980 Ph.D. Dissertation (1-20). Completion of doctoral dissertation. Hours may vary. Prerequisite: Permission of major professor and doctoral candidacy.
ANT 6302 Gender Identity in Comparative Perspective (3). Comparative examination of cultural and socioeconomic factors defining gender identities and relations in western and non-western societies. Includes selected cross-cultural case studies. Prerequisites: Graduate standing or permission of the instructor. (S)
ANT 6319 The African Diaspora: Anthropological Perspectives (3). History and cultures of Africans outside of Africa, with a special emphasis on the African experience in the Americas. Topics covered include
slavery, class, gender, ethnicity, and religion. Prerequisite: Graduate standing.
ANT 6469 Graduate Medical Anthropology (3). Concepts and methods in the field of medical anthropology. Importance of culture in governing the type and frequency of disease in a population, the way people explain and treat disease, and responses to the delivery of modern medicine. Prerequisite: Graduate standing. (S)
ANT 7491 Contemporary Theory in Social Anthropology (3). Graduate seminar examining current theoretical issues in social anthropology. Prerequisites: SYA 6018 or permission of the instructor.
GEA 6409 Landscapes of Violence and Healing in the Americas (3). Nation building in the Americas cycles between violence (political, economic, cultural) and healing (through magic, rituals, religion or the arts). Prerequisite: Graduate standing.
GEO 5415 Topics in Social Geography (3). Topics discussed include geographic aspects of population and ethnicity, with emphasis on sources and analysis of data and pertinent concepts. Prerequisites: GEA 2000, graduate standing, or permission of the instructor.
GEO 5479 Advanced Political Ecology (3). People are often engaged in conflict over nature and the landscapes where they would live, work, and recreate. Seminar illuminates roles of geography, history, and power in these conflicts. Prerequisite: Graduate status.
GEO 5557 Globalization (3). Examines the transformation of the world economy and of global finance, the changing significance of sovereignty and territoriality, the effects of space-time compression on everyday life, and associated shifts in culture and identity.
GEO 5906 Directed Individual Studies (3). Supervised readings and/or field research and training.
GEO 6113 Qualitative Research Methods in Geography (3). Workshop class on qualitative research methods including archival analysis, participant observation, interviewing, and focus groups.
GEO 6118 Theory in Geography (3). Examines the relationship between theory and research in the social sciences, focusing on theoretical perspectives in geography. Prerequisites: Graduate standing in the department or instructor's permission.
GEO 6413 Feminist Geographies (3). Examines key contributions of feminist theory and scholarship to the discipline of Geography.
GEO 6473 Space, Place and Identity (3). Explores space, place and identity in international relations. Focus is on the importance of the spatial relations instructing the politics of nationalisms, ethnicities, and genders.
GEO 6478 Critical Geopolitics (3). Examines the school of thought that emerged in the 1980s challenging hegemonic ways of representing the world. Topics include feminist geopolitics, war on terror, critical geopolitics in Latin America. Prerequisite: Graduate standing.
GEO 6603 Cities and Regions in Global Perspective (3). Examines the interplay of cities and regions with the world political economy, past and present. Emphasizes theoretical perspectives on conditions underlying
inequalities between cities and regions. Prerequisite: Graduate standing.
GEO 7964 Preparation: Preliminary Doctoral Exam (19). Preparation for the preliminary doctoral exam under the direction of a faculty member. Hours may vary. Prerequisite: Permission of major professor.
GEO 7980 Ph.D. Dissertation (1-20). Completion of doctoral dissertation. Hours may vary. Prerequisites: Permission of major professor and doctoral candidacy.
GIS 5038 Remote Sensing (3). Satellite image and aerial photo interpretation and analysis fundamentals.
GIS 5620 Surveillance, Intelligence, and International Relations (3). This seminar focuses on the role of advanced technology in obtaining information via orbital or land-based surveillance systems on issues of international relations such as warfare and globalization. Prerequisites: Graduate standing or permission of the instructor.

GIS 5935 Topics in Geographic Information Systems (3). Geographic concepts are studied in a computer-based mapping environment. Both social and physical data are used. Students receive a background in spatial analysis and basic cartography.
ISS 6305 Research Methods and Design (3). Logic and procedures in conceptualizing and conducting empirical social research. Emphasizes the relationship of research design and methods to theoretical perspectives. Prerequisites: Graduate standing or permission of the instructor.
ISS 6306 Writing Research Proposals (3). Development of skills in writing research proposals. Prerequisites: Graduate standing in the department and three semesters of completed graduate studies, or instructor's permission.
ISS 6317 Social Research Quantitative Methods I (3). First course in the graduate program's sequence in social research quantitative methods. Prerequisites: Graduate standing or permission of the instructor.
ISS 6346 Theory and Inquiry (3). First semester required core seminar. Introduces issues and controversies concerning the relationship between theory and research. Prerequisites: First year graduate standing in the department or permission of the instructor.
SYA 5135 Sociology of Knowledge (3). The study of the theoretical basis of knowledge and the inter-relatedness of knowledge and social factors, particularly as knowledge relates to institutional forms of behavior. (F)
SYA 5357 Graduate GIS and Latin American Societies (3). Introduces geographic information systems (GIS) in the context of Latin American socio-spatial and environmental problems and transformations.
SYA 5909 Directed Individual Study (VAR). Supervised readings and/or field research and training. Prerequisite: Permission of the instructor. (F,S,SS)
SYA 5941 Directed Field Research (VAR). Permission of the instructor required. (F,S,SS)
SYA 6018 Sociocultural Theories A (3). One of two courses designed to prepare students with a thorough understanding of the key theories and theorists of both sociology and anthropology typically offered in the fall
semester. Prerequisites: Graduate standing or permission of the instructor. (F)
SYA 6127 Theory and Inquiry (3). First semester required core seminar. Introduces issues and controversies concerning the relationship between theory and research. Prerequisites: First year graduate standing in the department or permission of the instructor.
SYA 6305 Research Methods I (3). The first in a twocourse sequence in applied social science research methods in comparative sociology emphasizes quantitative skills needed to design, implement and analyze data. Prerequisites: Graduate standing or permission of the instructor. (F)
SYA 6306 Research Methods II (3). The second in a twocourse sequence on research methods in comparative sociology. Includes the quantitative analysis of sociological research data, and the preparation of written reports and articles. Prerequisites: SYA 6305 and equivalent. (S)
SYA 6317 Social Research Quantitative Methods II (3). Second course in the graduate program's sequence in social research quantitative methods. Discusses the relationship between theory and research, and quantitative in relation to qualitative methods. Prerequisites: ISS 6317 or permission of the instructor.
SYA 6356 GIS and Social Research (3). Focuses on applications of GIS in social research; includes applying critical perspective on space, place, cartography to GIS social research projects. Prerequisites: GIS 3048 or EVR $4 X X X$ or permission of the instructor.
SYA 6452 Advanced Topics in GIS and Social Research (3). Advanced GIS skills in areas such as geographically weighted regression and use of census data with regard to social research. Prerequisites: Completion of an introductory statistics and either SYA 6356 or introductory GIS course.
SYA 6657 Evaluation of Organizations and Programs (3). Conceptual frameworks and methods for evaluating the performance and impacts of organizations and programs.
SYA 6941 Internship in Applied Sociology (1-9). Practical application in a supervised setting outside of the classroom of knowledge acquired in the classroom. Hours may vary.
SYA 6943 South Florida Area Study (3). Current issues in South Florida studied through large-scale survey research conducted by class members. Provides experience in research techniques and the development and testing of theory. Prerequisites: SYD 6625 and SYA 6305. (S)

SYA 6959 Writing Research Proposals (3). Development of skills in writing research proposals. Prerequisite: Three completed semesters of graduate work.
SYA 6975 Thesis (1-6). Registration for students working on the thesis for the M.A. in Comparative Sociology or the M.A. in International Studies. Prerequisites: All other course work for the M.A. in Comparative Sociology or International Studies. (F,S,SS)
SYA 7205 Foundations of Social Theory Construction (3). Seminar exams assumptions of social theory. Topics
include objectivity in the social sciences, social science concepts and explanations, reductionism, and the bases of social theory construction. (S)
SYA 7930 Special Topic in Comparative Sociological Research (3). A detailed exploration into particular research methodologies, approaches and techniques relevant to Comparative Sociology. Topic will vary depending upon the instructor. Course may be repeated. Prerequisites: SYA 6305 and SYA 6306 or permission of the instructor.
SYA 7941 Field Research (1-9). Research projects or certain aspects of research in a field situation carried out by one or more students under the direction of a faculty member. Topics vary. Usually selected on an individual basis. Hours may vary. (F,S,SS)
SYA 7967 Preparation: Preliminary Doctoral Exam (19). Preparation for the preliminary doctoral exam under the direction of a faculty member. Hours may vary. (F,S)

SYA 7979 Advanced Research (1-9). Research projects or certain aspects of research carried out by one or more students under the direction of a faculty member. Topics vary; selected on an individual basis. Hours may vary. (F,S,SS)
SYA 7980 Ph.D. Dissertation (1-12). Hours taken by students to work on the dissertation under the supervision of a major professor and the doctoral committee. Hours may vary. Prerequisites: Permission of Major Professor and Doctoral Candidacy. (F,S)
SYD 5045 Population and Society (3). The study of the processes that determine the size and composition of human populations. Emphasis on demographic transition theory and the antecedents and consequences of differential growth rates throughout the world. Prerequisites: Graduate standing or permission of the instructor.
SYD 5607 Advanced World Jewish Communities (3). Overview of Jewish communities throughout the world. Analyzes their origins, migrations, demographic and social characteristics. Covers Ashkenazi, Sephardi, and Oriental communities. Prerequisite: Graduate Standing.
SYD 5656 Global Japan (3). An examination of the dynamics of contemporary social issues in Japan and Japan's role in a globalized society.
SYD 5708 Advanced Race, Gender, Sexuality: Entanglements Across Time and Space (3). Examines the transnational, interrelated history of race and gender from the 16th century to the present.

SYD 6236 International Migration and Refugees (3). Comparative analysis of the causes, consequences, and policies concerning population movements across national borders. Includes review of various theories of labor migration. Students will conduct research on a migration or refugee topic. Prerequisites: Graduate standing or permission of the instructor. (F)
SYD 6325 Seminar in the Comparative Sociology of Gender (3). The examination of women's and men's roles, statuses, and life opportunities from a historical and comparative perspective. Current theoretical developments in the study of gender are emphasized.

Prerequisites: Graduate standing or permission of the instructor. (S)
SYD 6418 Graduate Seminar in Urban Sociology (3). Presents an overview of the major subtopics and debates in urban sociology, including comparative, transnational, and global perspectives.
SYD 6427 Seminar in Comparative Urban Issues (3). Current theoretical developments in the study of urbanism, including the evolution and growth of cities, spatial and social structures, migration, and the critical problems of social life in cities. Prerequisites: Graduate standing or permission of the instructor. (F)
SYD 6615 Seminar in Comparative Analysis of Selected Regions (3). Comparative social analysis using studies from two or more world regions. Students read a series of works on issues such as bureaucracy, modernization, and development, and discuss them in a seminar format. Prerequisites: Graduate standing or permission of the instructor. (S)
SYD 6625 South Florida Socio-cultural Systems (3). The sociological and anthropological analysis of South Florida. Presents tools for regional study including demography, cultural ecology, and ethnic group-centered symbolic systems. Prerequisites: Graduate standing or permission of the instructor. (F)
SYD 6626 Cuba Seminar (3). Examines the culture and social structure of the Cuban Republic; the antecedents and consequences of the profound process of social change initiated in 1959; and Cuban emigration. Prerequisites: Graduate standing or permission of the instructor.

SYD 6639 Seminar in Societies and Cultures of the Caribbean (3). This course examines the Caribbean's relationship to global social and cultural processes. It focuses both on the region's history and present day, with emphasis on sociological perspectives.
SYD 6655 Seminar on Social Change in Asia (3). An examination of social change in contemporary Asia, including the relationships between states, the changing political economies, and the role of social movements and cultural institutions in change. Prerequisites: Graduate standing or permission of the instructor.
SYD 6705 Comparative Analysis of Ethnicity and Race (3). Consideration of major theories of ethnicity and race and analysis of selected ethnic groups in various world regions. Includes the study of race and ethnic issues in Miami and the South Florida region. (S)
SYD 6796 Sex, Race, and Power in Colonial Times (3). Critical examination of sexual intimacy in colonial contexts between colonizers and colonized people. Explores the intersection between racialization and sexualization and white male power over black and brown male and female bodies. Prerequisite: Graduate standing.
SYD 6816 Advanced Sociological Theories of Gender (3). Examines sociological theory as it deals with gender from a feminist perspective. Prerequisite: Graduate standing. (S)
SYD 6901 Special Topics in Sociology (3). An examination of specific themes and topics in sociology. The theme may vary from semester to semester. With a
change in content, the course may be repeated. Can be taken for credit no more than twice with any given instructor. Prerequisites: SYA 6018 or permission of the instructor.
SYD 7903 Directed Readings (1-9). Readings under the direction of a faculty member focusing on one of the tracks in the Ph.D. program. Hours may vary. (F,S,SS)
SYG 6932 Special Topics in Disaster Studies (3). Case studies of major disasters used to explore topics such as impact of gender, class, ethnicity, and age on vulnerability, response, and outcome; effects of larger political and economic systems; and relationship to social change. May be repeated with change of topic.
SYO 6306 Political Sociology (3). Examines social relations of power in groups, organizations, and national and global structures; also patterns of state formation, state-society relations, and sources of political change. Prerequisite: Graduate standing. (S)
SYO 6405 Graduate Medical Sociology (3). Examination of the social significance of health, illness, and medicine in the U.S. as compared to other societies. Includes disease type and distribution as well as a critique of health care professions, organizations, and policies. Prerequisite: Graduate standing. (F)
SYO 6536 Comparative and Global Inequality (3). Addresses theoretical approaches and empirical studies concerning socioeconomic, political, and local/regional inequalities in comparative, transnational, and global perspective. Prerequisites: Graduate standing or permission of the instructor. (S)
SYP 5447 Development and Post-Development (3). Examines theories and case studies concerning development and post-development in global perspective. (S)

SYP 6306 Comparative Social Movements (3). Comparative analysis of social movements and social change, including peasant movements, environmentalism, civil rights, feminism, and nationalism. Competing theories of social movements are examined. Prerequisites: Graduate standing or permission of the instructor. (F)
SYP 6457 Cities and Regions in Global Perspective (3). Examines the interplay of cities and regions with the world political economy, past and present. Prerequisite: Graduate standing.
SYP 6907 Comparative and Global Social Change (3). Examines examples of social change in comparative, transnational, diasporic, and global perspective. Prerequisites: Graduate standing or permission of the instructor. (F)

## History

Victor M. Uribe, Associate Professor and Chairperson
Saad Abi-Hamad, Instructor
Jessica L. Adler, Assistant Professor
Tovah Bender, Instructor
Michael L. Brillman, Instructor
Michael Bustamante, Assistant Professor
Noble David Cook, Professor
Alexandra Cornelius-Diallo, Lecturer and Associate Chairperson
Gwyn Davies, Associate Professor
Rebecca Friedman, Associate Professor
Jenna Gibbs, Associate Professor
M. Sherry Johnson, Professor

Hilary J. Jones, Associate Professor
Alan Kahan, Professor Emeritus
Shane R. Landrum, Instructor
Kenneth J. Lipartito, Professor
Amy Bliss Marshall, Assistant Professor
April R. Merleaux, Assistant Professor
Aurora Morcillo, Professor
Okezi T. Otovo, Assistant Professor
Brian Peterson, Associate Professor
Joyce S. Peterson, Associate Professor
Terrence G. Peterson, Assistant Professor
Bianca C. Premo, Associate Professor
Darden Asbury Pyron, Professor Emeritus
Howard B. Rock, Professor Emeritus
Jeremy David Rowan, Senior Lecturer and Assistant Dean
Daniel Royles, Assistant Professor
Aaron K. Slater, Assistant Professor
Mark D. Szuchman, Professor Emeritus
Chantalle F. Verna, Associate Professor
Kirsten E. Wood, Associate Professor and Director of Graduate Studies

## Master of Arts in History

The Department of History offers the M.A. degree, with coursework in one of five culture areas: Africa, Asia, Europe, Latin America, and United States. Students will choose a Thesis, Report, or Internship in Public History option, in consultation with the Department's Graduate Program Director. The degree requirements for the M.A. vary according to the option taken (see under Degree Requirements).

## Entrance Requirements

Requirements for admission into the M.A. degree program in History are the same regardless of the option selected. Applicants must also satisfy any additional requirements the University sets for admission to graduate work. Applications should include transcripts from any postsecondary institutions attended, two (2) letters of recommendation, a writing sample, and a 2-4 page statement of purpose describing the applicant's academic plans and long-term career goals.

Admissions into the graduate programs are conducted once a year and only for the Fall term. Applicants seeking entrance for the Fall term should prepare all application materials in time for the Department of History and the Office of Graduate Admissions to receive them no later
than February 1. Completed applications generally receive notification of admission by March 30.

1. Applicants must hold a bachelor's degree from an accredited institution and have a 3.25 GPA in upperlevel work. Applicants who believe their applications would be strengthened by high GRE scores may also submit them. The GRE is not, however, required.
2. Two letters of recommendation. Applicants should ensure that each letter on their behalf is signed by the author along the sealed flap of the envelope. Letters should be mailed directly to the Graduate Program Director, together with the waiver form available from the Department of History website.
3. Applicants must have completed 12 semester-hours of credit (on the basis of 3 -hour courses) in upper division undergraduate courses in History, or the equivalent, as approved in writing by the Graduate Program Director.
Any applicant with fewer than twelve (12) semester-hours of upper division undergraduate courses in History, or the equivalent, should consult the Graduate Program Director about the possibility taking at least six (6) semester-hour graduate credits as a Non-Degree Seeking Student (consult the University Catalog and the Office of Graduate Admissions). After completing this work with an average grade of "B+" (3.3), the student may apply for regular admission. Other methods may also be pursued with the written permission of the Graduate Program Director.

The above admissions criteria are only minimum requirements. All applications are reviewed by the Graduate Committee which makes the final admissions recommendations to the University Graduate School.

## Degree Requirements

## Thesis Option

1. A minimum of 30 semester-hours for the degree, including the maximum of six semester-hours of Thesis Research. All course work must be taken at FIU.
2. A minimum of 24 semester-hours of course work, including one two-semester Research Seminar.
3. Reading competence in a foreign language, demonstrated by achieving a Pass or High Pass on the departmental examination. Courses taken to attain language competency do not count towards the degree. The Latin American concentration requires proficiency in Spanish, Portuguese, or another language appropriate to the student's field; the modern European concentration requires proficiency in an appropriate European language; the United States concentration requires proficiency in any of the above, or competency in social science quantitative skills, demonstrated by receiving a grade of "B" or higher in an appropriate course approved for this purpose by the Graduate Program Director; the medieval or ancient concentration in two languages; one of Hebrew, Latin, Greek or another ancient language as deemed appropriate by the student's advisor, and one modern European language.
4. The following limits are placed in accumulating credits toward the M.A. degree:
a. No more than six semester-hours of HIS 5908 (Independent Study) are permitted.
b. Students must receive the grade of "B" (3.0) or better in order for any course to count toward the degree.
c. Students are prohibited from taking graduatelevel cross-listed courses that they have already taken at the undergraduate level.
5. All students are required to take HIS 6059 (Historical Methods).
6. Core Area. Students will select one core area for concentration in United States History, European History, African History or Latin American and Caribbean History, in consultation with the Graduate Advisor. Twelve semester-hours of course work will be taken within the core area.
7. Breadth Areas. Students will take six semester-hours in breadth areas. These may be courses taken within the Department of History that are outside the culture area of concentration, or in associated disciplines outside of the Department (with the approval of the Graduate Advisor), or a combination of the two.
8. Students will take one elective course for 3 semesterhours.
9. Students will register for up to six semester-hours of HIS 6970 (Thesis Research).
10. At least one course must be comparative. Comparative courses must have HIS or WOH prefixes, or else be approved for this purpose by the Graduate Program Director.
11. The thesis must be successfully defended and formally approved by a Thesis Committee composed of three members, two of whom must be graduate faculty members of the Department of History. The Thesis Committee is convened and headed by the thesis supervisor.
12. The degree candidate will prepare the thesis in accordance with the regulations stipulated in the University's Graduate Policies Manual. The degree will be conferred after the approval of the final version of the thesis by the Offices of the Dean of the Steven J. Green School of International and Public Affairs and the University Graduate School.

## Report Option

1. A minimum of 30 semester-hours of course work are needed for the M.A. degree. The report option does not set requirements for Core/Breadth area distribution. Students will design their course work in consultation with the Graduate Program Director and the relevant faculty. All courses must be taken in the Department of History at FIU, or else be approved for by the Graduate Program Director.
2. Students must complete one two-semester research seminar. With the consent of the professor for whom it was written, students will revise the report and submit it to the Graduate Committee for final approval.
3. HIS 6059 (Historical Methods) is required of all students.
4. 6 semester-hours, not including Historical Methods, must be comparative. Comparative courses must have HIS or WOH prefixes, or else be approved for this purpose by the Graduate Program Director.
5. The following limits are placed on accumulating credits towards the Master's degree:
a. Students must receive the grade of "B" (3.0) or better for the course to count toward the degree.
b. HIS 5908 (Independent Study) is limited to six semester-hours.

## Internship in Public History Option

1. A minimum of 30 semester hours for the degree, including 6 semester hours of Independent Study tied to an internship in the fields of Museum Studies or Public History. The internship requires a minimum of 300 hours of work that is to be documented by the project supervisor or museum director. The internship must be approved by the Graduate Program Director and supervised by a regular member of the department's faculty. Students must submit a written report following departmental regulations of their internship activities to the Graduate Committee before the degree can be awarded.
2. A minimum of 24 semester hours of course work, of which 6 credit hours must be taken from the following list of courses: HIS 5067 (Public History Theory and Practice), HIS 5084 (History, Memory and the Public), ARH 5850 (Introduction to Museum Studies), ARH 5851 (Museum Ethics). Other appropriate courses may be substituted with permission of the Graduate Program Director.
3. Students must complete one two-semester research seminar.
4. HIS 6059: Historical Methods.

## History M.A. Option

Only students who have been admitted to the Ph.D. program without previously receiving an M.A. in History are eligible to pursue this track.

1. Completion of 39 hours of course work for graduate history credit. All course work must be taken at FIU, and receive a grade of "B" (3.0) or better.
2. Completion of one two-semester Research Seminars.
3. Completion of Historical Methods.
4. Reading competency in a language other than English.
5. Approval of this option by the Graduate Program Director, who will determine if the student is making satisfactory progress towards the Ph.D.

## Combined BA/MA in History

This combined BA/MA degree program allows our highly qualified undergraduate students the opportunity to pursue a Master's degree in History while they are completing their undergraduate studies. To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both
degrees. Students who pursue this track must complete all requirements for the undergraduate history major, including the prerequisites and the senior seminar, our capstone course. As part of their joint degree, students will enroll in three cross-listed courses at the 5000 level ( 9 credits). After completing all undergraduate credits, including the double counted courses, students will receive the B.A. In the summer following receipt of the B.A., they will take a minimum of three credit hours at the graduate level. In their final year, they will take 18 credit hours at the graduate level, including a two-semester Research Seminar (6 hours), Historical Methods (3 hours), and graduate seminars ( 9 hours). Students must complete all credits within a year of receiving the History B.A.

## Entrance Requirements

1. Formal applicants must have completed 75-90 credits. Please note that junior majors who are interested in pursuing this program should make their intentions known to the undergraduate and graduate advisors.
2. Applicants must have a 3.25 GPA overall and a 3.4 GPA in history courses taken at FIU.
3. Applicants must provide two letters of recommendation from tenured or tenure-earning FIU History Professors.
4. The History Department's Graduate Committee will make the final decision regarding admission to the program.

## Credit/Course Requirements

## Senior Year

- In their senior year, students will complete three cross-listed History courses at the 5000 level (9 credits).
- In their fourth year, students will also complete the exit requirement for the undergraduate History major, the Senior Seminar, HIS 4935 (3 credits).
- Students must apply for graduation so that they will receive the B.A. at the end of their senior year.


## Fifth Year

- In the summer after the senior year (between years 4 and 5), students will take at least three graduate credits. These can be taken in the form of a graduate independent study (HIS 5908), a public history internship (HIS 6942), or a dedicated graduate course.
- Those students who graduate in the fall semester will take a full load in the spring and then complete these credits the following summer. (3 credits)
During the fifth year, students will complete 18 hours of graduate level work, including the following:
One two-semester (6 credit hours) History Graduate Research Seminar
Graduate Methods Course, HIS 6059
Three Courses at the 5000 or 6000 level. 5000-level courses taken in the fifth year may not be cross-listed with 4000-level courses

All students MUST complete the M.A. credits within a year of receiving the B.A. in History at FIU.

## Doctor of Philosophy in History

The doctoral program in History offers students opportunities to concentrate on the areas of Latin America, Africa, the United States, or Europe. The program contains an underlying comparative framework based on the civilizations of the Atlantic, which allows students to explore the many dimensions of cross-cultural exchanges. The curriculum thus emphasizes the comparative framework around the Atlantic experience, and reflects the vitality of a cross-disciplinary approach.

## Admission to the Program

Every applicant must complete an application form, and submit college transcripts, GRE scores and the application fee to the Office of Graduate Admissions. A curriculum vitae, writing sample, statement of research interests, and at least two letters of recommendation together with the waiver form available from the Department of History web site should be submitted to the Graduate Program Director. For those transferring into the program who already hold the M.A., the thesis, when available, should be submitted as the sample. Admission requires a GRE score and a minimum undergraduate GPA of 3.25 in the upper level work. Applicants with the M.A. degree are required to have a graduate GPA of at least 3.25. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the iBT TOEFL (equivalent to 575 on the paper-based version of the Test of English as a Foreign Language) is required.

Admission into the doctoral program takes place once a year for entry in the Fall semester. Applicants should prepare all application materials in time for the Department of History and the Office of Graduate Admissions to receive them no later than December 1 for the following year's fall admissions. Applicants will be notified of the Department's recommendation regarding their application no later than March 15.

## Degree Requirements

## Number of Credits Required

A minimum of 75 credits are required for students entering the Ph.D. program without a M.A. in History, or 54 for those entering with a History M.A. from an accredited institution.

## Language Requirements

All students must acquire reading competence in two languages other than English. The language requirement may be fulfilled in one of two ways: 1) achieving a High Pass on the departmental examination in one language, and at least a Pass on the second; or 2) achieving a Pass or High Pass on the departmental examination in one language, and competency in social science quantitative skills, demonstrated by receiving a grade of " $B$ " or " $B+$ ", for Pass, and "A" or "A-", for High Pass, in an appropriate course approved for this purpose by the Director of Graduate Studies. At least one High Pass must be received. Language requirements vary, according to the concentration fields. In cases where the dissertation will be in the history of US or English-speaking countries, one language plus the quantitative skill is sufficient. In Latin

American history, either Spanish or Portuguese, and a second language appropriate to the student's field are required. Language exams will be graded on a High Pass, Pass, and Fail basis; a High Pass is required in the student's primary language. Students should check with the Department's Graduate Program Director to determine which languages are appropriate for their program of studies.

## Composition of Course Work

Course requirements for students entering the Ph.D. program without an M.A. are as follows:

1. HIS 6059 (Historical Methods), 3 credits.
2. Readings and Research in Atlantic Civilization (HIS 6906 and HIS 6918), 6 credits.
3. 24 credits are required in the student's core culture area to be chosen from the United States, Latin America and the Caribbean, Africa, or Europe, including at least 6 credits in a research seminar.
4. 15 credits are required in geographical/topical areas outside the culture area of concentration, 3 of which must be in comparative course (WOH or HIS, not including Historical Methods or Atlantic Civilization).
5. 12 elective credits, 9 of which may be taken outside the department with the permission of the Director of Graduate Studies.
6. 15 credits of dissertation research.

Course requirements for students entering the Ph.D. program with an M.A. in History are as follows:

1. HIS 6059 (Historical Methods), if not previously taken, 3 credits.
2. Readings and Research in Atlantic Civilization (HIS 6906 and HIS 6918), 6 credits.
3. 18 credits are required in the student's core culture area to be chosen from the United States, Latin America and Caribbean, Africa, or Europe, including at least 6 credits in a research seminar. If, however, students did not have at least 12 credits in their area of concentration in their MA, they must take an additional 3-6 credits in their area of concentration in lieu of the elective and comparative history requirements specified below.
4. 3 credits in comparative history (WOH or HIS), not including Methods or Atlantic Civilization.
5. 9 credits of outside culture area.
6. A minimum of 15 credits of dissertation research.

## Comprehensive Examinations and the Dissertation

Following completion of all course work, satisfaction of language requirements, and the constitution of a dissertation committee, students will be required to pass a written and an oral comprehensive examination. After the completion of their comprehensive examinations and the approval of a dissertation proposal by their dissertation committee, students will write a doctoral dissertation. The time needed for the research and writing of dissertations in History is variable, although doctoral candidates normally spend one year engaged in continuous field research and a second year in full-time writing.

## Restrictions

1. The grade of " B " or better is required for graduate credit.
2. At the end of the second semester of residence, or upon completion of the first 18 credit-hours of work, and every year thereafter, Ph.D. students must undergo an annual evaluation as required by the University Graduate School. The Graduate Program Director, the student's primary adviser, and/or the Dissertation Committee will examine and evaluate the student's progress and prospects. Students whose progress is deemed insufficient may be advised to withdraw from the program.
3. No more than 6 semester-hours of Topics (5935) courses toward meeting the degree requirements, without written permission of the Graduate Program Director.
4. No more than 6 semester-hours of HIS 5908 (Independent Study) toward meeting the degree requirements, without written permission of the Graduate Program Director.

## MA in African and African Diaspora Studies/Ph.D. in History Combined Degree Program

The Combined African and African Diaspora Studies M.A./ Ph.D. in History program allows qualified graduate students to complete the M.A. in Combined African and African Diaspora Studies (M.A. in AADS) en route to the Ph.D. in History. This program will train doctoral students within the discipline of Atlantic History while giving them area studies expertise in African and African Diaspora Studies in order to help them stay competitive in seeking careers with an international focus in today's global cultural and intellectual environment. In tandem, these two programs can offer students an unusually close fit and remarkably beneficial synthesis in interdisciplinary approaches to both the Atlantic world and the African diasporic experience.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.0 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.25 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the IBT TOEFL (equivalent to 575 on the paper-based version of the Test of English as a Foreign Language) is required.

## Admission Procedure

To be accepted into this program, students must submit an application to the Ph.D. in History with a sub plan for a M.A. in African and African Diaspora Studies. This designation will appear in the menu of programs in the graduate application. Applicants should prepare all
application materials in time for the Department of History and the Office of Graduate Admissions to receive them no later than December 1 for the following year's fall admissions. Applicants will be notified of the Department's recommendation regarding their application no later than March 15.
The following documents must be submitted as part of the application. They will be reviewed by the Admissions Committee from both units.

1. Official transcripts of all prior college-level work (undergraduate Bachelor's degree and any graduate transcripts);
2. Official GRE scores or equivalent;
3. Official TOEFL scores, if applicable;
4. A curriculum vita;
5. A detailed statement of research interests, reasons for seeking the M.A./Ph.D., future career goals, a summary of scholarly and extra-curricular activities, and the names of History Department faculty members who would be appropriate dissertation advisors (Note: Consult the department website for information about faculty members)
6. A writing sample (such as a seminar paper) which demonstrates the ability to conduct research and write effectively; and
7. Three letters of reference from academic sources or others able to judge academic abilities and potential.
In addition, an interview (in person or phone) with members of the M.A. in AADS Program and/or appropriate faculty in the Department of History is highly recommended.

## M.A. in African and African Diaspora Studies (M.A. in AADS)

Thirty-six graduate credits are required for the M.A. in AADS, including 6 credits of core courses, 12 credits within a concentration, 12 credits of electives and 6 credits for the directed research paper exit option. There is also a Foreign Language Requirement.
M.A. in AADS Core Courses: (9 credits)

HIS $6059 \quad$ Historical Methods
AFA $6920 \quad$ AADS graduate colloquium (3 credits)
AFA 6911 Research Paper/Proposal Writing in
African and African Diaspora Studies
M.A. in AADS Elective Courses: ( $\mathbf{2 4}$ credits)

15 credits of elective courses with a clear AADS focus from within the Department of History, such as those on the following list. This should include at least one twosemester research seminar (6 credits).
AFA $6851 \quad$ Advanced Seminar in African and African Diaspora Studies
AFH 5905 Readings in Asian History
AFH $5935 \quad$ Topics in African History
AFH 6915 Research in African History
AFH 6932 Research Seminar in African History I
AFH 6933 Research Seminar in African History II
WOH 5236 The Transatlantic Slave Trade and the Making of African Diaspora, 1441-1807
WOH 5237 The African Diaspora Since the End of the Slave Trade
9 credits of elective courses from outside the History Department and within the Green School and/or the College of Arts \& Sciences. At least 6 of these credits will
be from the Social Sciences list of AADS courses (see the Humanities and Social Sciences lists of AADS graduate courses).

## M.A. in AADS Research Proposal Option

To graduate from the M.A. in AADS, students enrolled in this combined M.A./Ph.D. program must elect the research proposal option and take the proposal writing course AFA 6911 Research Paper/Proposal Writing in African and African Diaspora Studies.

## M.A. in AADS Language Requirement

Students must demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests.

## Application for Graduation from M.A. in AADS

Students should apply for graduation for the M.A. in AADS as soon as they have completed all requirements for the degree - including the exit option. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in History.

## Ph.D. in History

Students will begin study towards the Ph.D. in History immediately following their satisfactory completion of M.A. in AADS degree requirements. Students are expected to meet all the degree requirements for the Ph.D. in History, which requires a total of 75 credits.

Courses required in addition to the degree requirements for the M.A. in African and African Diaspora Studies (minimum 39 credits)
$\begin{array}{ll}\text { HIS } 6906 & \begin{array}{l}\text { Advanced Readings in Atlantic } \\ \text { Civilization }\end{array}\end{array}$
HIS $6918 \quad$ Research in Atlantic Civilization 3
3 credits outside of AADS and Atlantic Civilization (also excluding Methods), 3 credits of which must be in a comparative course (HIS or WOH prefix)

## Electives

HIS $7890 \quad$ Dissertation 15

## Language Requirements

All students must acquire reading competence in two languages other than English. The language requirement may be fulfilled in one of two ways: 1) achieving a High Pass on the department examination in one language, and at least a Pass on the second; or 2) achieving a Pass or High Pass in departmental examination in one language, and competency in social science quantitative skills, demonstrated by receiving a grade of "B" or "B+", for Pass, and "A" or "A-", for High pass, in an appropriate course approved for this purpose by the Graduate Program Director. At least one High Pass must be received. Language requirements vary, according to the concentration fields. In cases where the dissertation will be in the history of US or English-speaking countries, one language plus the quantitative skill is sufficient. In Latin American history, either Spanish or Portuguese, and a second language appropriate to the student's field are required. Language exams will be graded on a High Pass, Pass, and Fail basis; a High pass is required in the student's primary language. Students should check with the Department's Graduate Program Director to determine
which languages are appropriate for their program of studies.

## Comprehensive Examinations and the Dissertation

Following completion of all course work, satisfaction of language requirements, and the constitution of a dissertation committee, students will be required to pass a written and an oral comprehensive examination. After the completion of their comprehensive examinations and the approval of a dissertation proposal by their dissertation committee, students will write a doctoral dissertation. The time needed for the research and writing of dissertations in History is variable, although doctoral candidates normally spend one year engaged in continuous field research and a second year in full-time writing.

## Restrictions

1. The grade of " $B$ " or better is required for graduate credit.
2. At the end of the second semester of residence, or upon completion of the first 18 credit-hours of work, the Graduate Committee will examine and evaluate the student's progress and prospects. Professors will provide detailed written evaluations of the work of all first-year Ph.D. students they have taught. Students whose progress is deemed insufficient will be advised to withdraw from the program.
3. No more than 6 semester-hours of Topics (5935) courses toward meeting the degree requirements, without permission of the Graduate Program Director.
4. No more than 6 semester-hours of HIS 5908 (Independent Study) toward meeting the degree requirements, without permission of the Graduate Program Director.

## Combined Master of Arts in Asian Studies/Doctor of Philosophy in History

The combined M.A. in Asian Studies/Ph.D. in History program allows qualified graduate students to pursue both degrees simultaneously. To be accepted into this program, students must simultaneously submit applications for the M.A. in Asian Studies and the Ph.D. in History. Applicants must meet the admission eligibility requirements and follow the admission procedures for both programs.

Students must fulfill the requirements for both programs, and up to 36 credits may count for both degrees. To graduate, students must complete the requirements of the History doctoral program, including the required 75 hours.

During their first two years of enrollment in this dual degree program, students will enroll in the following coursework which fulfills the Asian Studies M.A. requirements:

## Master of Arts in Asian Studies

## Requirements

(30 credits Thesis Option / 33 credits Non-Thesis Option)

## Core Courses: ( 24 credits)

- 3 credits Topics in Modern Asia (ASN 5315)
- 3 credits in a research methods course in a discipline related to the student's primary area of study
- 12 credits pertaining to main concentration
- 6 credits in other concentration

MAAS offers two exit options, Thesis or Non-Thesis
Thesis Exit Option: (6 credits)
ASN 6972 Master's Thesis
Non-Thesis Exit Option: (9 credits)
ASN 6912 Master's Essay (3 credits and two additional courses (6 credits)

Students will begin study towards the Ph.D. is History immediately following their satisfactory completion of MAAS degree requirements. Students are expected to meet at the degree requirements for the Ph.D. in History, which requires a total of 75 credits.

## Doctor of Philosophy in History

Courses required in addition to the degree requirements for the M.A. in Asian Studies (minimum 39 credits)

- 3 credits Advanced Readings in Atlantic Civilization (HIS 6906 )
- 3 credits Research in Atlantic Civilization (HIS 6918)
- 6 credits outside of Asian Studies and Atlantic Civilization (also excluding Methods), 3 credits of which must be in a comparative course (HIS or WOH prefix)
- 12 credits electives
- 15 credits Ph.D. Dissertation (HIS 7980)


## M.A. in Latin American and Caribbean Studies/Ph.D. in History Combined Degree Program

The Combined Latin American and Caribbean Studies M.A./Ph.D. in History program allows qualified graduate students to complete the M.A. in Latin American and Caribbean Studies (MALACS) en route to the Ph.D. in History. Capitalizing on the intellectual affinities between the graduate programs in Latin American and Caribbean Studies and in Atlantic History, the program allows students to enroll simultaneously in both programs and to count 36 credits of coursework toward fulfillment of the requirements for both graduate degrees. The M.A. program provides a multi-disciplinary perspective on the region as well as deep expertise on the region's history, culture and political economy, while the Ph.D. Program in Atlantic History is aimed at honing students' skills in historical methods while training them to approach individual nations and regions of Latin America and the Caribbean as sites of broader exchanges along the Atlantic corridor.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.0 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.25 on any previous graduate work;
3. (Verbal and Quantitative) Official Graduate Record Exam (GRE) scores, for International students, a minimum score of 525 on the EXADEP (Spanish version of the GRE); or a minimum of 590 on the GMAT;
4. International graduate student applicants whose native language is not English and have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the IBT TOEFL (equivalent to 575 on the paper-based version of the Test of English as a Foreign Language) is required.

## Admission Procedure

To be accepted into this program, students must submit an application to the Ph.D. in History with a sub plan for a M.A. in Latin American and Caribbean Studies. This designation will appear in the menu of programs in the graduate application. Applicants should prepare all application materials in time for the Department of History and the Office of Graduate Admissions to receive them no later than December 1 for the following year's fall admissions. Applicants will be notified of the Department's recommendation regarding their application no later than March 15.

The following documents must be submitted as part of the application. They will be reviewed by the Admissions Committee from both units.
Official transcripts of all prior college-level work (undergraduate Bachelor's degree and any graduate transcripts);

1. Official GRE scores or equivalent;
2. Official TOEFL scores, if applicable;
3. A curriculum vita;
4. A detailed statement of research interests, reasons for seeking the M.A./Ph.D., future career goals, a summary of scholarly and extra-curricular activities, and the names of History Department faculty members who would be appropriate dissertation advisors (Note: Consult the department website for information about faculty members)
5. A writing sample (such as a seminar paper) which demonstrates the ability to conduct research and write effectively; and
6. Three letters of reference from academic sources or others able to judge academic abilities and potential.

In addition, an interview (in person or phone) with members of the MALACS Program and/or appropriate faculty in the Department of History is highly recommended.

## M.A. in Latin America and Caribbean Studies

Thirty-six graduate credits are required for the MALACS, including 9 credits of core courses, 12 credits within a concentration, 9 credits of electives and 6 credits for the directed research paper exit option. There is also a Foreign Language Requirement.
MALACS Core Courses: ( 9 credits)
LAS 6003 Survey of Latin America
LAS 6934 Research Seminar in Latin American and Caribbean Studies
HIS 6059

MALACS Concentration Courses: (12 credits total)

| LAH 6932 | Research Seminars in Latin American <br> History I <br> LAH 6933 <br>  <br> Research Seminars in Latin American <br> History II |
| :--- | :--- |

6 credits from the following list:
LAH $5905 \quad$ Readings in Latin American History
LAH $5935 \quad$ Topics in Latin American History
LAH 6906 Advanced Readings in Latin American History
LAH 6915 Research in Latin American History
MALACS Electives Courses: (9 credits from other areas)

## MALACS Exit Option for Combined Degree Program: (6 credits)

Preparation of two directed research papers through enrollment in 6 credits of LAS 6905 Directed Research in Latin American and Caribbean Studies. Students are strongly encouraged to revise the research paper produced in the two-semester LAH research seminar for submission one of their directed research papers. Both papers require an oral defense to be evaluated by a committee of three professors.

## MALACS Language Requirement

Each student is required to demonstrate proficiency in either Spanish or Portuguese, or in another language such as French or Haitian Creole when justified by research interests. Proficiency demonstrated by scoring an advanced level on the ACTFL exam for Spanish, Portuguese, or French administered by FIU's Department of Modern Languages. Other tests of proficiency may be accepted upon approval of the graduate advisor.

## Application for Graduation from MALACS

Students should apply for graduation for the MALACS as soon as they have completed all requirements for the degree - including the exit option. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in History.

## Ph.D. in History

Students will begin study towards the Ph.D. in History immediately following their satisfactory completion of MALACS degree requirements. Students are expected to meet all the degree requirements for the Ph.D. in History, which requires a total of 75 credits.

Courses required in addition to the degree requirements for the M.A. in Latin American and Caribbean Studies (minimum 39 credits)

| HIS 6906 | Advanced Readings in Atlantic |  |
| :--- | :--- | :--- |
|  |  |  |
| HIS 6918 | Civilization | 3 |
| 3 credits in LACS |  |  |
| 6 credits outside of LACS and Atlantic Civilization (also |  |  |
| excluding | Methods), 3 credits of which | must be in |
| comparative course (HIS or WOH prefix) |  |  |

## Language Requirements

All students must acquire reading competence in two languages other than English. The language requirement may be fulfilled in one of two ways: 1) achieving a High Pass on the department examination in one language, and at least a Pass on the second; or 2) achieving a Pass or High Pass in departmental examination in one language, and competency in social science quantitative skills, demonstrated by receiving a grade of "B" or "B+", for Pass, and "A" or "A-", for High pass, in an appropriate course approved for this purpose by the Graduate Program Director. At least one High Pass must be received. Language requirements vary, according to the concentration fields. In cases where the dissertation will be in the history of US or English-speaking countries, one language plus the quantitative skill is sufficient. In Latin American history, either Spanish or Portuguese, and a second language appropriate to the student's field are required. Language exams will be graded on a High Pass, Pass, and Fail basis; a High pass is required in the student's primary language. Students should check with the Department's Graduate Program Director to determine which languages are appropriate for their program of studies.

## Comprehensive Examinations and the Dissertation

Following completion of all course work, satisfaction of language requirements, and the constitution of a dissertation committee, students will be required to pass a written and an oral comprehensive examination. After the completion of their comprehensive examinations and the approval of a dissertation proposal by their dissertation committee, students will write a doctoral dissertation. The time needed for the research and writing of dissertations in History is variable, although doctoral candidates normally spend one year engaged in continuous field research and a second year in full-time writing.

## Restrictions

1. The grade of " $B$ " or better is required for graduate credit.
2. At the end of the second semester of residence, or upon completion of the first 18 credit-hours of work, the Graduate Committee will examine and evaluate the student's progress and prospects. Professors will provide detailed written evaluations of the work of all first-year Ph.D. students they have taught. Students whose progress is deemed insufficient will be advised to withdraw from the program.
3. No more than 6 semester-hours of Topics (5935) courses toward meeting the degree requirements, without permission of the Graduate Program Director.
4. No more than 6 semester-hours of HIS 5908 (Independent Study) toward meeting the degree requirements, without permission of the Graduate Program Director.

## Combined M.P.H in Health Policy and Management/Ph.D. in History

The combined M.P.H. with a major in Health Policy and Management/Ph.D. in History is intended for those students in the program who are in interested in
leadership positions in government, private, voluntary, and research organizations. The major is offered as a combined degree in Master of Public Health is offered by the Department of Health Policy and Management and the Ph.D. in History is offered by the Department of History. Students in this combined degree program will need to be admitted to both the M.P.H. and the Ph.D. programs. Students intending to pursue this major must check the Health Policy and Management subplan option in the application. All nine of the allowed M.P.H. elective credits will be completed in the History Department within the first two years of students' entry into the combined program. Three of those credits will be completed in HIS 6059 (Historical Methods). Students will be encouraged to pursue a public health practicum that allows them to explore historical questions and conduct qualitative research, in addition to other practicum requirements. Students will earn their M.P.H. after two full years of study (including summers), complete comprehensive exams in History immediately following their fourth year, and earn their Ph.D. after defending their dissertations, usually in or after their sixth year.

## Required Courses

First Year (Public Health: 15 PH core; 6 HPM core, 3 PH elective) (History: 9)

## Fall Semester

PHC 6102 Introduction to Public Health Policy and Management
PHC 6065 Public Health Statistics
PHC 6000 Epidemiology I: Introduction to Public Health Epidemiology

## Spring Semester

HIS 6059
Historical Methods
Health Behavior and Public Health PHC 6315 Introduction to Environmental Health
Summer Semester
PHC 6154C Evidence Synthesis Applied to Clinical Settings and Health Policy-Making
HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS) HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS)
Second Year (Public Health: 9; HPM core; 6 PH elective) (History: 12)
Fall Semester
PHC 5430C Public Health Economics HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS) PHC 6104C Public Health Management and Leadership

## Spring Semester

| PHC 6063C | Health Policy Database Applications |
| :--- | :--- |
| PHC 6155C | Health Policy Analysis |
| PHC 6945 | Practicum in Public Health (could earn |
|  | HIS credit with approval of Graduate <br> Program Director) |

## Summer Semester

PHC 6930C Integrative Seminar in Public Health (could earn HIS credit with approval of Graduate Program Director)
HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS)
HIS Readings or Topics (AFH/AMH/EUH/LAH/WOH/HIS)

## Third through Six Year

1. HIS 6059 (Historical Methods), 3 credits.
2. Readings and Research in Atlantic Civilization (HIS 6906 and HIS 6918), 6 credits.
3. 24 credits are required in the student's core culture area to be chosen from the United States, Latin America and the Caribbean, Africa, or Europe, including at least 6 credits in a research seminar.
4. 15 credits are required in geographical/topical areas outside the culture area of concentration, 3 of which must be in comparative course (WOH or HIS, not including Historical Methods or Atlantic Civilization).
5. 12 elective credits, 9 of which may be taken outside the department with the permission of the Director of Graduate Studies.
6. 15 credits of dissertation research.

## Course Descriptions

## Definition of Prefixes

AFH-African History; AMH-American History; ASH-Asian History; EUH- European History; HIS-General; LAH-Latin American History; WOH-World History.

AFH 5905 Readings in African History (3). An examination of historiographical traditions within African history. Topics will vary; with a change in theme, the course may be repeated. Prerequisite: Graduate standing.
AFH 5935 Topics in African History (3). An examination of specific themes in African history. Topics will vary. With a change in theme, the course may be repeated. Prerequisite: Graduate standing.
AFH 6915 Research in African History (3). Research in primary and secondary sources on African History. Subjects may vary. May be repeated with departmental approval. Prerequisite: Graduate standing.
AFH 6932 Research Seminar in African History I (3). Semester one of a two-semester research seminar investigating topics in African history. Topics may vary.
AFH 6933 Research Seminar in African History II (3). Semester two of a two-semester research seminar investigating topics in African history. Prerequisite: AFH 6932.

AMH 5905 Readings in American History (3). Students read books from different historiographical traditions and with conflicting interpretations about an important subject in American history. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.
AMH 5935 Topics in American History (3). An examination of specific themes or topics in American history. The theme will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). Prerequisite: Graduate standing.
AMH 6906 Advanced Readings in American History (3). Detailed analysis of a selected topic in American History. May be repeated as topics vary. Prerequisite: Graduate standing.
AMH 6915 Research in American History (3). Students conduct research in primary and secondary sources on aspects of important subjects in American History. Subjects will vary according to professor. Course may be
repeated with departmental approval. Prerequisite: Graduate standing.
AMH 6932 Research Seminar in American History I (3). Semester one of a two-semester research seminar investigating topics in American history. Topics may vary.
AMH 6933 Research Seminar in American History II (3). Semester two of a two-semester research seminar investigating topics in American history. Topics may vary. Prerequisite: AMH 6932.
ASH 5446 Readings in Japanese History (3). Students read books from different historigraphical traditions and with conflicting interpretations about a subject in Japanese history. Subject will vary according to professor. Repeat with approval. Prerequisite: Graduate standing.
ASH 5905 Readings in Asian History (3). Graduate reading seminar dedicated to issues of gender, identity, and authority in China, Japan, and other regions of Asia.
ASH 5930 Topics in Asian History (3). An examination of topics in Asian history such as gender, modernization, transnational encounters, or the intersection of culture and politics. Comparative approach emphasized.
EUH 5905 Readings in European History (3). Students read books from different historiographical traditions and with conflicting interpretations about an important subject in European history. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.
EUH 5935 Topics in European History (3). An examination of specific themes or topics in European history. The theme will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). Prerequisite: Graduate standing.
EUH 6906 Advanced Readings in European History (3). Detailed analysis of a selected topic in European history. May be repeated as topics vary. Prerequisite: Graduate standing.
EUH 6915 Research in European History (3). Students conduct research in primary and secondary sources on aspects of important subjects in European History. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.
EUH 6932 Research Seminar in European History I (3). Semester one of a two-semester research seminar investigating topics in history. Topics may vary.
EUH 6933 Research Seminar in European History II (3). Semester two of a two-semester research seminar investigating topics in European History. Topics may vary. Prerequisite: EUH 6932.
HIS 5067 Public History Theory and Practice (3). Theory and methods of history in non-academic settings, with practical interactions with professional and institutions such as museums, monuments, archives, parks, and government. Prerequisite: Graduate standing.
HIS 5084 History, Memory and the Public (3). Critical examination of theories and texts on museums, monuments, archives, historical sites, community organizations, and/or oral histories. Specific topical focus
to be determined by instructor. Prerequisite: Graduate standing.

HIS 5289 Comparative History (3). A study of specific topics in history that cut across regional, national, and chronological lines. The topics will change from semester to semester, and with a change in content, the course may be repeated. (The topic of the course will be announced in the yearly schedule). Prerequisite: Graduate standing.
HIS 5347 History of Social Thought (3). Examines the evolution of major currents in Western social thought from the nineteenth century to the present, emphasizing how these ideas have influenced historians' work.

HIS 5908 Independent Study (VAR). Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor. Prerequisite: Graduate standing.
HIS 5910 Advanced Research Seminar (3). Small group sessions will analyze particular subject areas in history, with the consent of the instructor. Prerequisite: Graduate standing.
HIS 5930 Special Topics (3). An examination of specific themes or topics in history. The theme will vary from semester to semester, and with a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). Prerequisite: Graduate standing.
HIS 5940 Supervised Teaching (1-3). The students will work under the close supervision of a regular member of the faculty in a mentorial fashion. The supervision will cover various aspects of course design and delivery in history. Prerequisite: Graduate standing.
HIS 6059 Historical Methods (3). A seminar designed to introduce the beginning graduate student to the technical aspects of the study of history. Prerequisite: Graduate standing.
HIS 6159 Historiography (3). An introduction to the discipline of history, with primary and secondary readings allowing exploration of the evolution of historical schools of thought over several generations. Prerequisite: Graduate standing.
HIS 6906 Advanced Readings in Atlantic Civilization (3). A team-taught, comparative course dealing with the interactions between at least two of the geographical fields of concentration. May focus on one or more topics. Required of all Ph.D. students during their first term of study in the program. Prerequisite: Graduate standing.
HIS 6909 Summer Doctoral Study Seminar (3). Doctoral students work under the close supervision of a member of the Graduate Faculty in a mentorial fashion in designing pre-dissertation research, preparation for comprehensive exams, and/or proposal writing for grants and fellowships to fund dissertation research. Prerequisite: Graduate standing.
HIS 6918 Research in Atlantic Civilization (3). A research seminar on cross-cultural topics, involving the comparative method. Required of all Ph.D. students in the program, during second term of residence. Topics will vary. Prerequisite: Graduate standing.
HIS 6942 Internship in Public History (3-6). Offers hands-on experience in public history and museum studies to students in public history option. Prerequisites:

Enrollment in History MA Option in Public History; permission of the instructor.

HIS 6970 Thesis Research (1-10). Research toward completion of Master's Thesis. May be repeated. Prerequisite: Permission of Department.
HIS 7980 Ph.D. Dissertation (1-12). Completion of Doctoral Dissertation. Prerequisite: Permission of Major Professor and Doctoral Candidacy.
LAH 5905 Readings in Latin American History (3). Students read books from different historiographical traditions and with conflicting interpretations about an important subject in Latin American history. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.
LAH 5935 Topics in Latin American History (3). An examination of specific themes or topics in Latin American history. The theme will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). Prerequisite: Graduate standing.
LAH 6906 Advanced Readings in Latin American History (3). Detailed analysis of a selected topic in Latin American history. May be repeated as topics vary. Prerequisite: Graduate standing.
LAH 6915 Research in Latin American History (3). Students conduct research in primary and secondary sources on aspects of important subjects in Latin American history. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.
LAH 6932 Research Seminar in Latin American History I (3). Semester one of a two-semester research seminar investigating topics in Latin American History. Topics may vary.
LAH 6933 Research Seminar in Latin American History II (3). Semester two of a two-semester research seminar investigating topics in Latin American history. Topics may vary. Prerequisite: LAH 6932.
WOH 5236 The Transatlantic Slave Trade and the Making of African Diaspora, 1441-1807 (3). Topics include slavery and economy in Africa and the Diaspora, as well as Diasporic religion, kinship, gender, sexuality, language, oral tradition, resistance, and creolization.
WOH 5237 The African Diaspora Since the End of the Slave Trade (3). Primary emphasis on history of social and intellectual movements. Topics include slave resistance, black nationalism, socialism, anticolonialism, gender, art and literature, and afrocentrism.
WOH 5935 Topics in World History (3). An examination of specific themes in World History. Topics will vary with a change in theme, the course may be repeated. Prerequisites: Permission of the instructor or graduate standing.
WOH 6227 Global Economic History (3). Global economy 1500-present. Industrialization, trade, finance, and labor in Europe, US, Asia, Latin America. Comparative economic systems. Prerequisite: Graduate standing.

WOH 6932 Research Seminar in World History I (3). Semester one of a two-semester research seminar investigating topics in World history. Topics may vary.
WOH 6933 Research Seminar in World History II (3). Semester two of a two-semester research seminar investigating topics in World history. Topics may vary. Prerequisite: WOH 6932.

# Kimberly Green Latin American and Caribbean Studies 

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Chantalle F. Verna, Associate Professor, Politics and International Relations and History
Augusta Maria S. Vono, Instructor of Portuguese, Modern Languages

The Master of Arts in Latin American and Caribbean Studies (MALACS) is a unique interdisciplinary program that allows students to design their program based on their own research and career interests. The Program is particularly valuable to those students whose research and professional interests cannot be accommodated within a single discipline. MALACS students study the religious, political, economic, social and cultural processes shaping Latin America and the Caribbean and emerge from the program with the expertise required to become leaders in a variety of fields, including education, government, non-governmental business and social services organizations, among others. Students may choose to focus on a particular country, region, discipline, or topic such as, but not limited to, migration, comparative sociology, Cuban studies, cultural studies, economics, environmental studies, foreign policy and security studies. Haitian studies, Hispanic literature, history, international business, international development, and politics/ international relations.

MALACS is administered by the FIU Kimberly Green Latin American and Caribbean Center (LACC), one of the largest area and language studies centers in the US that specializes in the region. In addition to the MALACS degree, LACC also administers joint JD/MALACS and MBA/MALACS degree programs that allow the student to receive both degrees in substantially less time than would be required to pursue each degree individually. LACC also administers partnership degree programs with the Joint Forces Staff College and the Western Hemisphere Institute for Security Cooperation (WHINSEC). More
information on joint and partnership degrees is found at the end of this section.

For further information please contact LACC Graduate Program Director, Kimberly Green Latin American and Caribbean Center, Florida International University, Modesto A. Maidique Campus DM 353, Miami, Florida 33199. Phone: (305) 348-2894; Fax: (305) 348-3593; email: MALACS@fiu.edu, or see the MALACS web site at http://lacc.fiu.edu.

## Admission Requirements

Applicants must meet the following minimum admissions requirements:

1. Completed FIU graduate application.
2. A baccalaureate degree from an accredited institution for higher education, or equivalent.
3. A grade-point average of at least 3.0 on a 4.0 scale (or equivalent) for the last two years of undergraduate study and for any post baccalaureate study.
4. Official GRE scores or other exams such as EXADEP, GMAT or LSAT.
5. A statement of purpose consistent with the goals of the program.
6. Three letters of recommendation, at least two of which must come from current or former professors.
7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
8. Application for M.A. assistantship or fellowship (if applicable).
9. Approval by the program admissions committee.

Note: The above admission requirements are minimums and not all students meeting them are assured admission. Students with either a grade-point average or GRE score below the above minimums may still apply and request conditional admission. The student must provide an explanation of why the waiver is being requested.

## Degree Requirements

The MA in Latin American and Caribbean Studies (MALACS) program is a highly flexible program requiring a total of 36 graduate credits. Required core courses include two research methods courses and an interdisciplinary course ( 9 credits). Students work with the Graduate Program advisor to design a cohesive and focused program. Fifteen credits are taken in a depth area, and six credits are comprised of breadth or elective courses for a total of 21 credits. All courses must be passed with a grade of " $B$ " or better. MALACS offers three graduation exit options that comprise six credits total (see exit options below). All courses to be counted towards the degree must have a minimum of $25 \%$ Latin American and Caribbean content and/or be a LACC approved course. Course requirements are distributed as follows:

- 9 credits, core
- 15 credits, depth (area of focus)
- 6 credits, breadth (electives)
- 6 credits, exit option


## Required Core Courses ( 9 credits)

The core courses consist of an interdisciplinary overview course in Latin America and the Caribbean and two courses in MALACS approved research methods. Firstyear MALACS students enroll in a required interdisciplinary research methods course. In their second year, students select a research methods course in their depth area from the approved list and/or with the approval of the graduate advisor. The core courses and credits are distributed as follows:

| LAS 6003 | Survey of Latin America and the |
| :--- | :--- | ---: |
| LAS 6934 | Caribbean |

## MALACS Depth Courses or Area of Focus (15 credits)

MALACS students choose to concentrate on a particular country, region, discipline, or topic that serves as the focus of their study of Latin America or the Caribbean. Disciplinary areas (e.g. business, religious studies, art history, anthropology, history, political science) emphasize training and research within a particular academic department, while topical and regional areas (e.g. migration, Cuban studies, public policy, international relations, and gender studies) cluster coursework and research around specific issues or geographic regions. A primary goal of the coursework is to advance the student's core research area and expertise.

## Breadth Requirements (6 credits)

Students select six credits from the MALACS approved course list.

All courses to be counted toward the degree must have a minimum of $25 \%$ Latin American and/or Caribbean course content.

## Foreign Language

Each student is required to demonstrate proficiency in either Spanish or Portuguese, or in another language such as French or Haitian Creole when justified by research interests. Proficiency demonstrated by scoring an advanced level on the ACTFL exam for Spanish, Portuguese, or French administered by FIU's Department of Modern Languages. Other tests of proficiency may be accepted upon approval of the graduate advisor.

Advanced level on the ACTFL exam (2+ on the US government scale) can normally be attained by students with six undergraduate semesters of language instruction (in basic, intermediate and advanced level). Attainment of the required language proficiency is the responsibility of the student and extra instruction to achieve the required proficiency level must be taken outside the MALACS curriculum. Fellowships and scholarships to study Portuguese and Haitian Creole are available to selected MALACS students. Opportunities for students to improve their language proficiency is provided in courses offered by the FIU Modern Languages Department, through special summer institute language programs, and by taking designated Foreign Language Across Curriculum
(FLAC) courses. Completion of a FLAC course meets the MALACS language proficiency requirement.

## Exit Options ( 6 credits)

MALACS students select one of the following options: LAS $6970 \quad$ Thesis 6 Students complete a thesis paper supervised by three committee members. All members of the committee must have FIU Graduate Faculty Status.

## or

LAS 6942 Internship in Latin American and Caribbean Studies
Supervised internship leading to a major research paper in Latin American and Caribbean Studies
or
LAS 6905 Directed Research in Latin American and Caribbean Studies
Students complete two directed research papers of about 35-40 pages each.

## Professional Development Activities

Students must complete a minimum of 39 points of professional development prior to graduation. A short 1-2 page response paper submitted to MALACS graduate directors and/or advisors is required as documentation for participation in the non-research paper activities. Activities may consist of the following:

- Published article (25 pts.)
- Public research proposal presentation at a conference (15 pts. per student conference; 20 for professional conference presentation)
- MALOKA (graduate student organization), University Graduate School, or other approved FIU community service, professional development or peer mentoring activities ( 3 pts. per activity)
- Attendance at LACC lectures, symposiums, colloquiums, conferences or other approved scholarly events ( 3 pts. per lecture; 6-9 pts. per conference or extended event)
Students should meet with their graduate advisor during advising sessions twice per year to discuss options for the completion of professional development points.


## M.A. in Latin American and Caribbean Studies/Ph.D. in Global and Sociocultural Studies Combined Degree Program

The combined Latin American and Caribbean Studies M.A. (MALACS)/Global \& Sociocultural Studies Ph.D. program allows qualified graduate students to pursue both degrees at the same time. Students can develop an expertise in Latin American and Caribbean Studies while progressing towards a Ph.D. in one of the three majors in the Global and Sociocultural Studies Ph.D.: geography, sociology, or anthropology.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the internetbased TOEFL (equivalent to 550 on the paper-based version) or a 6.5 overall on the IELTS is required.

## Admission Procedures

To be accepted into this program, students must submit an application to the Ph.D. in Global and Sociocultural Studies with a sub-plan for a M.A. in Latin American and Caribbean Studies. This designation will appear in the menu of programs in the graduate application. To be accepted into this program, students must submit an application by March 1 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

The following must be submitted as part of the on-line application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable.
5. Statement of purpose explaining his/her interest for enrolling in both the MALACS program and in the Ph.D. program in GSS. The statement of purpose must clearly address the applicant's academic and professional objectives for enrolling in both fields of inquiry. The statement of purpose must also indicate the intended major (anthropology, geography, or sociology) the applicant plans to select while engaged in the Ph.D. in GSS;
6. three letters of recommendation from university professors who are able to comment on the various aspects of the student's academic ability;
7. A curriculum vitae; and
8. Writing samples and other relevant professional work that may support their applications.
Degree Requirements for M.A. in Latin
American and Caribbean Studies
The 36 credits earned for the M.A. in LACC (MALACS) will count towards the 75 credits required for the Ph.D. in GSS.
MALACS Core ( 9 credits)

| LAS 6003 | Survey of Latin America |
| :---: | :---: |
| LAS 6934 | Research Seminar |
| ISS 6305 | Research Methods and Design |
| or |  |
| ISS 6317 | Social Research Quantitative Methods I |
| Courses Required for GSS Track (9 credits) |  |
| SYA 6127 | Theory and Inquiry |
| ISS 6305 | Research Methods and Design |
|  |  |

ISS 6317
SYA 6959

## Electives (12 credits)

- 6 credits of elective courses with a clear MALACS focus from within the Department of Global and Sociocultural Studies
- 6 credits of elective Courses from outside that Department and within the Green School and/or the College of Arts \& Sciences (see the MALACS Humanities and Social Sciences lists of approved graduate courses).


## MALACS Research Proposal

To graduate from the MALACS program, students enrolled in this combined M.A./Ph.D. program must elect the research proposal option and take the proposal writing course SYA 6959 Writing Research Proposals during the semester prior to enrolling in the required exit options in the MALACS program.

## MALACS Exit Options (6 credits)

Students may choose any of the exit options offered by the MALACS degree.
LAS 6790 Thesis (minimum 6 credits) See the MALACS program description for more information. The thesis is publically defended and approved by a committee of three graduate faculty members;
LAS 6905 (6 credits) Preparation of two directed research papers. Both papers require an oral presentation, defense and approval by a committee of three graduate faculty members;
LAS 6942 Internship and major research paper (6 credits). Supervised internship leading to a major research paper based upon the student's work during the internship. The research paper requires an oral presentation and approval by a committee of three graduate faculty members.

## MALACS Language Requirement

Students must demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests.

## Application for Graduation from MALACS program

Students should apply for graduation for the MALACS degree as soon as they have completed all requirements for the degree - including the exit option. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in GSS.

## Matriculation to PhD in GSS

All students must undergo a successful M.A. review upon completion of the MALACS Program requirements in order to continue toward the Ph.D. in GSS. The GSS Graduate Committee, along with an appointee from LACC, conducts these reviews. The purpose of the M.A. review is to determine the ability of the student to do Ph.D. level work with the department's faculty. Among the information considered during the review are a student's overall performance, grades in courses, and faculty recommendations.

## Degree Requirements for Ph.D. in Global and Sociocultural Studies

The doctorate in Global and Sociocultural Studies requires a minimum of 75 credits beyond the baccalaureate including a dissertation based on original research. 36 credits of the MALACS program will count toward the 75credit minimum. Thus, a minimum of 39 credits must be earned beyond the M.A.

## Major Courses (33 credits)

All doctoral students will choose a major in Anthropology, Geography, or Sociology. The following distribution of coursework is required.
(a) Major theory (3)
(b) Major methods (3)
(c) Major course electives ( 6 minimum)
(d) Exam and dissertation credits and GSS and non-GSS Department electives

- Doctoral Exam Preparation (6 maximum)
- Doctoral Dissertation (15 minimum)


## General Electives (6 credits)

GSS and non-GSS Department electives

## Ph.D. General Examination

After successfully completing the common core requirements, the major's course requirements, and electives, a student prepares for the Ph.D. General Exam by enrolling in a maximum of six credits of exam preparation for their major. In preparation for the exam, a student forms a dissertation committee according to the regulations published on the University Graduate School web page (http://gradschool.fiu.edu). The Ph.D. General Exam addresses the student's anticipated dissertation topic, and is conducted according to the University Graduate School Policies and Procedures Manual and the Department's Ph.D. General Exam guidelines.

## The Dissertation Proposal and Defense/Candidacy Exam

After passing the Ph.D. General Exam, a student works under the guidance of the dissertation committee to prepare a dissertation proposal and defend it orally before the committee. The chair of the dissertation committee must hold Dissertation Advisor Status from the University Graduate School. The proposal defense serves as the doctoral candidacy exam for the Ph.D. program in Global and Sociocultural Studies. Upon passing the proposal defense, a student is admitted to candidacy status.

## The Dissertation and Dissertation Defense

After successfully defending a dissertation proposal, a student conducts the proposed research and completes a dissertation under the guidance of a dissertation committee. Only after successfully defending the dissertation proposal may a student register for dissertation hours (ANG 7980, GEO 7980, or SYA 7980). The Ph.D. program requires a student to be continuously enrolled in a minimum of 3 hours of Doctoral Dissertation each semester from the time of advancement to candidacy until completion of the dissertation, including summers. Upon completion of the dissertation manuscript and authorization by the committee, a student defends the dissertation before the committee and the University community. The University Graduate School's regulations
governing the dissertation are described at http://gradschool.fiu.edu.

## MA in Latin American and Caribbean Studies/Ph.D. in History Combined Degree Program

The Combined Latin American and Caribbean Studies M.A./Ph.D. in History program allows qualified graduate students to complete the M.A. in Latin American and Caribbean Studies (MALACS) en route to the Ph.D. in History. Capitalizing on the intellectual affinities between the graduate programs in Latin American and Caribbean Studies and in Atlantic History, the program allows students to enroll simultaneously in both programs and to count 36 credits of coursework toward fulfillment of the requirements for both graduate degrees. The M.A. program provides a multi-disciplinary perspective on the region as well as deep expertise on the region's history, culture and political economy, while the Ph.D. Program in Atlantic History is aimed at honing students' skills in historical methods while training them to approach individual nations and regions of Latin America and the Caribbean as sites of broader exchanges along the Atlantic corridor.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.0 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.25 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores or, for International students, a minimum score of 525 on the EXADEP (Spanish version of the GRE); or a minimum of 590 on the GMAT;
4. International graduate student applicants whose native language is not English and have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the IBT TOEFL (equivalent to 575 on the paper-based version, or 232 on the computer-based version of the Test of English as a Foreign Language) is required.

## Admission Procedure

To be accepted into this program, students must submit an application to the Ph.D. in History with a sub plan for a M.A. in Latin American and Caribbean Studies. This designation will appear in the menu of programs in the graduate application. Applicants should prepare all application materials in time for the Department of History and the Office of Graduate Admissions to receive them no later than December 1 for the following year's fall admissions. Applicants will be notified of the Department's recommendation regarding their application no later than March 15.

The following documents must be submitted as part of the application. They will be reviewed by the Admissions Committee from both units.

Official transcripts of all prior college-level work (undergraduate Bachelor's degree and any graduate transcripts);

1. Official GRE scores or equivalent;
2. Official TOEFL scores, if applicable;
3. A curriculum vita;
4. A detailed statement of research interests, reasons for seeking the M.A./Ph.D., future career goals, a summary of scholarly and extra-curricular activities, and the names of History Department faculty members who would be appropriate dissertation advisors (Note: Consult the department website for information about faculty members)
5. A writing sample (such as a seminar paper) which demonstrates the ability to conduct research and write effectively; and
6. Three letters of reference from academic sources or others able to judge academic abilities and potential.
In addition, an interview (in person or phone) with members of the MALACS Program and/or appropriate faculty in the Department of History is highly recommended.

## MA in Latin America and Caribbean Studies

Thirty-six graduate credits are required for the MALACS, including 9 credits of core courses, 15 credits within a concentration, 6 credits of electives and 6 credits for the directed research paper exit option. There is also a Foreign Language Requirement.

| MALACS Core Courses: (9 credits) |  |
| :--- | :--- |
| LAS 6003 | Survey of Latin America <br> Research Seminar in Latin American <br> LAS 6934 |
| HIS Caribbean Studies |  |

## MALACS Concentration Courses: (15 credits total)

LAH 6932 Research Seminars in Latin American History I
LAH 6933 Research Seminars in Latin American History II
9 credits from the following list:
LAH 5905 Readings in Latin American History
LAH $5935 \quad$ Topics in Latin American History
LAH 6906 Advanced Readings in Latin American History
LAH 6915 Research in Latin American History

## MALACS Electives Courses: (6 credits from other areas)

## MALACS Exit Option for Combined Degree Program: (6 credits)

Preparation of two directed research papers through enrollment in 6 credits of LAS 6905 Directed Research in Latin American and Caribbean Studies. Students are strongly encouraged to revise the research paper produced in the two-semester LAH research seminar for submission one of their directed research papers. Both papers require an oral defense to be evaluated by a committee of three professors.

## MALACS Language Requirement

Each student is required to demonstrate proficiency in either Spanish or Portuguese, or in another language such as French or Haitian Creole when justified by research interests. Proficiency demonstrated by scoring an advanced level on the ACTFL exam for Spanish, Portuguese, or French administered by FIU's Department of Modern Languages. Other tests of proficiency may be accepted upon approval of the graduate advisor.

## Application for Graduation from MALACS

Students should apply for graduation for the MALACS as soon as they have completed all requirements for the degree - including the exit option. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in History.

## Ph.D. in History

Students will begin study towards the Ph.D. in History immediately following their satisfactory completion of MALACS degree requirements. Students are expected to meet all the degree requirements for the Ph.D. in History, which requires a total of 75 credits.

Courses required in addition to the degree requirements for the M.A. in Latin American and Caribbean Studies (minimum 39 credits)

| HIS 6906 | Advanced Readings in Atlantic |  |
| :--- | :--- | :--- |
|  | Civilization | 3 |
| HIS 6918 | Research in Atlantic Civilization | 3 |

## 3 credits in LACS

6 credits outside of LACS and Atlantic Civilization (also excluding Methods), 3 credits of which must be in a comparative course (HIS or WOH prefix)

## Electives

## HIS 7890 <br> Dissertation

## Language Requirements

All students must acquire reading competence in two languages other than English. The language requirement may be fulfilled in one of two ways: 1) achieving a High Pass on the department examination in one language, and at least a Pass on the second; or 2) achieving a Pass or High Pass in departmental examination in one language, and competency in social science quantitative skills, demonstrated by receiving a grade of " $B$ " or " $B+$ ", for Pass, and "A" or "A-", for High pass, in an appropriate course approved for this purpose by the Graduate Program Director. At least one High Pass must be received. Language requirements vary, according to the concentration fields. In cases where the dissertation will be in the history of US or English-speaking countries, one language plus the quantitative skill is sufficient. In Latin American history, either Spanish or Portuguese, and a second language appropriate to the student's field are required. Language exams will be graded on a High Pass, Pass, and Fail basis; a High pass is required in the student's primary language. Students should check with the Department's Graduate Program Director to determine which languages are appropriate for their program of studies.

## Comprehensive Examinations and the Dissertation

Following completion of all course work, satisfaction of language requirements, and the constitution of a dissertation committee, students will be required to pass a written and an oral comprehensive examination. After the completion of their comprehensive examinations and the approval of a dissertation proposal by their dissertation committee, students will write a doctoral dissertation. The time needed for the research and writing of dissertations in History is variable, although doctoral candidates normally spend one year engaged in continuous field research and a second year in full-time writing.

## Restrictions

1. The grade of " $B$ " or better is required for graduate credit.
2. At the end of the second semester of residence, or upon completion of the first 18 credit-hours of work, the Graduate Committee will examine and evaluate the student's progress and prospects. Professors will provide detailed written evaluations of the work of all first-year Ph.D. students they have taught. Students whose progress is deemed insufficient will be advised to withdraw from the program.
3. No more than 6 semester-hours of Topics (5935) courses toward meeting the degree requirements, without permission of the Graduate Program Director.
4. No more than 6 semester-hours of HIS 5908 (Independent Study) toward meeting the degree requirements, without permission of the Graduate Program Director.

## Combined M.A. in Latin American and Caribbean Studies (MALACS)/Ph.D. in International Relations

The Combined Latin American and Caribbean Studies M.A.International Relations Ph.D. program allows qualified graduate students to pursue graduate degrees in both areas simultaneously rather than sequentially. Students must fulfill the requirements for both programs, and up to 36 credits completed as part of the M.A. in MALACS will be counted toward the 75 credit Ph.D. in International Relations.
To be considered for admission, students must meet the following requirements:

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. (Verbal and Quantitative) Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL)
or for the International English Language Testing System (IELTS). A total score of 90 on the internetbased TOEFL (equivalent to 575 on the paper-based version) or 6.5 overall on the IELTS is required.
Although admissions decisions typically are made in the spring, decisions for students who have not yet received their bachelor's degree will be conditional, pending confirmation of the B.A. Meeting the minimum requirements does not guarantee admission into the program. All applications are subject to review by the members of the Department of Politics and International Relations and the MALACS admissions committee.

## Admission Procedures

To be accepted into this program, students must submit an application to the Ph.D. in International Relations with a sub-plan for a M.A. in LACS. This designation will appear in the menu of programs in the graduate application. The application must be submitted by January 15 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

The following must be submitted as part of the on-line application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable.
5. A statement of research interests, including reasons for seeking the M.A./Ph.D., future career goals, and a summary of scholarly preparation for this program;
6. Three letters of reference from academic sources or others able to judge academic abilities and potential; and
7. A curriculum vitae.

## Masters of Arts in Latin America and Caribbean Studies Degree Requirements (36 credits)

During their first two years of enrollment in the Combined Degree Program, students must complete 36 credits for an M.A. in Latin America and Caribbean Studies with depth or focus courses in International Relations.

## MALACS Core Courses ( 9 credits)

During their first two years of enrollment in this dual degree program, students take three core courses as follows:
LAS 6003 Survey of Latin America and the
LAS 6934 Research Seminar (first year, spring
INR 5615 semester) Relations

## MALACS Focus Courses ( 15 credits)

Students will take a minimum of 15 credits within the Department of Politics and International Relations with a Latin American and/or Caribbean focus.
MALACS Elective Courses ( 6 credits)
Student may take courses from other areas.

## MALACS Exit Options for Combined Degree Program

 (6 credits)Students may choose one of three exit options:
LAS 6970 Thesis
See the MALACS program description for more information. The thesis is publicly defended and approved by a committee of three graduate faculty members.
LAS $6905 \quad$ Directed Research in Latin American and Caribbean Studies
Preparation of two directed research papers. Both papers require an oral presentation and approval by a committee of three graduate faculty members.
LAS 6942 Internship in Latin American and Caribbean Studies
Supervised internship leading to a major research paper in Latin American and Caribbean Studies. The research paper requires an oral presentation and approval by a committee of three graduate faculty members.
Each student is required to demonstrate proficiency in either Spanish or Portuguese, or in another language such as French or Haitian Creole when justified by research interests. Proficiency demonstrated by scoring an advanced level on the ACTFL exam for Spanish, Portuguese, or French administered by FIU's Department of Modern Languages. Other tests of proficiency may be accepted upon approval of the graduate advisor.

Students should apply for graduation for the MALACS M.A. as soon as they have completed all requirements for the degree - including the exit requirements. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in International Relations.

## Doctor of Philosophy in International Relations Degree Requirements

Students will begin study towards the Ph.D. in International Relations immediately following their satisfactory completion of MALACS requirements. A minimum of 39 credits beyond the 36 credits required for the MALACS degree will be necessary to satisfy the requirements of the Ph.D. Program in International Relations.

## Program Requirements <br> 15 Core Course credits:

GEO 6473 Space, Place and Identity 3
INR 6604 International Relations Theory I 3
INR 6608 Contemporary International Relations Theory 3
INR $5609 \quad$ Contemporary Dynamics of International Relations
INR $6706 \quad$ Political Economy of International Relations

## 12 Major Field credits in either:

1. Global Institutions and Issues,
2. Comparative Area Studies,
3. Foreign Policy and Security Studies, or
4. International Law.

With advisor approval, these 12 credits may include some or all of the coursework (except INR 5615) taken in satisfaction of the requirements for the MALACS degree.

## 9 Minor Field credits in either:

1. a second field from the above major field list, or
2. a field offered within another Ph.D. program at FIU (with approval of the Graduate Program Director), or
3. a petition field (with approval of the Graduate Program Director).
With advisor approval, these 9 credits may include some or all of the coursework (except INR 5615) taken in satisfaction of the requirements for the MALACS degree.

## Elective Credits:

Elective credits necessary to bring total credits earned beyond the MALACS degree to a minimum of 24.

## Dissertation:

15 credits of dissertation research.

## Comprehensive Exams

After completing 60 hours of course work (or in the semester in which they expect to do so), students may take their written comprehensive examinations on the core sequence and in both of their fields. Students must sit for these examinations within 6 months of completing the minimum 60 hours of coursework unless granted an extension by the International Relations Graduate Program Director.

## Dissertation

Within 3 months of passing the comprehensive examinations, students should publicly present a dissertation proposal that is acceptable to a committee of at least four qualified scholars. Three members of the committee, including the dissertation supervisor, must be graduate faculty members of the Department of Politics and International Relations. One must be from outside the department, but inside FIU. Other members must be approved by the International Relations Graduate Program Director. To complete program requirements, Ph.D. degree candidates must enroll for a minimum of 15 dissertation credits and maintain enrollment for 3 credits every semester until the degree is awarded.

## Combined M.A. in Latin American and Caribbean Studies (MALACS)/Ph.D. in Political Science

The Combined M.A. in Latin American and Caribbean Studies/Ph.D. in Political Science program allows qualified graduate students to pursue graduate degrees in both areas simultaneously. Students must fulfill the requirements for both programs, and up to 36 credits completed as part of the M.A. in MALACS will be counted toward the 76 credit Ph.D. in Political Science.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.25 on any previous graduate work;
3. (Verbal and Quantitative) Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the internetbased TOEFL (equivalent to 550 on the paper-based version) or a 6.5 overall on the IELTS is required.
Although admissions decisions typically are made in the spring, decisions for students who have not yet received their bachelor's degree will be conditional, pending confirmation of the B.A. Meeting the minimum requirements does not guarantee admission into the program. All applications are subject to review by both the members of the Department of Politics and International Relations and the MALACS Graduate Committee.

## Admission Procedure

To be accepted into this program, students must submit an application to the Ph.D. in Political Science with a subplan for a M.A. in LACS. This designation will appear in the menu of programs in the graduate application. The application must be submitted by February 1 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable.
5. A statement of research interests, including reasons for seeking the M.A./Ph.D., future career goals, and a summary of scholarly preparation for this program;
6. Three letters of reference from academic sources or others able to judge academic abilities and potential.
7. A curriculum vitae; and
8. A writing sample (such as a seminar paper) which demonstrates the ability to conduct research and write effectively.

## Masters of Arts in Latin America and Caribbean Studies Degree Requirements (36 credits)

During their first two years of enrollment in the Combined Degree Program, students must complete 36 credits for an M.A. in Latin America and Caribbean Studies with depth or focus courses in Political Science.

## MALACS Core Courses ( 9 credits)

During their first two years of enrollment in this dual degree program, students take three core courses as follows:
LAS 6003 Survey of Latin America and the
LAS $6934 \quad$ Caribbean (first year, fall semester)
LAS 6934 Research Seminar (first year, spring semester)
POS 5706 Research Methods
MALACS Focus Courses ( $\mathbf{1 5}$ credits)
Students will take a minimum of 15 credits within the Department of Politics and International Relations with a Latin American and/or Caribbean focus.

## MALACS Elective Courses ( 6 credit)

Student can take courses from other areas

## MALACS Exit Options for Combined Degree Program (6 credits) <br> Students may choose one of three exit options:

LAS 6970 Thesis 6
See the MALACS program description for more information. The thesis is publicly defended and approved by a committee of three graduate faculty members.
LAS 6905 Directed Research in Latin American and Caribbean Studies

6
Preparation of two directed research papers. Both papers require an oral presentation and approval by a committee of three graduate faculty members.
LAS 6942 Internship in Latin American and Caribbean Studies
Supervised internship leading to a major research paper in Latin American and Caribbean Studies. The research paper requires an oral presentation and approval by a committee of three graduate faculty members.
Each student is required to demonstrate proficiency in either Spanish or Portuguese, or in another language such as French or Haitian Creole when justified by research interests. Proficiency demonstrated by scoring an advanced level on the ACTFL exam for Spanish, Portuguese, or French administered by FIU's Department of Modern Languages. Other tests of proficiency may be accepted upon approval of the graduate advisor.

Students should apply for graduation for the M.A. in LACS as soon as they have completed all requirements for the degree - including the exit requirements. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in Political Science.

## Doctor of Philosophy in Political Science Degree Requirements

Students will begin study towards the Ph.D. in Political Science immediately following their satisfactory completion of MALACS requirements. A minimum of 40 credits beyond the 36 credits required for the MALACS degree will be necessary to satisfy the requirements of the Ph.D. Program in Political Science.
The total of 76 credits for a Ph.D. in Political Science include the following:

## Program Requirements:

7 Required Course Credits:
POS 5702 Teaching Political Science 1
POS 5716 Foundations of Political Science 3
POS 6918 Seminar in Political Science Research Methods

## 12 Common Core Course credits:

CPO $5091 \quad$ Seminar in Comparative Politics 3
INR 5007 Seminar in International Politics 3
POS 5045 Seminar in American Politics 3
POT 5007 Seminar in Political Theory 3

## 12 Credits in Two Examination Fields from the following:

1. American Politics,
2. Comparative Politics,
3. International Politics, and
4. Political Theory.

With advisor approval, these 12 credits may include some or all of the coursework (except POS 5706) taken in satisfaction of the requirements for the MALACS degree.

## 9 Credits in Third Area Specialization:

With advisor approval, these 9 credits may include some or all of the coursework (except POS 5706) taken in satisfaction of the requirements for the MALACS degree.

## Elective Credits:

Elective credits necessary to bring total credits earned beyond the MALACS degree to a minimum of 40 .

## Dissertation:

24 Dissertation course credits.

## Comprehensive Examination

After satisfactory completion of course work, students will take comprehensive exams in their two chosen subfields before being admitted to candidacy and defending a dissertation proposal. The comprehensive exams will cover core courses and broad knowledge of the two examination fields. They will be written and oral. Comprehensive examinations are given twice yearly, in mid-September and mid-January.

## Dissertation (Minimum 24 credits)

After being admitted to candidacy, students enroll for dissertation credits under the supervision of their dissertation advisors. Candidates will prepare and defend a dissertation proposal. Upon completion of the dissertation itself, a public defense of the dissertation will be scheduled in accordance with University policy.

## Course Descriptions

## Definitions of Prefixes

FLAC - Foreign Language Across Curriculums; LAS - Latin American and Caribbean Studies.
F - Fall semester offering; S - Spring semester offering; SS - Summer semester offering.

LAS 5120 Ecuador Abroad: Andean Shamanism, Religion, and Ritual (3). Offered in conjunction with the study abroad program in Ecuador and focuses on the indigenous spirituality and religion on the Andes. Field experience includes community service, lectures, workshops. Prerequisite: Graduate standing.
LAS 5301 Culture and Society in the Rio de la Plata (3). Argentinean and Uruguayan societies through an interdisciplinary approach and a series of relevant texts. Prerequisite: Permission of the instructor.

LAS 5907 Independent Study (1-3). Supervised readings or field research and training. Prerequisite: Permission of the instructor. (F,S,SS)
LAS 5920 Teaching Latin American Studies (1). Fundamentals in the teaching of Latin American Studies. Relevance and effectiveness of various methods and strategies, as well as pedagogy-related exercises. Prerequisite: Graduate standing. (F)
LAS 5933 Graduate Seminar in Latin American Studies
(3). Exposes graduate students to interdisciplinary issues for students pursuing the MA in Latin American and Caribbean Studies. May be repeated up to 3 times with
change of topic. Prerequisite: Graduate Standing. (F,S,SS)

LAS 5955 Haiti Study Abroad (3). Study abroad examination of Haitian Politics and Society. Part of Haitian Summer Institute. Prerequisite: Graduate standing.
LAS 6003 Survey of Latin America (3). A multidisciplinary, multimedia survey of the history, politics, societies and cultures of the countries of Latin America and the Caribbean. Prerequisite: Graduate standing. (F)
LAS 6025 Seminar: The Humanities in Cuba (3). Interdisciplinary graduate seminar on the development of the humanities in Cuba, focusing on the major movements, artists and works in architecture, visual arts, literature, music and dance. FLAC course. Prerequisite: Graduate Standing. (F)
LAS 6905 Directed Research in Latin American and Caribbean Studies (3). Directed research under a major professor conducted to meet MALACS graduation requirements instead of a thesis. Two directed research courses are required. Prerequisite: Completion of all MALACS courses. (F,S,SS)
LAS 6930 Latin American and Caribbean Data Analysis (3). This course introduces students to basic empirical data analysis techniques while they complete an empirical research project in a Latin American or Caribbean topic. Prerequisite: Recommend a graduate research design course. (S)
LAS 6934 Research Seminar in Latin American and Caribbean Studies (3). Introduces students to intermediate level research methods while they complete a directed research project in Latin American and Caribbean studies. Prerequisites: LAS 6930 or equivalent. (F)

LAS 6942 Internship in Latin American and Caribbean Studies (1-6). Supervised internship leading to a major research paper in Latin American and Caribbean Studies. Prerequisite: All MALACS coursework completed. (F,S,SS)
LAS 6970 Thesis (1-6). Requires students to enroll for thesis research for at least one credit hour every semester until thesis is completed. Prerequisite: Completion of all MALACS courses. (F,S,SS)

## MALACS Approved Courses

A sample of courses approved for each MALACS concentration is provided on the MALACS web site at http://lacc.fiu.edu.
Courses approved for the MALACS program are posted each semester on the FIU Class Schedule at http://lacc.fiu.edu/catalogl. (Under "Special Programs and Certificate Programs" select "Latin American \& Caribbean Studies.") All courses listed from 5000 through 7000 series may be applied to the degree program. Approved courses are also posted each semester outside LACC (DM 353) or are available from the Graduate Program Director.

## MALACS Joint and Partnership Degree Programs

## Joint JD/MALACS Degree Program

An agreement approved by the University Graduate School, between the FIU College of Law and the Steven J. Green School of International and Public Affairs allows students to pursue simultaneously the Juris Doctor (JD) and MALACS degrees, thereby saving considerable time over pursuing each degree separately. Students must meet the entrance requirements for both the JD and MALACS programs. Fifteen credits from the law school curriculum will be allowed toward the MALACS program and will constitute a MALACS concentration in International and Comparative Law. Nine credits from the MALACS program will also count toward the law school curriculum requirements. All other requirements to receive either the JD or MALACS degree must be met. Additional information on the joint degree program is available on the College of Law and MALACS web sites.

## Joint MBA/MALACS Degree Program

An agreement approved by the University Graduate School, between the FIU Alvah H. Chapman, Jr. Graduate School of Business and the Steven J. Green School of International and Public Affairs allows students to pursue simultaneously the Master's in Business Administration (MBA) and MALACS. In doing so the student will finish both programs much sooner than if they pursue each degree separately. Students must meet the entrance requirements for both the MBA and MALACS programs. Twelve credits from the MBA curriculum will be allowed toward the MALACS program and will constitute a MALACS concentration in International Business. Nine credits from the MALACS program will also count toward the MBA curriculum requirements. All other requirements to receive either the MBA or MALACS degree must be met. Additional information on the joint degree program is available on the Chapman Graduate School of Business and MALACS web sites.

## MALACS Partnership Degree with the Joint Forces Staff College

An agreement between FIU and the Joint Forces Staff College (JFSC) of the National Defense University allows JFCS graduates to transfer 15 JFSC credits toward the MALACS degree completion requirements. Students will receive a MALACS concentration in Foreign Policy and Security Studies from JFSC courses. Students wishing to take advantage of this partnership must be accepted into the MALACS program through normal application procedures. Once accepted, students are required to take 15 credit hours of MALACS courses ( 5 classes): a research methods class, LAS 6003, LAS 6930, and two breadth courses in at least two MALACS concentrations other than Security Studies. JFSC students must also complete a MALACS exit option ( 6 credit hours) and meet MALACS language proficiency requirements. Additional information on the JFSC partnership degree program is available on the MALACS web site.

## MALACS Partnership Degree with the Western Hemisphere Institute for Security Cooperation

An agreement between FIU and the Western Hemisphere Institute for Security Cooperation (WHINSEC) allows WHINSEC graduates to transfer 15 WHINSEC credits toward the MALACS degree completion requirements. Students will receive a MALACS concentration in Foreign Policy and Security Studies from WHINSEC courses. Students wishing to take advantage of this partnership must be accepted into the MALACS program through normal application procedures. Once accepted, students are required to take 15 credit hours of MALACS courses (5 classes): a research methods class, LAS 6003, LAS 6930, and two breadth courses in at least two MALACS concentrations other than Security Studies. WHINSEC students must also complete a MALACS exit option (6 credit hours) and meet MALACS language proficiency requirements. Additional information on the WHINSEC partnership degree program is available on the MALACS web site.

## Modern Languages

Pascale S. Bécel, Associate Professor and Chairperson
Nicolas André, Instructor
Aurelio A. Baldor, Senior Instructor
Melissa L. Baralt, Associate Professor
Ferial Maya Boutaghou, Associate Professor
Jean-Robert J. Cadely, Associate Professor
Samba Camara, Visiting Instructor
Erik Camayd-Freixas, Professor
Ricardo E. Castells, Professor
James O. Crosby, Professor Emeritus
Andrea Fanta Castro, Assistant Professor
Marisa Filgueras, Assistant Professor
Maria Antonieta Garcia, Senior Instructor
Myriam Garcia, Senior Instructor
Nicola Gavioli, Assistant Professor
Maria Asuncion Gomez, Professor
Yvonne Guers-Villate, Professor Emerita
Marie D. Guiribitey, Senior Lecturer
Santiago Juan-Navarro, Professor
Naoko Komura, Instructor
Maria Krol, Lecturer
Li Ma, Senior Instructor
Peter A. Machonis, Professor
Asuka Mashav, Senior Instructor
Zablon Mgonja, Visiting Instructor
Marian Montero-Demos, Associate Professor
Magda Novelli Pearson, Instructor
Ana Roca, Professor Emerita
Renee M. Silverman, Associate Professor
Juan Torres-Pou, Professor
Augusta Maria S. Vono, Senior Instructor
Shenggao Wang, Instructor
Maida Watson-Espener, Professor
Hitomi Yoshio, Assistant Professor

## Master of Arts in Spanish

## Admission Requirements

To be admitted into the Master's degree program, a student must:

1. Hold a Bachelor's degree in Spanish from an accredited university or college. Special cases, such as holders of a degree in a related field, will be evaluated individually by the Department.
2. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
3. Have attained a minimum 3.0 grade point average ( $B$ average), during the last two years of her/his undergraduate program as determined by the FIU Graduate Admissions Office.
4. Demonstrate the ability to speak and write in Spanish with near-native fluency. Demonstrate the ability to read English with excellent proficiency. An examination may be necessary. Contact the Director of Graduate Study (305-348-2851; Modern Languages, FIU, Miami, FL, 33199). Students with deficiencies will be required to complete certain course work before beginning graduate study.
5. Apply for graduate admission to the Graduate Admissions Office and submit to the Department of Modern Languages the following documentation: a) two letters of recommendation from former professors in the format required by the Graduate Studies Committee, b) a resume, c) a statement of purpose in English or Spanish, addressing the candidate's goals and objectives in pursuing a master's degree in Spanish, and d) a writing sample in Spanish, preferably a term paper or thesis, of analytical nature, on a literary subject.
6. Receive approval of the departmental graduate committee. Admission is competitive and meeting all minimum requirements does not guarantee automatic entrance into the program.

## Degree Requirements

The Master's degree program consists of 33 semester hours of graduate level work. A maximum of six credits of graduate course work may be transferred into the program from other institutions, subject to the approval of the departmental graduate committee. Six core courses and three elective courses are required at the 5000-and 6000level. Some courses have prerequisites which do not count toward the degree. All core courses in literature must be taken with or after SPW 5806. Courses taken before SPW 5806 are considered to be electives.
Core Courses: (18 credits)
SPW 5806 Methods of Literary Research 3
$\begin{array}{ll}\text { FOL } 5943 & \text { Foreign Language Teaching } \\ & \text { Methodology }\end{array}$
One course in peninsular Spanish Literature of the 19th or $20^{\text {th }}-21^{\text {st }}$ centuries. 3
One course in either Medieval Spanish Literature or Literature of the Golden Age.
Two courses in Spanish American Literature. (Colonial or $20^{\text {th }}-21^{\text {st }}$ centuries)

## Electives

A student must take at least nine graduate credits of electives, as follows: three in Spanish or Latin American literature, and six from one or more of the following areas: Spanish or Spanish American literature, Linguistics, Translation/Interpretation, or Culture of Spain, Latin America or Hispanics in the United States.

## Graduation Requirements

To receive the M.A. degree in Spanish, a student must complete all the course work with a 3.0 GPA or higher, and receive a minimum grade of ' B ' in every course. Upon completion of 27 graduate credits (core and elective courses), students will have the option of writing a thesis (equivalent to six credits), or taking two elective courses and writing a research paper. The thesis will be presented to an ad hoc committee chosen by the student and his or her advisor. The research paper must be submitted to a committee of two professors of the Department. Upon completion of 33 credits, the student will be required to take Comprehensive Examinations, based on course work and on the Department's Graduate Reading List (the exams must be passed with a minimum grade of ' $B$ '; they may be taken no more than twice).

## Master of Arts in Spanish (en route Ph.D. track)

## Admission Requirements

Only students who have been admitted to the Ph.D. program without previously receiving an M.A. in Spanish or Spanish-American literature are eligible to pursue this track.

## Degree Requirements

1. Completion of 39 hours of graduate course work in Spanish and Spanish-American Literature, including 18 credits of core courses:
SPW 5806 Methods of Literary Research 3
FOL $5943 \quad$ Foreign Language Teaching Methodology
One course in peninsular Spanish Literature of the 19th or $20^{\text {th }}-21^{\text {st }}$ centuries.
One course in either Medieval Spanish Literature or Literature of the Golden Age.
Two courses in Spanish American Literature. (Colonial or $20^{\text {th }}-21^{\text {st }}$ centuries)

All course work must be taken at FIU, and receive a grade of "B" (3.0) or better.
2. Approval of this option by the Spanish Graduate Committee members, who will determine if the student is making satisfactory progress towards the Ph.D.

## Combined BA/MA in Spanish

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000 -level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the BA in Spanish at FIU.
2. Current GPA must be 3.5 or higher.
3. Completed at least $75-90$ credits of course work.
4. Two letters of recommendation.
5. A writing sample consisting of a research paper in Spanish of an analytical nature - preferably a term paper or thesis - on a literary subject.
6. A resume.
7. A statement of purpose, addressing the candidate's goals and objectives in pursuing a master's degree in Spanish.
8. Approval of the Spanish Graduate Committee.

## Completion Requirements

Required Courses for the BA: (33 credits)
SPN 3301 Review Grammar and Writing* 3
SPN 3343 Advanced Spanish for Native Speakers* 3
SPN 3422 Advanced Grammar and Composition* 3
SPW $3820 \quad$ Peninsular Spanish Literature 3
SPW 3130 Spanish American Literature 3
SPN $3733 \quad$ General Linguistics (or equivalent) 3
One additional course in Spanish Linguistics 3
One additional course in Spanish 3
or
Spanish American Literature
*(Students who have advanced proficiency in Spanish may replace the six language credits with electives in Spanish at the 3000 or 4000 level with the written permission of their advisors).

## Electives

Twelve credits of electives

## Overlap

Nine credits will be taken at the 5000 or 6000 level and may be used to satisfy both the Bachelor's and Master's degree requirements.
Required Courses for the MA: ( $\mathbf{3 3}$ credits)

| SPW 5806 | Methods of Literary Research <br> FOL 5943 | Foreign Language Teaching <br> Methodology |
| :--- | :--- | :--- |
|  |  | 3 |

One course in either Medieval Spanish Literature 3
or
Literature of the Golden Age 3
One course in Peninsular Spanish Literature of the 19th or the 20th centuries
Two courses in Spanish American Literature 6

## Electives

Six graduate credits of electives, as follows: 3 in Spanish or Spanish American Literature, and 3 from one or more of the following areas: Spanish or Spanish American Literature, Linguistics, Translation/Interpretation, or Spanish American Culture.

## Comprehensive Exams

The comprehensive examinations should be taken the semester immediately following the completion of all course work.

## Doctor of Philosophy in Spanish

The doctoral program in Spanish offers students the opportunity to specialize in one of two major fields: Peninsular Spanish Literature or Spanish American Literature. Minors are available in Peninsular Spanish Literature, Spanish American Literature, and Hispanic Linguistics.

## Admission Requirements

To be admitted to the doctoral program, a student must:

1. Hold a Bachelor's degree in Spanish from an accredited college or university. Special cases, such as holders of a degree in a related field, will be evaluated individually by the Department.
2. Demonstrate the ability to speak, understand, read, and write in Spanish with native or near-native fluency. Demonstrate the ability to speak and read in

English with excellent proficiency. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
3. Have attained a minimum 3.0 grade point average ( $B$ average), during the last two years of her/his undergraduate program as determined by the FIU Graduate Admissions Office, and submit GRE or EXADEP scores. Applicants with Master's degrees are required to have a graduate GPA of 3.5 in all graduate courses.
4. Apply for graduate admission to the Admissions Office and submit to the Department of Modern Languages the following documentation: a) two letters of recommendation from former professors in the format required by the Graduate Studies Committee, b) a resume, c) a statement of purpose in English, addressing the candidate's goals and objectives in pursuing a doctorate in Spanish, and d) a writing sample in Spanish, preferably a term paper or thesis, of analytical nature, on a literary subject.
5. Receive approval of the departmental Graduate Studies Committee. Admission is competitive, and meeting all minimum requirements does not guarantee automatic entrance to the program.

## Degree Requirements

The doctoral program consists of 75 semester hours of graduate level work beyond the Bachelor's degree, distributed as follows: 57 graduate credits of courses and 18 credits of dissertation. Students holding Master of Arts degrees in Spanish or Hispanic Studies will be considered for admission and some or all of their graduate credits may be counted toward the doctoral degree after being evaluated and approved by the Graduate Studies Committee. Students will be able to transfer a maximum of 33 graduate credits from an earned graduate degree.

## Core Courses: ( 9 credits)

All core courses must be taken as graduate courses offered by the university and may not be taken as independent studies:

1. SPW 5806 Methods of Literary Research
2. FOL 5943 Foreign Language Teaching Methodology
3. SPW 6825 Literary Theory and Criticism

## Distribution Requirement: ( $\mathbf{1 5}$ credits)

All students must take:
One course in Medieval or Golden Age Peninsular Spanish Literature
One course in Peninsular Spanish Literature of the 18th21st century
One course in Colonial/19th century Spanish American Literature
One course in 20th century Spanish American Literature One additional course in Spanish American Literature
Electives: (33 credits)
Students may choose from graduate courses in Hispanic literature, linguistics, culture, and translation/interpretation.

## Dissertation: (18 credits)

## Graduation Requirements

To receive a Ph.D. in Spanish, a student must complete all courses with a GPA of 3.0 or higher, and receive a minimum grade of ' $B$ ' in every course. Before graduation the student must demonstrate a reading knowledge of a language other than English or Spanish, chosen by the student in consultation with her/his adviser. Upon completion of 57 graduate credits beyond the Bachelor's degree, students must take a qualifying written examination which will determine whether they are permitted to continue their studies toward the doctorate or whether they should be terminated, with or without a master's degree. Qualifying examinations must be passed with a minimum grade of ' B ' and may not be taken more than twice. A student is formally considered a doctoral candidate upon successful completion of the examinations and the approval of a dissertation proposal. Students must write and successfully defend a doctoral dissertation before a committee of three graduate faculty members from the Department of Modern Languages and an FIU graduate faculty member from a different department.

## Course Descriptions

## Definition of Prefixes

CAT-Catalan Language; FIL-Film; FOL-Foreign Languages; FOT-Foreign Languages in Translation; FOWForeign Languages, Comparative Literature; FRE-French Language; FRT-French Translation; FRW-French Literature (Writings); GER-German Language; HAI-Haitian Creole Language; JPT-Japanese Culture in Translation or Translation Skills; JPW-Japanese Literature (Writings); LIN-Linguistics; SPN-Spanish Language; SPT-Spanish Translation; SPW-Spanish Literature (Writings); TSLTeaching English as a Second Language.
(See English listing for additional Linguistics courses.) Application of basic language skills.

CAT 5505 Introduction to Catalan Culture, Literature and Language (3). Catalan culture and society through literary and visual texts. Provides also an introduction to Catalan language. Prerequisite: Advanced level of Spanish.

FIL 5825 Spanish Film (3). The history of film in Spain and discussions of films by the most important 20th Century directors.

FIL 5846 Latin American Film (3). The study of 20th Century films and documentaries produced by leading Latin American directors. Films are examined in relation to Latin American Society and its literary creations.
FOL 5735 Romance Linguistics (3). The common and distinctive Romance features. Survey of linguistic geography and internal/external influences.
FOL 5906 Independent Study (1-3). Project, field experience, readings, or research.
FOL 5943 Foreign Language Teaching Methodology (3). Explores communicative approaches to foreign language teaching and learning. Prerequisite: Graduate standing.
FOL 5945 Foreign Exchange Internship (0). Foreign exchange students perform graduate research in the

Department of Modern Languages and English as a corequisite to their assistantship in the Modern Languages Department.
FOT 5125 Literature in Translation (3). Masterpieces of world literature. Open to students who are proficient in more than one language.
FOT 5805 Translation/Interpretation Arts (3). The language barrier and translation and interpretation. Types, modes, and quality of T/I: philological, linguistic, and sociolinguistic theories. History of $\mathrm{T} / \mathrm{I}$ from Rome to date. The impact of $\mathrm{T} / \mathrm{I}$ on Inter-American developments. Prerequisites: Graduate standing or permission of the instructor.

FOW 5395 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).
FOW 5545 Bicultural Writings (3). Experiment in linguistic pluralism. Content and focus to be determined by the international community.
FOW 5587 Comparative Studies (3). Cross-over and distinctiveness in a multi-language problem, period, or aesthetic.
FOW 5934 Special Topics in Language/Literature (3). Content and objectives to be determined by students and teacher.
FOW 5938 Graduate Seminar (3). Topic and approach to be determined by students and instructor. (Approval of the Department required.)
FRE 5060 Language for Reading Knowledge I (3). Designed primarily for graduate students who wish to attain proficiency for M.A. and Ph.D. requirements. Open to any student who has no prior knowledge of the language.
FRE 5061 Language for Reading Knowledge II (3). Emphasis on translation of materials from the student's field of specialization. Prerequisites: FRE 5060 or equivalent..
FRE 5508 La Francophonie (3). Analysis of the different varieties of French spoken outside of France. Includes Quebec French, African French, and French Creoles. Also examines the political alliance of Francophone countries. Credit will not be given for both FRE 4503 and FRE 5508. Prerequisite: Graduate standing.
FRE 5735 Special Topics in Linguistics (3). Content to be determined by students and instructor. Prerequisite: Graduate standing.
FRE 5755 Old French Language (3). Introduction to the phonology, morphology, and syntax of the Old French language. Reading and analysis of the 12th and 13th century texts in their original. Comparison of major medieval dialects. Prerequisite: Graduate standing.
FRE 5845 History of the Language I (3). The internal and external history of the French language from Latin to Old French. Examination of some of the first texts written in French. Credit will not be given for both FRE 4840 and FRE 5845. Prerequisite: Graduate standing.
FRE 5846 History of the Language II (3). External and internal history of the French language from 1400 to the present. Examination of first dictionaries and grammars of

French. Survey of recent linguistic legislation concerning the French language. Credit will not be given for both FRE 4841 and FRE 5846. Prerequisite: Graduate standing.
FRE 5855 Structure of Modern French (3). Systematic study of the phonology, morphology, syntax, and lexicon of Modern French. Taught in English. Credit will not be given for both FRE 4850 and FRE 5855. Prerequisite: Graduate standing.
FRE 5908 Independent Study (1-3). Project, field experience, readings, or research. Prerequisite: Graduate standing.
FRT 5805 Translation/Interpretation Arts (3). Techniques of professional translation and interpretation. Prerequisite: FRT 4801.
FRW 5395 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama). Prerequisite: Graduate standing.
FRW 5934 Special Topics in Language Literature (3). Content and objectives to be determined by student and instructor. Prerequisite: Graduate standing.
FRW 5938 Graduate Seminar (3). Topic and approach to be determined by students and instructor. Prerequisite: Graduate standing.
GER 5060 German for Reading Knowledge (3). Designed primarily for graduate students who wish to attain proficiency for M.A. or Ph.D. requirements. Open to any student who has no prior knowledge of the language.
GER 5061 German for Reading Knowledge (3). Emphasis on translation of materials from the student's field of specialization. Prerequisites: GER 5060 or the equivalent.
HAI 5235 Haitian Creole Seminar (3). A study of the phonological and morpho-syntactic structures of Haitian Creole. Patterns of language usage and attitude. Prerequisite: Graduate standing.
JPT 5396 Japanese Literature and Film (3). A critical overview of modern Japanese literature and film, addressing socio-cultural and philosophical issues in the context of historical and cultural transformations. Prerequisites: Graduate student status or permission of the instructor.
JPW 5133 Advanced Reading and Translating Japanese Literature (3). Close reading of wide range of literacy texts in Japanese across genres. Students will learn to read and analyze authentic material in the original language, as well as the methods and techniques of literacy translation. Prerequisites: Graduate student status or permission of the instructor.
LIN 5207C Acoustic Phonetics (3). Introduction to principles of acoustic and instrumental phonetics, including the physics of speech sounds and use of the sound spectrograph and other instruments. Prerequisites: LIN 3010, LIN 3013, or SPN 3733, or the equivalent, plus one additional course in phonetics or phonology. Corequisite: One of the prerequisites may be counted as a co-requisite.
LIN 5601 Sociolinguistics (3). Principles and theories of linguistic variation with special attention to
correspondences between social and linguistic variables. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5603 Language Planning: Linguistic Minority Issues (3). Introduction to the field of language planning. Minority linguistic issues in developing and developed nations: official languages, endangered languages, and language as problem and/or resource. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5604 Spanish in the United States (3). An examination of the sociolinguistic research into Spanish in the U.S.: varieties of Spanish, language attitudes, language contact and change, and aspects of language use. Prerequisites: LIN 3010, LIN 3013, or SPN 3733 or the equivalent.
LIN 5613 Dialectology (3). The geography of language variation: linguistic geography, atlases, national and regional studies. Dialectology within a modern sociolinguistic frame work; research approaches. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5625 Studies in Bilingualism (3). Readings and analysis of bilingual programs and binational goals. Prerequisites: LIN 3010, LIN 3013, LIN 5018 or the equivalent.
LIN 5689 Seminar in Lexicon Grammar (3). This course introduces students to research in Lexicon Grammar -syntactic analyses based on a formal classification of large portions of the lexicon. Idioms and NLP applications are also discussed. Prerequisites: LIN 5018 and one structure course (e.g. LIN 5501, SPN 5705, or FRE 5855).
LIN 5720 Second Language Acquisition (3). Research, theories, and issues in second language acquisition. Topics include the Monitor Model, the role of the first language, motivation, age, individual differences, codeswitching, and the environment; affective variables and attitudes.

LIN 5725 Seminar: Issues in Language Learning (3). Seminar in applied linguistics to serve as introduction to theory, research, and practice in language. Examines difficulties experienced in learning syntax, oral comprehension, usage, etc. Prerequisites: LIN 3010, LIN 3013, SPN 3733 or equivalent.
LIN 5760 Research Methods in Language Variation (3). Research in sociolinguistics, dialectology, bilingualism: problem definition, instrument design, data collection and analysis, including sampling techniques and statistical procedures. Prerequisites: LIN 5601, LIN 5625, LIN 5613 or other course in variation.
LIN 5825 Pragmatics (3). Study of the relationships between language form, meaning, and use. Special emphasis on speech act theory. Prerequisites: LIN 3010, LIN 3013, or SPN 3733 or the equivalent.
LIN 6571 Discourse Analysis (3). The study of the organization of language above the sentence level, such as conversational interactions and written texts. Prerequisites: LIN 3010, LIN 3013, or the equivalent.
LIN 6608 Seminar on Language, Race Identity, Nation and Power (3). Explores the historical and social use of
language in the construction of race, nation, identity and power. Prerequisite: Graduate standing.

LIN 6934 Special Topics in Linguistics (3). Content to be determined by students and instructor. (Approval of the Department required.) (See English listing for additional Linguistics courses.)
SPN 5060 Language for Reading Knowledge (3). Designed primarily for graduate students who wish to attain proficiency for M.A. or Ph.D. requirements. Open to any student who has no prior knowledge of the language.

SPN 5061 Language for Reading Knowledge (3). Emphasis on translation of materials from the student's field of specialization. Prerequisites: SPN 5060 or the equivalent.
SPN 5515 Cultural Representations of the Spanish Civil War (3). Representations for the Spanish Civil War in literature, film, and the other arts.

SPN 5525 Spanish American Culture (3). A graduate survey of the major artistic phenomena in Latin America. Art, music, film, and literature will be discussed in their cultural context. Prerequisites: Graduate standing and permission of the instructor.
SPN 5536 Afro-Cuban Culture (3). Explores the role played by blacks in Cuban culture. Issues studied include: Afro-Cuban religions, languages, and music, as well as the Afro-Cuban presence in literature and the arts.
SPN 5539 Special Topics in Afro-Hispanic Culture (3). Close examination of various topics related to the culture of African Diaspora groups in the Hispanic world.
SPN 5705 The Structure of Spanish (3). Diachronic and synchronic study of the structures of the Spanish language (phonetic, morphosyntactic, and lexical). Also considers pedagogical considerations for teaching structures. Prerequisites: LIN 3010, LIN 3013, SPN 3733 or equivalent.
SPN 5725 Syntactic Structures of Spanish and English (3). An in-depth study of syntactic structures in Spanish and English, with an emphasis on how linguistic theory can account for the similarities and differences between the two languages. Prerequisites: LIN 3010, LIN 3013, SPN 3733 or equivalent.

SPN 5736 Spanish as a Heritage Language: Acquisition and Development (3). Examines applied linguistics research and practice concerning acquisition, retention and literacy development of Spanish as a minority or heritage language in the United States. Prerequisites: LIN 3010, LIN 3013, SPN 3733 or equivalent or permission of instructor.
SPN 5805 Morphological Structures of Spanish and English (3). A survey of the morphologies of Spanish and English. Topics include the difference between isolating and synthetic languages, rich vs. impoverished agreement, and syntactic ramifications of morphology. Prerequisites: LIN 3010, LIN 3013, SPN 3733 or equivalent.

SPN 5807 Syntactic Structures of Spanish (3). The study of syntactic structures in Spanish, topics include different syntactic approaches to current issues in Spanish syntax. Prerequisites: LIN 3010, LIN 3013, SPN 3733 or equivalent.

SPN 5845 History of the Language (3). Historical development of the Spanish language, primarily from the point of view of internal linguistic change. Spanish as an example of general processes of language development. Prerequisites: LIN 3010, LIN 3013, SPN 3733 or equivalent.
SPN 5908 Independent Study (1-3). Project, field experience, readings, or research.
SPN 6395 Latin American Literature and Film in an Age of Globalization (3). Examines the latest trends in Latin American literature and film in light of the cultural dynamics of globalization.
SPN 6505 Spanish Culture (3). Selected development in language, literature, art, music, film, and the social institutions of Spain. Prerequisites: Graduate standing or permission of the instructor.
SPN 6535 Hispanic Culture in the U.S. (3). Readings in literature, culture, and language to illustrate the experience of the major Hispanic groups in the United States. Prerequisites: Graduate standing or permission of the instructor.
SPN 6795 Phonological Structure of Spanish (3). Approaches to current issues in Spanish phonology. Linguistic methodology for the analysis of phonological processes in Spanish. Prerequisite: Graduate standing.
SPN 6825 Hispanic Dialectology (3). A study of the principal varieties of the Spanish language in the Spanishspeaking world, with special emphasis on Latin American Spanish. Prerequisite: Graduate standing.
SPN 6930 Special Topics in Linguistics (3). Content to be determined by students and instructor. (Approval of the Department required.)
SPN 6970 Thesis Research (1-10). Research toward completion of Master's Thesis. Repeatable. Prerequisite: Permission of the Department.
SPN 7980 Ph.D. Dissertation (1-12). Research toward the completion of a doctoral dissertation. Repeatable. Prerequisite: Permission of the Major Professor and Doctoral Candidacy.
SPT 5118 Literature in Translation (3). Masterpieces of world literature. Open to students who are proficient in more than one language.
SPT 5715 Hispanic Women Writers in Translation (3). Readings and analysis of Spanish and Spanish American women writers in translation. Emphasis on cultural and linguistic considerations involved in the translation of literary texts. Prerequisites: Graduate standing or permission of the instructor.
SPW 5135 Spanish American Literature for Teachers (3). Overview of major trends in Spanish American literature. Especially designed for school teachers and majors in modern language education. Not for M.A. or Ph.D. Spanish majors. Prerequisite: Permission of the instructor.
SPW 5155 Comparative Studies (3). Cross-over and distinctiveness in a multi language problem, period, or aesthetic.
SPW 5225 Textual Reading and Analysis (3). Studies how texts are constructed, the role played by Poetics and

Rhetoric in their formulation, and the context in which they were produced. Prerequisite: Graduate standing.
SPW 5237 The Traditional Spanish American Novel (3). Study and analysis of the traditional Spanish novel as a form of art, from 19th century Lizardi's "El periquillo sarniento", to 1950. The novels and authors studied are representative of 'costumbrismo', 'romanticismo', 'naturalismo', 'modernismo', and 'criollismo'.
SPW 5277 Twentieth Century Spanish Narrative (3). Analysis of the Spanish novel from Ferlosio's "El Jarama" to the present. The perspective will be focused within historical, social, and artistic context. Representative authors such as Cela, Martin Santos, Umbral, Delibes, Benet, Goytisolo, and others will be included.
SPW 5286 Contemporary Spanish American Novel (3). A study of the Spanish American Novel from 1950. The course will intensively and extensively focus on the novelists who are best known for their innovations, defining and analyzing the qualities which give originality and newness both in themes and language.
SPW 5348 Avant-Garde Spanish Poetry: From Creacionismo to Lorca (3). Analysis of the significance of the avant-garde as well as vanguard poetry during Spain's Silver Age. Contrast Spanish avant-garde poetry with modernism. Discuss F.G. Lorca and the Generation of 1927. Prerequisites: Graduate status. Advanced knowledge of Spanish language. At least one course in Spanish literature (level 4 or higher).
SPW 5349 Modern Spanish Poetry: The 19TH and 20TH Centuries (3). A complete examination of the 19thand 20th century Spanish peninsular poetry and related critical studies. Prerequisite: Graduate students status.
SPW 5358 Graduate Seminar: Prose and Poetry of Jorge Luis Borges (3). Close readings of short stories and poetry. Emphasis on Borge's linguistic and cultural pluralism and the interplay of philosophy with fabulation.
SPW 5388 Travel Writing and Cultures in Spanish Literatures (3). Studies Spanish and Spanish American travel literature and representation of otherness through different literary critical approaches.
SPW 5396 History of Cuban Cinema (3). Overview of Cuban Cinema, from its origins to the present.
SPW 5398 Africanism in Spanish Literature and Film (3). Studies the literary and artistic production generated by Spanish relationship with African cultures, as well as Afro-Spanish literature.
SPW 5405 Medieval Spanish Literature (3). Readings in Medieval literature of Spain including the epic, the learned poetry of the XIIIth and XIVth Centuries, and the literature of Juan II's court. Prerequisites: Graduate standing or permission of the instructor.
SPW 5407 The Renaissance in Spain (3). Readings in the literature and cultural expressions of the Spanish Renaissance. Prerequisites: Graduate standing or permission of the instructor.
SPW 5428 Theatre in Calderon and Lope (3). The creation of verbal theatrical technique in the Baroque masters Calderon de la Barca and Lope de Vega.

SPW 5436 Poetry Writing in Spanish (3). Readings from Spanish and Latin American texts; description and recreation of traditional and experimental metrics. Students will exchange critiques of original poems. Prerequisites: sample of unpublished poems; wordprocessing literacy; permission of the instructor.
SPW 5475 19th Century Latin American Literature (3). A study of the main literary works of Spanish speaking 19th Century Latin America: Romanticism, Realism, Naturalism and Modernism. Prerequisites: Upper level and graduate standing.
SPW 5486 Modern Spanish Women Writers (3). Analysis of narrative works by Spain's most representative women writers from the 19th century to the present. Emphasis on the novel. Includes works by Pardo Bazan, Matute, Laforet, Martin Gaite. Prerequisites: Graduate standing or permission of the instructor.
SPW 5515 Advanced Studies in Hispanic Folklore (3). Studies the oral literary and linguistic tradition of the Hispanic world. Prerequisites: Graduate standing or permission of the instructor.
SPW 5535 Hispanic Romanticism (3). A transatlantic approach to literary production of Hispanic Romanticism. Prerequisite: Graduate standing.
SPW 5546 Hispanic Neoclassicism (3). Study of major Spanish and Spanish-American Neoclassic writers: Cadalso, Moratin, Jovellanos, Carrio de la Vandera, Mier and Lizardi. Prerequisite: Graduate Standing.
SPW 5556 Spanish Realism and Naturalism (3). Readings in Spanish XIXth Century Novel of Realism and Naturalism including Alarcon, Perez Galdos, Pardo Bazan, Clarin and Blasco Ibanez. Prerequisites: Graduate standing or permission of the instructor.
SPW 5575 Spanish American Modernism (3). An indepth study of prose and poetry of one of the most important periods of Spanish American literature, focusing on Marti, Dario, Najera, Casals, Silva, Valencia, Lugones, and Herrera y Reissig.
SPW 5585 Learning Technology in Spanish Pedagogy and Research (3). Exploration of the role of technology in today's language and literature learning environment. Overview of the WWW, Network-based communication, and electronic databases related to Hispanic language and literature. Prerequisites: Graduate standing or advanced undergraduate with permission of the instructor.
SPW 5595 Magical Realism and Typologies of NonRealist Fiction (3). Theories of magical realism, fantastic and non-realist fiction, focusing on narrative technique. Authors may include Onetti, Borges, Cortázar, Asturias, Carpentier, Rulfo, Márquez, Allende or others. Prerequisites: Graduate standing or permission of the instructor.
SPW 5606 Cervantes (3). A comprehensive introduction to the master-pieces of Cervantes as the creator of the modern novel, and to critical theories about his art.
SPW 5727 Hispanic Noventaiochism (3). Studies in narrative tendencies at turn of the century in Spanish and Spanish American literary production.
SPW 5729 Major Writers of the Generation of '98 (3). Study of the social and political circumstances of Spain at
the turn of the XIX Century, and analysis of the work of Ganivet, Azorin, Baroja. Machado, Maeztu, Unamuno and Valle-Inclan. Prerequisites: Graduate standing or permission of the instructor.
SPW 5735 Hispanic Literature of the United States (3). Readings in the literature of Hispanics in the United States. Prerequisites: Graduate standing or permission of the instructor.
SPW 5776 Black Literature in Latin America (3). An examination of the different genres in Latin American literature focusing on the life of Afro-Hispanics, from the beginning of this literary tradition to the present time. Prerequisite: Graduate standing.
SPW 5781 The Representation of Women in Spanish Literature and Film (3). Study of cinematographic adaptations of Spanish novels, plays and short stories. Analyzes the representation of the female subject in both literary and film works. Prerequisites: Graduate standing or permission of the instructor.
SPW 5786 Spanish American Women Writers (3). Through a selection of poems, plays and novels, this course studies Spanish American women production from Independence to the present times. Prerequisite: Graduate students only.
SPW 5806 Methods of Literary Research (3). Introduction to bibliography, methods of research, the composition of essays, rhetoric, and the presentation of documentation. Theory of literary criticism, and its practical application to texts in Spanish.
SPW 5934 Special Topics in Language/Literature (3). Content and objectives to be determined by student and instructor.
SPW 6238 Spanish American Historical Novel (3). The evolution of the historical novel in Spanish America from the Romantic period to the present. Stylistic, literary, and theoretical analysis of selected traditional and recent historical novels. Prerequisite: Graduate standing.
SPW 6216 Golden Age Prose (3). Analysis of representative prose works from 16th and 17th century Spain. Emphasis will be on the picaresque novel, the pastoral novel, autobiography, and the short story. Prerequisite: Graduate standing.
SPW 6335 Golden Age Poetry (3). An examination of major poetics (1450-1650); emphasis on historical/cultural contexts. Prerequisite: Graduate standing.
SPW 6345 Twentieth Century Spanish Poetry (3). Close reading of two of the greatest poets of the 20th century (Jorge Guillen; F. Garcia Lorca) and of major voices from the Generation of 1927 and from post-Franco Spain. Emphasis on cultural contexts. Prerequisite: Graduate standing.
SPW 6366 Studies in the Spanish American Essay (3). Stylistics of the essay, neoclassic to postmodern, as reflecting the intellectual spirit of the times. Analysis of arguments and methods of cultural epistemology in Bolivar, Marti, Paz and others. Prerequisite: Graduate standing.
SPW 6367 Prose and Poetry of Jose Marti (3). Study of Jose Marti's prose and poetry within the aesthetic and ideological contexts which characterize the discourse of

Spanish American Modernism. Prerequisite: Graduate standing.
SPW 6368 19 $^{\text {th }}$ Century Spanish-Caribbean Narrative (3). Studies the most popular literary trends of $19^{\text {th }}$ century literature through the works of various Spanish-Caribbean writers. Prerequisite: Graduate standing.
SPW 6389 Cuban Novel and Short Story (3). Critical reading of representative texts of the Cuban novel and short story from XIX century to contemporary narrative expressions, within historical, social and artistic context. Prerequisite: Graduate standing.
SPW 6395 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry,) or the study of interaction between literary types (e.g. novel and drama).
SPW 6495 The Latin American Experience Literature and Film (3). Literary and cinematic representations of significant periods in the formation of Latin American politics, culture, and identity. Prerequisite: Graduate standing.
SPW 6716 Seminar in Galdós (3). An in-depth study of the novels by Benito Pérez Galdós. Stylistic and theoretical analysis of a selection of Galdós' works, especially his novelas españolas contemporáneas (contemporary Spanish novels). Prerequisite: Graduate standing.

SPW 6775 Literature of the Spanish Caribbean (3). Close readings of representative texts of the literature of the Dominican Republic, Cuba and Puerto Rico. Emphasis on the characteristics of the literary discourse within the context of a regional literature. Prerequisite: Graduate standing.
SPW 6825 Literary Theory and Criticism (3). Study of the theoretical foundation of literature and contemporary systems of critical approach to literary discourse. Prerequisite: Graduate standing.
SPW 6826 The Historiography of Literature (3). Methodology and theory in the writing of literary history: periodization, continuity and change, literature in intellectual history. Prerequisite: Graduate standing.

SPW 6936 Graduate Seminar (3). Topic and approach to be determined by students and instructor. Prerequisite: Approval of the Department.
SPW 7910 Pre-Dissertation Research (1-9). Enables students to concentrate on completion of their dissertation prospectus during the term in which they take Ph.D. comprehensive exams. Prerequisite: Completion of all other Ph.D. coursework.
TSL 6348 Task-Based Language Teaching (3). Introduction to task-based approaches to language teaching and learning. Emphasis is on researching and learning how to design tasks to maximize second language acquisition in the classroom.

# Politics and International <br> Relations 

John F. Clark, Professor and Acting Chair
Iqbal Akhtar, Assistant Professor
Astrid Arrarás, Senior Lecturer and Associate Director of Undergraduate Studies
Alexander Barder, Assistant Professor
Kenneth Boodhoo, Professor Emeritus
Thomas A. Breslin, Professor
Danielle P. Clealand, Assistant Professor
Ronald Cox, Professor and Associate Chair
Peter R. Craumer, Associate Professor
Erin Kimball Damman, Assistant Professor
Kathryn DePalo, Senior Lecturer
Shlomi Dinar, Associate Professor and Associate Dean, Steven J. Green School of International and Public Affairs
Kevin Evans, Assistant Professor and Director of Undergraduate Studies
Clement Fatovic, Associate Professor
Eduardo Gamarra, Professor
Harry D. Gould, Associate Professor
Kevin Hill, Associate Professor
Tatiana Kostadinova, Associate Professor and Graduate Program Director, Political Science
Barry Levitt, Associate Professor
Eric Lob, Assistant Professor
Charles MacDonald, Professor Emeritus
Todd Makse, Assistant Professor
Félix Martín, Associate Professor
Kyle Mattes, Assistant Professor
Mohiaddin Mesbahi, Associate Professor and Director of Middle East Studies Program
Sara Moats, Instructor
Francisco O. Mora, Professor and Director of Kimberly Green Latin American and Caribbean Center
Dario Moreno, Associate Professor
Brian Nelson, Associate Professor Emeritus
John Oates, Assistant Professor
Nicholas Onuf, Professor Emeritus
Richard S. Olson, Professor and Director of Extreme Events Research
Catherine Rodriguez, Diplomat-in-Residence
Mark Rosenberg, Professor and University President
Rebecca Mae Salokar, Associate Professor and
Director, Pre-Law Advising and Training Office (PLATO)
Naisy Sarduy, Instructor
John F. Stack, Jr., Professor and Founding Dean, Steven
J. Green School of International and Public Affairs

Judith H. Stiehm, Professor
Markus Thiel, Associate Professor and Director of European Studies Program
Chantalle F. Verna, Associate Professor
Marcie Washington, Instructor
Jin Zeng, Associate Professor
Susanne Zwingel, Associate Professor and Graduate Program Director, International Relations

The Department of Politics and International Relations offers four advanced degrees: a Master of Arts in International Studies, a Master of Arts in Political Science, a Doctor of Philosophy in International Relations, and a Doctor of Philosophy in Political Science.

The Department emphasizes a multi-disciplinary approach to graduate education. This emphasis reflects the many disciplines and perspectives represented in the Department, and it results in a vital and challenging exchange of ideas among students and faculty members. Together they investigate a stimulating range of topics, from the traditional concerns of foreign policy and national security to contemporary global issues such as democratization, the environment, human rights, refugees, and social movements. These scholarly inquiries are generally informed by an engagement with social and political theory, to which students are exposed through a closely coordinated set of graduate reading seminars. Many members of the Department have longstanding regional interests, as do many other members of the University faculty. The program boasts of strengths in Africa, Central Asia, East Asia, Latin America and the Caribbean, the Middle East, and Europe.
The Department of Politics and International Relations is an affiliate member of the Association of Professional Schools of International Affairs.

## Master of Arts in International Studies

The M.A. program is designed to prepare students for careers in government, the private sector, or international agencies, or for professional and doctoral studies.

The Steven J. Green School of International and Public Affairs offers certificate programs in African and African Diaspora Studies, Asian Studies, Latin American and Caribbean Studies, and Transnational and Regional Studies, among others. The graduate program encourages its M.A. students to pursue regional certification in conjunction with their work in the M.A. program.

## Admission Requirements

To be considered for admission to the M.A. program, applicants must have a GPA of 3.0 in upper-level work, or its equivalent, from a recognized institution of higher education, and verbal and quantitative sections of the Graduate Record Examination (GRE) scores. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Admissions requirements are minimums and even if the minimums are met, admission is not assured.

## Degree Requirements

The M.A. program requires a minimum of 36 semester hours of credit at the graduate level. Undergraduate courses taken to satisfy prerequisites for graduate courses will not count toward the 36 hour minimum requirement. The Graduate Advisory Committee may approve the transfer of a maximum of six graduate credits earned in another recognized institution of higher education.
Core Sequence: ( 15 credits)
All MA students must complete a core sequence of five courses ( 15 credits), each of which reflects a distinctive disciplinary point of view. These courses are:
GEO 6473 Space, Place and Identity

| INR 6706 | Political Economy of International <br> Relations |
| :--- | :--- |
| INR 5609 | Contemporary Dynamics of <br> International Relations |
| INR 5615 | Research Design in International <br> Relations |
| INR 5017 | Approaches to Area Studies |

Major Field: ( 9 credits)
M.A. students also must select a major field of study in either (1) Global Institutions and Issues, or (2) International Relations and Foreign Policy, by taking three courses ( 9 credits) from an extensive list of approved courses in the social sciences. Students must take at least two courses offered by the Department of Politics and International Relations to satisfy the field requirement.

## Electives: (6 credits)

To satisfy the program's elective requirement, students may take two additional courses (6 credits) from the field lists. Students wishing to elect other graduate-level courses offered by the University may do so with permission of the Graduate Program Director.

## Thesis and Alternatives (6 credits)

To complete degree requirements, M.A. students have the option of (a) writing a thesis or (b) taking a comprehensive examination. Before electing either of these options, students must demonstrate competence in the use of a foreign language other than English.

Any student electing (a) to write a thesis will normally take 6 credit hours of thesis supervision and prepare a thesis proposal subject to the approval of three members of the University graduate faculty. A graduate faculty member of the Department of Politics and International Relations must chair any thesis committee thus constituted. No thesis may be approved until the writer has defended it in a public examination. Any student electing (b) to take a comprehensive examination must have 6 semester hours of course work in preparation for the exam. One half of the comprehensive examination will cover the core sequence of courses, and the other half will cover the student's major field.

## Combined B.A. in International Relations/M.A. in International Studies

The combined B.A./M.A. degree program allows highly qualified undergraduate students to pursue an accelerated M.A. degree in International Studies. Students accepted into this program will be able to complete the M.A. degree as much as one year sooner that would otherwise be possible. Students accepted into the International Relations Honors Track are particularly encouraged to apply for this program.

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree
program. Upon conferral of the bachelor's degree, the student will be granted graduate status. Only 5000 -level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

To be accepted into the combined B.A./M.A. degree program, students must submit an M.A. program application by March 15 in their junior year (to apply, students must already have completed $75-90$ credits in their undergraduate degree program). A complete application requires:

1. Current enrollment in the B.A. program in International Relations at FIU
2. GRE scores
3. Minimum GPA of 3.5
4. Two letters of recommendation
5. Statement of purpose discussing research interests

All components of the application must be complete by the March 15 application date. Students should consult the graduate catalog and the International Relations Program website for a more comprehensive discussion of admission requirements. Students in the combined B.A./M.A. degree program must apply for their undergraduate degree as soon as possible after having satisfied the degree requirements.

The program gives students the opportunity to take up to 9 credits of graduate coursework in their senior year that will count towards both the B.A. and the M.A. Successful completion of the B.A./M.A. program will therefore require a total of 147 credit hours. Students will take three 5000-level graduate courses in their senior year and follow the regular M.A. curriculum after they earn their B.A. degree. A typical course of study is as follows:

Undergraduate Junior Year: apply to the program (March 15 deadline)

## Undergraduate Senior Year

Fall Semester - take 12 credits, including one 5000-level course
Spring Semester - take 12 credits, including two 5000level courses

## Graduate Program

Summer - take 3 graduate credits ( 5000 -level or higher) Fall - take 9 graduate credits (5000-level or higher) Spring - take 9 graduate credits (5000-level or higher) Summer - take 6 graduate credits (thesis or comps preparation)
Students in the combined B.A./M.A. program in International Studies must complete all other requirements for the M.A. degree in International Studies. Please consult the graduate catalog and the Department's online graduate handbook.

## Master of International Business/Master of Arts in International Studies Joint Degree Program

The Department of Politics and International Relations and The Alvah H. Chapman Jr. Graduate School of Business at Florida International University offer a joint degree program culminating in both a Master in International Business (MIB), and a Master of Arts in International Studies (MAIS). Under the joint degree program, a student
can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applications for a joint degree will not be accepted from candidates who have already graduated with either degree. MIB or MAIS students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements, including the comprehensive examination for the MAIS degree.
3. Candidates must satisfy all requirements for each degree. The two degrees will have four common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. Courses transferred to meet elective credits must be 5000 or 6000 level courses. Directors of the MAIS and MIB degree programs may adjust these exact course requirements as a result of future changes to the MAIS or MIB curriculums.
3.1. To obtain the MIB degree, MAIS students who have successfully completed the required 36 credits must, additionally, complete 24 credit hours in the MIB program as follows:

| MAN 6617 | Managing Global Production and |  |
| :--- | :--- | :--- |
|  | Technology | 3 |
| MAR 6158 | International Marketing | 3 |
| MAN 6635 | International Business Policy | 3 |
| MAN 6679 | Master's Project in International |  |
|  | Business | 3 |
| MAN 6601 | International Management | 3 |
| FIN 6644 | Global Financial Strategy | 3 |
| ACG 6255 | International Accounting | 3 |
| MAN 6930A | Master's Seminar in Management 1 1 |  |
| MAN 6930B | Master's Seminar in Management 2 1 |  |
| MAN 6930C | Master's Seminar in Management 3 1 |  |

In order to satisfy the 36 credits hours required by the MIB program, 12 credit hours will be transferred from the MAIS program as follows:

| INR 5017 | Approaches to Area Studies | 3 |
| :--- | :--- | :--- |
| INR 5409 | International Law | 3 |
| Elective 1 |  | 3 |
| Elective 2 |  | 3 |

Elective 2
3.2. To obtain the MAIS degree, MIB students who have successfully completed the required 36 credits must, additionally, complete 24 credit hours in the MAIS program as follows:

| INR 6706 | Political Economy of International <br>  <br>  <br> Relations |  |
| :--- | :--- | :--- |
| INR 5615 | Research Design and International |  |
|  | Relations | 3 |
| GEO 6473 | Space, Place and Identity | 3 |
| INR 5609 | Contemporary Dynamics of |  |
|  | International Relations | 3 |
| INR 5017 | Approaches to Area Studies | 3 |
| Field course 1 |  | 3 |

Field course 2
Field course 3
In order to satisfy the 36 credits hours required by the MAIS program, 12 credit hours will be transferred from the MIB program as follows:

| MAN 6606 | International Business Environment 3 |  |
| :--- | :--- | ---: |
| BUL 6850 | International Business Law | 3 |
| Elective 1 |  | 3 |
| Elective 2 |  | 3 |

All MAIS students coming into the MIB program will be required, during the first month of classes, to take a 16 -hour workshop in Accounting and a 16 -hour workshop in Quantitative Methods. The purpose of these workshops is to ascertain whether that students have the necessary background in both of these fields. Students must pass each workshop with at least a B grade (there is no charge for this workshop). Otherwise, they must register, and pay the corresponding tuition for the Accounting class (ACC 6026) and/or the Quantitative Methods class (QMB 6357) in the Evening MBA program, and earn a grade of $B$ or higher.
Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all of the program requirements for the first degree program as if they had never been a joint degree candidate.

## Doctor of Philosophy in International Relations

The Ph.D. program is designed to prepare students for careers as scholars and teachers. It provides students with a solid theoretical foundation while allowing individual latitude for rigorous research on a wide range of subjects. Students work closely with dedicated, internationally recognized scholars.

## Admission Requirements

To be considered for admission to the Ph.D. program, all applicants must have a bachelor's degree, or its equivalent, from a recognized institution of higher education, or have received a bachelor's degree before they matriculate in the program.

Applicants should have a minimum undergraduate grade point average of 3.2 , or its equivalent, a minimum grade point average of 3.5 for all combined graduate work, and verbal and quantitative portions of the Graduate Record Examination (GRE). International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the iBT TOEFL (equivalent to 575 on the paper-based version of the Test of English as a Foreign Language) or 6.5 overall on the IELTS is required.

Applications will be reviewed only in the spring term for fall admission. Students who wish to be considered for graduate assistantships must submit an application by January 15 in the year in which they wish to begin their studies.

## Degree Requirements

The Ph.D. requires a minimum of 75 semester hours of credit at the graduate level.

Undergraduate courses taken to satisfy prerequisites for graduate courses will not count toward the 75 hour minimum requirement. Students earning a M.A. degree within the last five years may count 36 credits toward the 75 hour minimum requirement. The Graduate Advisory committee may approve the transfer of a maximum of 12 graduate credits earned in a non-degree capacity at FIU.

Ph.D. students who have satisfied all other requirements for the M.A. apart from the exit requirement (i.e. all coursework and the foreign language competency) are eligible to receive an M.A. degree. Passing the doctoral comprehensive examinations serves as equivalent to the M.A. comprehensive examination. Ph.D. students who have satisfied their requirements should consult with the Graduate Program Director about the necessary paperwork and procedures to receive the M.A. degree in the course of their Ph.D. studies.

## Core Sequence (18 credits)

All Ph.D. students must complete a core sequence of six courses (18 credits). These courses are:
GEO 6473 Space, Place, and Identity
INR 5609 Contemporary Dynamics of International Relations
INR $5615 \quad$ Research Design in International Relations
INR 6604 International Relations Theory I
INR 6608 Contemporary International Relations Theory
INR 6706 Political Economy of International Relations

## Major and Minor Fields: (21 credits)

Students must select a major field of study in (1) Global Institutions and Issues (2) Comparative Area Studies (3) Foreign Policy and Security Studies, or (4) International Law by taking four courses (12 credits) from a list of approved courses. Students must also select a minor field of study consisting of at least three courses ( 9 credits), (a) by choosing a second field from the above list, (b) by taking a Ph.D. field in some other teaching unit of the University, or (c) by creating a field in consultation with the Graduate Program Director and three members of the University faculty.

## Electives: (21 credits)

To satisfy the Ph.D. program's elective requirement, students must take 21 credits of additional course work, including independent study courses. Students wishing to elect a course or courses offered elsewhere in the University may do so with permission of the Graduate Program Director. Students must demonstrate the ability to use a foreign language other than English for scholarly purposes.

## Comprehensive Exams

Within 6 months of completing the foreign language requirement and 60 hours of course work, students must sit for written comprehensive examinations on the core sequence and in both of their fields. Students may sit for their comprehensive examination during the term in which they complete these requirements.

## Dissertation

Within 3 months of passing the comprehensive examinations, students should publicly present a dissertation proposal that is acceptable to a committee of at least four qualified scholars. Three members of the committee, including the dissertation supervisor, must be graduate faculty members of the Department of Politics and International Relations. One must be from outside the department, but inside FIU. Other members must be approved by the Graduate Program Director.

To complete program requirements, Ph.D. degree candidates must enroll for a minimum of 15 dissertation credits and maintain matriculation until the degree is awarded.

## Combined Master of Arts in Asian Studies/Doctor of Philosophy in International Relations

The combined M.A. in Asian Studies/Ph.D. in International Relations program allows qualified graduate students to pursue both degrees simultaneously. To be accepted into this program, students must submit an application for the M.A. in Asian Studies/Ph.D. in International Relations by January 15 in the year in which they wish to begin their studies. Applicants must meet the admission eligibility requirements and follow the admission procedures for both programs.

Students must fulfill the requirements for both programs, and up to 33 credits may count for both degrees. To graduate, students must complete the requirements of the International Relations doctoral program, including the required 75 hours.

In addition to the requirements for the two degrees, during their first two years of enrollment in this dual degree program, students will enroll in the following course which fulfills the M.A. in Asian Studies methods requirement:

## INR 5615 Research Design in International

 RelationsThe following International Relations courses will also be taken by M.A. in Asian Studies students during the first two years of the program and will count toward the M.A.: INR $5609 \quad$ Contemporary Dynamics of International INR 6706 Political Economy of International Relations

## Master of Arts in Asian Studies Requirements

(30 credits Thesis Option/33 credits Non-Thesis Option)

## Core Courses: ( $\mathbf{2 4}$ credits)

- 3 credits Topics in Modern Asia (ASN 5315)
- 3 credits Methods in Asian Studies (ASN 5050)
- 3 credits in Advanced Research
- 9 credits pertaining to main concentration
- 6 credits in other concentration

MAAS offers two exit options, Thesis or Non-Thesis
Thesis Exit Option (6 credits):
ASN 6972 Master's Thesis
Non-Thesis Exit Option (9 credits):
ASN 6912 Master's Essay (3 credits and two additional courses (6 credits)

## Doctor of Philosophy in International Relations ( 75 credits)

## Core Courses: (18 credits)

GEO 6473 Space, Place, and Identity 3
INR 5609 Contemporary Dynamics of International Relations
INR 5615
INR 6604
INR 6608 Contemporary International Relations
Research Design in International Relations Theory

## Major and Minor Fields: ( $\mathbf{2 1}$ credits)

12 credits in major field of study
9 credits in minor field of study
Electives: ( 21 credits)
Additional elective coursework

## Comprehensive Exams

Once students have achieved 60 credits, they must sit for written examination on the core sequence of their fields
Dissertation: ( 15 credits)
INR $7980 \quad$ Ph.D. Dissertation

## M.A. in African and African Diaspora Studies/Ph.D. in International Relations Combined Degree Program

The dual African and African Diaspora Studies M.A.International Relations Ph.D. program allows qualified graduate students to pursue both degrees at the same time.

## Admission Requirements

To be accepted into this program, students must submit an application for the M.A. in African and African Diaspora Studies/Ph.D. in International Relations by January 15 in the year in which they wish to begin their studies.

To be considered for admission, students must meet the following requirements:

1. Minimum cumulative grade point average of 3.2 in undergraduate work.
2. Minimum cumulative grade point average of 3.5 in any prior graduate work.
3. Official Graduate Record Exam (GRE) scores.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the IBT TOEFL (equivalent to 575 on the paper-based version of the Test of English as a Foreign Language) is required.

Applicants must follow the admission procedures for both programs (see the appropriate sections in this graduate catalog). Only applications to begin studies in the fall semester will be considered. This designation will appear in the menu of programs in the graduate application, and students must indicate their intention to apply for this dual program.

Each applicant must complete an online graduate application form and arrange to send transcripts of all prior college (undergraduate and graduate) work and official
reports of the Graduate Records Exam (GRE) and TOEFL
(if applicable) to FIU's Office of Graduate Admissions.
Each applicant should also submit a separate statement of purpose, along with copies of the above material. The letter of application should include a statement expressing the applicant's academic and professional objectives. Applicants must include writing samples and other relevant professional work that may support their applications. Applicants must request three letters of recommendation from university professors who are able to comment on the various aspects of the student's academic ability. The letters of recommendation should be sent directly to the Director of the African and African Diaspora Studies Graduate Program. AADS will photocopy the recommendation letters once they are all in and send them to the International Relations Graduate Program Director.

The application file must be complete before the African and African Diaspora Studies/International Relations Graduate Program Committees will consider the applicant for admission. We encourage applicants to send their application material sooner.

## Required Credits

Students must fulfill the requirements for both programs. The 36 credits for the M.A. in AADS earned by students will count toward the 75 credits required for the Ph.D. in INR.

## Prescribed Required Courses and Other Requirements

In addition to the requirements for the two degrees, during their first two years of enrollment in this dual degree program, students will enroll in the following course which fulfills the African and African Diaspora Studies M.A. methods requirement:
INR $5615 \quad$ Research Design in International Relations
The following International Relations courses will also be taken by African and African Diaspora Studies M.A. students during the first two years of the program and will count toward the M.A.:

| INR 5609 | Contemporary Dynamics of International <br>  <br> Relations |
| :--- | :--- |
| INR 6706 | Political Economy of International <br> Relations |

## Language Requirement

Students must demonstrate proficiency in a language other than English according to the nature of their thesis or research paper/proposal and professional interests. The AADS Graduate Program Director will ask a university faculty member fluent in the language of interest to the student, to evaluate the student's fluency by asking her/him to summarize or synthesize the content of a text of between 10 to 20 pages, published in that language, in no more than one page. That exercise will have to take place at the university during a limited period of time. The text will be given to the student at the beginning of the exercise. The chosen text will have some connection to the student's research interest. Once a student has demonstrated proficiency for the M.A. in African and African Diaspora Studies, that proficiency will be recognized by the International Relations Ph.D. program. Therefore, proficiency in a foreign language will not be
part of the candidacy exam. Credit hours earned in meeting the language requirement will not count towards the 36 credit hours required for the M.A. degree.

Students should apply for graduation with the M.A. in African and African Diaspora Studies as soon as they have completed all requirements for the degree including the exit requirements, as specified for the M.A. in African and African Diaspora Studies. Ordinarily, students will complete these requirements and earn their M.A. before advancing to candidacy for the Ph.D. in International Relations. The research paper/proposal option is the only option available for students enrolled in this dual M.A./Ph.D. program.

## Masters of Arts in African and African Diaspora Studies Requirements

(36 credits Research Paper/Proposal Option)
Courses to be taken in addition to INR 5615, INR 5609, and INR 6706 (for 24 credits):

| AFA 5005 | African and African Diaspora Studies <br> Theory | 3 |
| :--- | :--- | :--- |
| AFA 6911 | Research Paper/Proposal Writing in <br> African and African Diaspora Studies | 3 |
| AFA 6920 | African and African Diaspora Studies <br> Graduate Colloquium | 3 |
| 1 semester of graduate colloquium |  |  |

18 credits of elective from the lists of elective courses (see M.A. in AADS):
6 to 12 credits from the Humanities list and
6 to 12 credits from the Social Sciences list
Total credits for the M.A.: 36

## Doctor of Philosophy in International Relations ( 75 credits)

The following courses in addition to all 36 M.A. credits:
GEO 6473 Space, Place, and Identity $\quad 3$

INR 6604 International Relations Theory I 3
INR 6608 Contemporary International Relations Theory
Major and Minor Fields: (12 credits)
Major field of study
Minor field of study
Electives: (3 credits)
Additional elective course work according to the specific information about elective courses indicated in the Ph.D. in INR section of the catalog.

## Comprehensive Examinations

Once students have achieved 60 credits of course work, they must sit for written examinations on the core sequence of their fields as per the Ph.D. in INR section of the catalog.

## Dissertation: ( 15 credits)

See the university catalog for relevant sections of the Ph.D. Program in International Relations for details.

## Combined M.A. in Latin American and Caribbean Studies (MALACS)/Ph.D. in International Relations

The Combined Latin American and Caribbean Studies M.A./International Relations Ph.D. program allows
qualified graduate students to pursue graduate degrees in both areas simultaneously rather than sequentially. Students must fulfill the requirements for both programs, and up to 36 credits completed as part of the M.A. in MALACS will be counted toward the 75 credit Ph.D. in International Relations.
To be considered for admission, students must meet the following requirements:

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Verbal and Quantitative portions of the Graduate Record Exam (GRE) scores;
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the internetbased TOEFL (equivalent to 575 on the paper-based version) or 6.5 overall on the IELTS is required.
Although admissions decisions typically are made in the spring, decisions for students who have not yet received their bachelor's degree will be conditional, pending confirmation of the B.A. Meeting the minimum requirements does not guarantee admission into the program. All applications are subject to review by the members of the Department of Politics and International Relations and the MALACS admissions committee.

## Admission Procedures

To be accepted into this program, students must submit an application to the Ph.D. in International Relations with a sub-plan for a M.A. in LACS. This designation will appear in the menu of programs in the graduate application. The application must be submitted by January 15 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.
The following must be submitted as part of the on-line application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable.
5. A statement of research interests, including reasons for seeking the M.A./Ph.D., future career goals, and a summary of scholarly preparation for this program;
6. Three letters of reference from academic sources or others able to judge academic abilities and potential; and
7. A curriculum vitae.

## Masters of Arts in Latin America and Caribbean Studies Degree Requirements (36 credits)

During their first two years of enrollment in the Combined Degree Program, students must complete 36 credits for an MA in Latin America and Caribbean Studies with depth or focus courses in International Relations.

## MALACS Core Courses ( 9 credits)

During their first two years of enrollment in this dual degree program, students take three core courses as follows:

| LAS 6003 | Survey of Latin America and the <br> Caribbean (first year, fall semester) | 3 |
| :--- | :--- | :--- |
| LAS 6934 | Research Seminar (first year, spring <br> semester) | 3 |
| INR 5615 | Research Design in International <br> Relations | 3 |

MALACS Focus Courses ( $\mathbf{1 2 - 1 5}$ credits)
Students will take a minimum of 12-15 credits within the Department of Politics and International Relations with a Latin American and/or Caribbean focus.

MALACS Elective Courses (6-9 credits)
Student may take courses from other areas.

## MALACS Exit Options for Combined Degree Program (6 credits)

Students may choose one of three exit options:
LAS 6970 Thesis 6
See the MALACS program description for more information. The thesis is publicly defended and approved by a committee of three graduate faculty members.
LAS 6905 Directed Research in Latin American and Caribbean Studies 3
Preparation of two directed research papers. Both papers require an oral presentation and approval by a committee of three graduate faculty members.
$\begin{array}{ll}\text { LAS } 6942 & \text { Internship in Latin American and } \\ \text { Caribbean Studies }\end{array}$
Supervised internship leading to a major research paper in Latin American and Caribbean Studies. The research paper requires an oral presentation and approval by a committee of three graduate faculty members.
Each student is required to demonstrate proficiency in either Spanish or Portuguese, or in another language such as French or Haitian Creole when justified by research interests. Proficiency demonstrated by scoring an advanced level on the ACTFL exam for Spanish, Portuguese, or French administered by FIU's Department of Modern Languages. Other tests of proficiency may be accepted upon approval of the graduate advisor.

Students should apply for graduation for the MALACS M.A. as soon as they have completed all requirements for the degree - including the exit requirements. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in International Relations.

## Doctor of Philosophy in International Relations Degree Requirements

Students will begin study towards the Ph.D. in International Relations immediately following their satisfactory completion of MALACS requirements. A
minimum of 39 credits beyond the 36 credits required for the MALACS degree will be necessary to satisfy the requirements of the Ph.D. Program in International Relations.

## Program Requirements

## 15 Core Course credits:

GEO 6473 Space, Place and Identity 3
INR 6604 International Relations Theory I 3
INR 6608 Contemporary International Relations Theory
INR 5609 Contemporary Dynamics of International Relations
INR 6706 Political Economy of International Relations

## 12 Major Field credits in either:

1. Global Institutions and Issues,
2. Comparative Area Studies,
3. Foreign Policy and Security Studies, or
4. International Law.

With advisor approval, these 12 credits may include some or all of the coursework (except INR 5615) taken in satisfaction of the requirements for the MALACS degree.

## 9 Minor Field credits in either:

1. a second field from the above major field list, or
2. a field offered within another Ph.D. program at FIU (with approval of the Graduate Program Director), or
3. a petition field (with approval of the Graduate Program Director).
With advisor approval, these 9 credits may include some or all of the coursework (except INR 5615) taken in satisfaction of the requirements for the MALACS degree.

## Elective Credits:

Elective credits necessary to bring total credits earned beyond the MALACS degree to a minimum of 24 .

## Dissertation:

15 credits of dissertation research.

## Comprehensive Exams

After completing 60 hours of course work (or in the semester in which they expect to do so), students may take their written comprehensive examinations on the core sequence and in both of their fields. Students must sit for these examinations within 6 months of completing the minimum 60 hours of coursework unless granted an extension by the International Relations Graduate Program Director.

## Dissertation

Within 3 months of passing the comprehensive examinations, students should publicly present a dissertation proposal that is acceptable to a committee of at least four qualified scholars. Three members of the committee, including the dissertation supervisor, must be graduate faculty members of the Department of Politics and International Relations. One must be from outside the department, but inside FIU. Other members must be approved by the International Relations Graduate Program Director. To complete program requirements, Ph.D. degree candidates must enroll for a minimum of 15 dissertation credits and maintain enrollment for 3 credits every semester until the degree is awarded.

## Combined M.A. in Religious Studies/Ph.D. in International Relations

The combined M.A. in Religious Studies/Ph.D. in International Relations program allows qualified graduate students to pursue both degrees simultaneously. Students must fulfill the requirements for both programs, and up to 36 credits completed as part of the M.A. in Religious Studies will be counted toward the 75 credit Ph.D. in International Relations.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Verbal and Quantitative portions of the Graduate Record Exam (GRE);
4. Minimum 156 GRE verbal score or a minimum 3.5 on a 4.0 scale (or equivalent) for the last two years of undergraduate work.
5. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the internetbased TOEFL (equivalent to 575 on the paper-based version) or 6.5 overall on the IELTS is required.
Although admissions decisions typically are made in the spring, decisions for students who have not yet received their bachelor's degree will be conditional, pending confirmation of the B.A. Meeting the minimum requirements does not guarantee admission into the program. All applications are subject to review by the members of the Department of Politics and International Relations and the Religious Studies Department.

## Admission Procedures

To be accepted into this program, students must submit an application to the Ph.D. in International Relations with a sub-plan for a M.A. in Religious Studies. This designation will appear in the menu of programs in the graduate application. The application must be submitted by January 15 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.
The following must be submitted as part of the on-line application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable;
5. A statement of research interests, including reasons for seeking the M.A./Ph.D., future career goals, and a summary of scholarly preparation for this program;
6. Three letters of reference from academic sources or others able to judge academic abilities and potential; and
7. A curriculum vitae.

## Masters of Arts in Religious Studies Degree Requirements ( $\mathbf{3 6}$ credits)

| REL 6935 | Seminar in Sacred Sources | 3 |
| :---: | :---: | :---: |
| RLG 6013 | Modern Analysis of Religion | 3 |
| RLG 5038 | Advanced Fieldwork in Religious |  |
|  | Studies | 3 |
| 12 credit hours of electives approved by the Graduate |  |  |
| Program Director |  | 12 |
| RLG 6971 | Thesis or 6 additional hours of elective credits | 6 |
| INR 5615 | Research Design in International |  |
|  | Relations | 3 |
| INR 5609 | Contemporary Dynamics of International |  |
|  | Relations |  |
| INR 6706 | Political Economy of International |  |
|  | Relations |  |

Students who choose the thesis exit option must include at least one Politics and International Relations faculty member, though the majority must be from Religious Studies.

## Doctor of Philosophy in International Relations Degree Requirements

Students will begin study towards the Ph.D. in International Relations immediately following their satisfactory completion of M.A. in Religious Studies requirements. A minimum of 39 credits beyond the M.A. degree in Religious Studies will be necessary to satisfy the requirements of the Ph.D. Program in International Relations.

Degree Requirements beyond the M.A. in Religious Studies are the following:

## 9 Core Course credits:

GEO 6473 Space, Place and Identity 3
INR 6604 International Relations Theory I 3
INR 6608 Contemporary International Relations Theory

3

## 12 Major Field credits in either:

1. Global Institutions and Issues,
2. Comparative Area Studies,
3. Foreign Policy and Security Studies, or
4. International Law.

With advisor approval, these may include 3 credits taken in satisfaction of the requirements for the M.A. in Religious Studies.

## 9 Minor Field credits in either:

1. a second field from the above major field list, or
2. a field offered within another Ph.D. program at FIU (with approval of the Graduate Program Director), or
3. a petition field (with approval of the Graduate Program Director).
With advisor approval, these may include 3 credits taken in satisfaction of the requirements for the M.A. in Religious Studies.

## Elective Credits:

Elective credits necessary to bring total credits earned beyond the M.A. in Religious Studies to a minimum of 24.

## Dissertation Credits:

15 credits of dissertation research.

## Comprehensive Exams

After completing 60 hours of course work (or in the semester in which they expect to do so), students may take their written comprehensive examinations on the core sequence and in both of their fields. Students must sit for these examinations within 6 months of completing the minimum 60 hours of coursework unless granted an extension by the International Relations Graduate Program Director. Before advancing to candidacy, students must also demonstrate an ability to use a foreign language other than English for scholarly purposes.

## Dissertation

Within 3 months of passing the comprehensive examinations, students should publicly present a dissertation proposal that is acceptable to a committee of at least four qualified scholars. Three members of the committee, including the dissertation supervisor, must be graduate faculty members of the Department of Politics and International Relations. One must be from outside the department, but inside FIU. Other members must be approved by the International Relations Graduate Program Director. To complete program requirements, Ph.D. degree candidates must enroll for a minimum of 15 dissertation credits and maintain enrollment for 3 credits every semester until the degree is awarded.

## Joint Certificate in Integrated Marketing Communications: Latin American Certification

The Joint Graduate Certificate in Integrated Marketing Communications: Latin American Certification is an 18hour program with two required courses each from ICAP and International Relations, plus several electives from both areas. The objective of this graduate level certificate program is to prepare working communications professionals with the skills necessary to develop and implement communications programs in Latin America. It is also appropriate to provide international relations professionals who have gained communications responsibilities with a broad overview of the basic concepts and tasks of mass communications.

## Required Courses - ICAP Program

\(\left.$$
\begin{array}{ll}\text { PUR 6806 } & \begin{array}{l}\text { Global Account Planning } \\
\text { (Prerequisite: Permission of the } \\
\text { instructor) }\end{array}
$$ <br>
Global Strategic Communication <br>
Management <br>

(Prerequisite: PUR 6806)\end{array}\right\}\)| Elective Courses - ICAP Program |  |
| :--- | :--- |
| MMC 6402 | Theories of Mass Communication <br> (Prerequisite: Permission of the <br> instructor) |
| PUR 6935 | Advanced Communications Seminar <br> (Prerequisite: Permission of the <br> instructor) |

## Required Courses - International Relations

| INR 6107 | U.S. Foreign Policy: Processes and |
| :--- | :--- |
|  | Institutions |

INR 6609 Dynamics of International Relations in the 20th Century

## Elective Courses - International Relations

INR 4031 The Media and International Relations
INR 6089 International Relations and Human Rights
INR 6209 Comparative Foreign Policy of Latin
INR 6604 America

INR 6606 Political Psychology of International Relations
Current selections from the Latin American and Caribbean Center as offered.

## Master of Arts in Political Science

The Master of Arts degree in Political Science at Florida International University is designed to provide students with a comprehensive knowledge of the discipline. The department's graduate program in Political Science builds on faculty strengths and distinguishes itself by stressing a comparative approach to the study of politics. The program is designed to equip its graduates with a solid foundation in the basic theories and methods of Political Science, in conjunction with an in-depth education in selected traditional subfields.

## Admission Procedures

Applicants seeking admission for the Fall semester must submit all application materials by March $15^{\text {th }}$ (February 15 for international students). Incomplete applications cannot be considered by the Graduate Admissions Committee. Admission decisions will be announced no later than April 15th. Applicants must apply online using the website of the FIU University Graduate School. The following items should be submitted to the FIU University Graduate School:

1. Official transcripts of all university-level work, including undergraduate or professional school courses.
2. An official report of Graduate Record Examination (GRE) scores.
3. For International graduate student applicants whose native language is not English, a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS).
It is advised to send copies of the above items to the Political Science Graduate Admissions Committee at the following address: Department of Politics and International Relations, Modesto A. Maidique Campus, 11200 S.W. $8^{\text {th }}$ Street, SIPA 436, Miami, Florida 33199. Telephone: (305) 348-1077; Fax: (305) 348-3765. In addition, applicants must submit the following directly to the Political Science Graduate Admissions Committee:
4. Two letters of reference from former instructors who are able to evaluate the applicant's potential for graduate study. Applicants should ensure that each letter is signed by the author along the sealed flap of the envelope.
5. A personal statement of intent, including a discussion of education and career objectives and the specific relationship of a Master's degree in Political Science to the achievement of those objectives. The personal statement should not exceed three typewritten, double-spaced pages.

## Admission Requirements

Admission to the Master's program is competitive. Meeting the minimum requirements does not guarantee acceptance.
The minimum requirements for admission to the M.A. program include:

1. A baccalaureate degree from an accredited college or university.
2. A minimum 3.2 grade point average (on a 4.0 scale) during the last two years of a student's undergraduate program (students with graduate or professional course work will be evaluated individually).
3. Verbal and Quantitative sections of the GRE.
4. Graduates of non-U.S. institutions must be academically eligible for further study in the country where the degree was earned.
5. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Degree Requirements

The course of study for the M.A. in Political Science requires 30 credit hours. A final research project and research seminar are required components:

## Required Courses: ( 9 credits)

$\begin{array}{lll}\text { POS 5716 } & \text { Foundations of Political Science } & 3 \\ \text { POS 5706 } & \text { Research Methodology } & 3 \\ \text { POS 6976 } & \text { Research Seminar } & 3\end{array}$
Core Courses: ( 9 credits)
Each student is required to take three of the following four core courses:
POS 5045 Seminar in American Politics 3
CPO 5091 Seminar in Comparative Politics 3
INR $5007 \quad$ Seminar in International Politics 3
POT 5007 Seminar in Political Theory 3

## Electives: (12 credits)

Students are required to take four elective courses. A student may take a maximum of six credit hours in a cognate field or in an approved cognate program.

## Combined B.A./M.A. in Political Science

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree
program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000-level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Students must have completed $75-90$ credit hours.
2. Students must have been admitted to the Steven J. Green School of International and Public Affairs.
3. A 3.5 GPA overall in college work, and a 3.75 GPA in Political Science courses taken at FIU, are required.
4. Three letters of recommendation, at least two of which must be from FIU Politics and International Relations faculty, are required.
5. Students must meet admissions requirements for the M.A. in Political Science.
6. Finally, a favorable decision into the $4+1$ program by the Political Science graduate committee is required.
7. Students will be awarded the B.A. degree upon completion of the B.A. requirements, prior to completing the requirements for the M.A. degree.

## Common Prerequisites and Departmental Requirements (3 courses/9 credits)

The Common Prerequisites are required introductory courses for the undergraduate major and should be among the first Political Science courses taken. The department requires one additional 2000-level course beyond the Common Prerequisites. In order to conform with both state and departmental requirements, students must take the following:

| POS 2041 | American Government (or its equivalent) <br> and two of the following three courses: <br> CPO 2002 |
| :--- | :--- |
| Introduction to Comparative Politics (or <br> its equivalent) |  |
| INR 2001 | Introduction to International Relations <br> (or its equivalent) |
| POT 2002 | Introduction to Political Theory (or its <br> equivalent) |

Some transfer students will have already taken these or equivalent courses at other institutions, and should not repeat them at FIU. Students with questions about course equivalencies should contact the Political Science undergraduate advisor.

## Breadth Requirement (8 courses/24 credits)

The Breadth Requirement is intended to expose majors to each of the four major sub-fields of Political Science. Two three-hour courses must be taken in each of the following subfields, for a total of 24 semester hours. These courses may not include independent studies, internships or POS 4784 Analytic Writing in Political Science.

American Politics - Any two 3000-level or above courses with a POS prefix, except POS 4784. PUP 4004 may be used as one of the required two American Politics courses. (6 credits)
Comparative Politics - Any two 3000-level or above courses with a CPO prefix. (6 credits)
International Politics - Any two 3000-level or above courses with an INR prefix. (6 credits)
Political Theory - Any two 3000-level or above courses with a POT prefix. (6 credits)
II. Political Science Electives Requirement ( 6 credits) Two upper division courses with POS, CPO, INR, or POT prefixes, for a total of 6 credits. Independent studies, internships and/or POS 4784 can be applied toward the Political Science Electives Requirement.

## Political Science Graduate/Undergraduate Electives Requirement (3 courses/9 credits)

Students in the $4+1$ program will take three 3 -credit graduate Political Science courses at the 5000-level to satisfy this requirement. Students must be advised by the departmental Graduate Program Director before enrolling in these 5000-level courses.

The 9 hours of graduate credit taken to satisfy the undergraduate Political Science major requirement will also count as 9 credit hours toward the 30 hours of graduate courses required for the M.A. degree.

## M.A. Courses

A total of 30 hours of graduate-level courses is required for the successful completion of the M.A. degree. Nine of these 30 hours will have been completed at the undergraduate level by students in the $4+1$ program.

## Required Core Graduate Courses

POS 5706 Research Methodology
POS 5716 Foundations of Political Science
POS 6976 Research Seminar (to be taken during last term)
Secondary Core Graduate Courses - Choose three of the following:
CPO $5091 \quad$ Seminar in Comparative Politics
INR 5007 Seminar in International Politics
POS 5045 Seminar in American Politics
POT $5007 \quad$ Seminar in Political Theory
Electives - Four courses (12 credit hours)
Any 5000- or 6000-level Political Science courses. Two courses ( 6 credit hours) may be taken from outside the Department, with prior approval from the Graduate Program Director.

## Research Project

A final research project must be completed in POS 6976 under the supervision of a Politics and International Relations faculty member. M.A. candidates are required to formally present the results of their research to faculty and peers at the end of the semester. The M.A. project will be evaluated by a three-member faculty panel.

## Doctor of Philosophy in Political Science

The Doctor of Philosophy degree in Political Science at Florida International University is designed to provide students with a comprehensive knowledge of the discipline. The department's graduate program in Political Science builds on faculty strengths and distinguishes itself by stressing a comparative approach to the study of politics. The program is designed to equip its graduates with a solid foundation in the basic theories and methods of Political Science, in conjunction with an in-depth education in selected traditional subfields.

## Admission Requirements

Admission to the Ph.D. program is competitive. Meeting minimum requirements does not guarantee acceptance.

The minimum requirements for admission to the Ph.D. program include:

1. A baccalaureate degree from an accredited college or university;
2. An undergraduate GPA of 3.2 and/or a graduate GPA of 3.25;
3. Verbal and Quantitative sections of the GRE.
4. Graduates of non-U.S. institutions must be academically eligible for further study in the country where the degree was earned.
5. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

## Degree Requirements

The Ph.D. program requires a minimum of 76 credit hours beyond the Bachelor's degree.

The Doctor of Philosophy in Political Science is conferred based on satisfactory completion of required coursework, a demonstrated mastery of a broad field of knowledge, and successful completion and defense of the dissertation. The degree provides graduates with a solid foundation in the basic theories and methodologies of Political Science in conjunction with specialization in traditional subfields. Students will, in consultation with their faculty advisors, determine the contents of their course work. Students will specialize in two examination fields drawn from the four principal subfields of Political Science: American Politics, Comparative Politics, International Politics, and Political Theory. Students are also required to take additional coursework in a third, non-examined field of specialization. The third specialization field is satisfied by a minimum of 9 credit hours in a regionally or topically defined area.

Students' proposed programs must be approved by their advisors and the Political Science Graduate Studies Committee.

Ph.D. students who have satisfied all other requirements for the M.A. apart from the exit requirement (i.e. all coursework and the foreign language competency) are eligible to receive an M.A. degree. Passing the doctoral comprehensive examinations serves as equivalent to the M.A. comprehensive examination. Ph.D. students who have satisfied there requirements should consult with the Graduate Program Director about the necessary paperwork and procedures to receive the M.A. degree in the course of their Ph.D. studies.
Required Courses: ( 10 credits)
POS 5702 Teaching Political Science 1
POS 5706 Research Methodology 3
POS 5716 Foundations of Political Science 3
$\begin{array}{lll}\text { POS } 6918 & \begin{array}{l}\text { Seminar in Political Science } \\ \text { Methodology }\end{array}\end{array}$
Common Core Courses: (12 credits)
CPO $5091 \quad$ Seminar in Comparative Politics 3
INR $5007 \quad$ Seminar in International Politics 3
POS 5045 Seminar in American Politics 3
POT 5007 Seminar in Political Theory 3
Two Examination Fields (minimum 12 credits)
Third Specialization (minimum 9 credits)
Approved Electives (minimum 9 credits)

## Language Requirement

The Political Science Ph.D. program requires competency in one foreign language or demonstrated competency in computer and methodological techniques when considered more appropriate. Language competency must be demonstrated prior to taking the comprehensive examinations.

## Comprehensive Examination

After satisfactory completion of course work, students will take comprehensive exams in their two chosen subfields before being admitted to candidacy and defending a dissertation proposal. The comprehensive exams will cover core courses and broad knowledge of the two examination fields. They will be written and oral.

Comprehensive examinations are given twice yearly, in mid-September and in mid-January.

## Dissertation: (minimum 24 credits)

After passing the comprehensive exams, students are admitted to candidacy and enroll for dissertation credits under the supervision of their dissertation advisors. Candidates will prepare and defend a dissertation proposal. Upon completion of the work, a public defense of the dissertation will be scheduled in accordance with university policy.

## Financial Aid

The program has a limited number of graduate assistantships available for qualified students.

Assistantships are awarded on a competitive basis only to full-time students. Students applying for full-time status are considered automatically for these awards.

Assistantships are renewable each year for up to four years based on satisfactory progress and performance.

## Combined M.A. in Latin American and Caribbean Studies (MALACS)/Ph.D. in Political Science

The Combined M.A. in Latin American and Caribbean Studies/ Ph.D. in Political Science program allows qualified graduate students to pursue graduate degrees in both areas simultaneously. Students must fulfill the requirements for both programs, and up to 36 credits completed as part of the M.A. in MALACS will be counted toward the 76 credit Ph.D. in Political Science.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.25 on any previous graduate work;
3. Verbal and Quantitative portions of the Graduate Record Exam (GRE);
4. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL)
or for the International English Language Testing System (IELTS). A total score of 80 on the internetbased TOEFL (equivalent to 550 on the paper-based version) or a 6.5 overall on the IELTS is required.
Although admissions decisions typically are made in the spring, decisions for students who have not yet received their bachelor's degree will be conditional, pending confirmation of the B.A. Meeting the minimum requirements does not guarantee admission into the program. All applications are subject to review by both the members of the Department of Politics and International Relations and the MALACS Graduate Committee.

## Admission Procedure

To be accepted into this program, students must submit an application to the Ph.D. in Political Science with a subplan for a M.A. in LACS. This designation will appear in the menu of programs in the graduate application. The application must be submitted by February 1 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable.
5. A statement of research interests, including reasons for seeking the M.A./Ph.D., future career goals, and a summary of scholarly preparation for this program;
6. Three letters of reference from academic sources or others able to judge academic abilities and potential.
7. A curriculum vitae; and
8. A writing sample (such as a seminar paper) which demonstrates the ability to conduct research and write effectively.

## Masters of Arts in Latin America and Caribbean Studies Degree Requirements (36 credits)

During their first two years of enrollment in the Combined Degree Program, students must complete 36 credits for an M.A. in Latin America and Caribbean Studies with depth or focus courses in Political Science.

## MALACS Core Courses ( 9 credits)

During their first two years of enrollment in this dual degree program, students take three core courses as follows:
LAS 6003 Survey of Latin America and the
LAS 6934 Research Seminar (first year, spring
POS 5706 semester)

## MALACS Focus Courses ( $\mathbf{1 2 - 1 5}$ credits)

Students will take a minimum of $12-15$ credits within the Department of Politics and International Relations with a Latin American and/or Caribbean focus.
MALACS Elective Courses (6-9 credit)
Student can take courses from other areas
MALACS Exit Options for Combined Degree Program ( 6 credits)
Students may choose one of three exit options:

## LAS 6970 Thesis

See the MALACS program description for more information. The thesis is publicly defended and approved by a committee of three graduate faculty members.
LAS 6905 Directed Research in Latin American and Caribbean Studies

6
Preparation of two directed research papers. Both papers require an oral presentation and approval by a committee of three graduate faculty members.
LAS 6942 Internship in Latin American and Caribbean Studies
Supervised internship leading to a major research paper in Latin American and Caribbean Studies. The research paper requires an oral presentation and approval by a committee of three graduate faculty members.

Each student is required to demonstrate proficiency in either Spanish or Portuguese, or in another language such as French or Haitian Creole when justified by research interests. Proficiency demonstrated by scoring an advanced level on the ACTFL exam for Spanish, Portuguese, or French administered by FIU's Department of Modern Languages. Other tests of proficiency may be accepted upon approval of the graduate advisor.

Students should apply for graduation for the M.A. in LACS as soon as they have completed all requirements for the degree - including the exit requirements. Ordinarily, the M.A. will be conferred before the student advances to candidacy for the Ph.D. in Political Science.

## Doctor of Philosophy in Political Science Degree Requirements

Students will begin study towards the Ph.D. in Political Science immediately following their satisfactory completion of MALACS requirements. A minimum of 40 credits beyond the 36 credits required for the MALACS degree will be necessary to satisfy the requirements of the Ph.D. Program in Political Science.
The total of 76 credits for a Ph.D. in Political Science include the following:

## Program Requirements:

7 Required Course Credits:
POS 5702 Teaching Political Science 1
POS 5716 Foundations of Political Science 3
POS 6918 Seminar in Political Science Research Methods
12 Common Core Course credits:
CPO $5091 \quad$ Seminar in Comparative Politics 3
INR $5007 \quad 3$
POS 5045 Seminar in American Politics 3
POT 5007 Seminar in Political Theory 3

## 12 Credits in Two Examination Fields from the

 following:1. American Politics,
2. Comparative Politics,
3. International Politics, and
4. Political Theory.

With advisor approval, these 12 credits may include some or all of the coursework (except POS 5706) taken in satisfaction of the requirements for the MALACS degree.

## 9 Credits in Third Area Specialization:

With advisor approval, these 9 credits may include some or all of the coursework (except POS 5706) taken in satisfaction of the requirements for the MALACS degree.

## Elective Credits:

Elective credits necessary to bring total credits earned beyond the MALACS degree to a minimum of 40 .

## Dissertation:

24 Dissertation course credits.

## Comprehensive Examination

After satisfactory completion of course work, students will take comprehensive exams in their two chosen subfields before being admitted to candidacy and defending a dissertation proposal. The comprehensive exams will cover core courses and broad knowledge of the two examination fields. They will be written and oral. Comprehensive examinations are given twice yearly, in mid-September and mid-January.

## Dissertation (Minimum 24 credits)

After being admitted to candidacy, students enroll for dissertation credits under the supervision of their dissertation advisors. Candidates will prepare and defend a dissertation proposal. Upon completion of the dissertation itself, a public defense of the dissertation will be scheduled in accordance with University policy.

## Course Descriptions

## Definition of Prefixes

CPO-Comparative Politics; INR-International Relations; POS-Political Science; POT-Political Theory; PUP-Public Policy.

CPO 5036 Politics of Development (3). This course examines divergent explanations for development and underdevelopment. Of central importance are the concepts and theories that emphasize the political dimensions of development processes of development, and actors in the development process.
CPO 5091 Seminar in Comparative Politics (3). A foundation in the development of the field of comparative politics and in the major schools of thought that have molded perspectives on comparative political analysis.
CPO 5325 Politics of the Caribbean (3). Examines the structural and institutional aspects of the politics of the Prerequisite: Graduate standing.
CPO 5745 Political Economy of Disaster Risk Reduction (3). Examines the political economy of attempts, or lack thereof, to reduce the exposures and vulnerabilities to natural and/or technological hazards of communities across world regions. Prerequisite: Graduate standing.
CPO 5934 Topics in Comparative Politics (3). A rigorous examination of a topic in comparative politics. Subject matter varies according to instructor. Topic will be announced in advance.
CPO 5936 Seminar in Comparative Political Parties (3). Students read and discuss major works on parties by conservative, liberal, and Marxist authors.

CPO 6062 Seminar in Comparative Judicial Politics (3). An examination of judicial structures, legal traditions, judicial behavior and judicial power cross culturally.
CPO 6066 Comparative Constitutional Law (3). An examination of constitutionalism in both established and developing democracies. Particular emphasis on the role of courts, judicial review and judicial remedies using doctrinal, contextual and theoretical analysis.
CPO 6084 War, Peace and the Military (3). Examines theories of the relationship between societies, governments and their militaries. Emphasis on relationship between militaries and a nation's experience with peace and participation in war. Prerequisite: Graduate standing.
CPO 6092 Seminar in Comparative Political Culture (3). Examines culturalist theories in comparative politics, including postmaterialism, social capital, and civic culture. Students test hypothesis using survey data from prominent cross-national datasets. Prerequisites: POS 5706 or equivalent.
CPO 6105 Politics of the European Union (3). Examines the development and operation of the world's most successful experiment in regional cooperation, the European Union (EU), including political economy, institutions, and policy-making. Prerequisite: Graduate Standing.
CPO 6106 Seminar on European Politics (3). Advanced discussion of major themes in European politics. Topics include corporatism, post-materialism, democratization, and European integration.
CPO 6206 Seminar in African Politics (3). Studies the crisis of African development. Topics include colonialism, internal cleavages, and impact of the global economy.
CPO 6307 Seminar on South American Politics (3). Explores the realities and myths of the democratization experience of South America.
CPO 6316 Seminar in Latin American Democratic Institutions (3). Reviews the role of institutional design in promoting accountability in Latin American democracy, including presidentialism, party systems, legislatures, electoral laws, and federalism. Prerequisite: Graduate standing.
CPO 6350 Seminar in Brazilian Politics (3). The political development of Brazil, focusing on alternation between authoritarianism and democracy. Emphasis on clientelism, patrimonialism, civil-military relations, and political institutions.
CPO 6376 Seminar in Central American Politics (3). Central America's socio-political evolution. Attention is given to both the national and international politics of the region.
CPO 6407 Seminar in Politics of the Middle East (3). In depth analysis of comparative theoretical perspectives of political processes in the Middle East.
CPO 6546 Chinese Politics (3). The course examines key issues and challenges in contemporary Chinese politics, including corruption, economic inequality, statesociety relations, and China's integration into the world economy.

CPO 6771 Politics of Disaster (3). Examines disaster and other extreme events as political system shocks. Analyzes disasters as crises of values, legitimacy, and agenda control. Evaluates policy alternatives in prevention, mitigation, and response. Prerequisite: Graduate Standing.
INR 5007 Seminar in International Politics (3). An advanced graduate course designed to give students a specialized knowledge of the classics in international politics. The course traces the development of international politics from Thucydides to the present.
INR 5012 Global Issues and Human Rights (3). Identification, articulation and clarification of global issues that affect Human Rights and the global strategies used to challenge and overcome obstacles. Prerequisite: Graduate standing.
INR 5017 Approaches to Area Studies (3). Provides students the necessary tools to approach global issues from the comparative perspective of how they play out in different regions of the world.
INR 5036 Politics of Globalization (3). Intensive examination of state and global institutions that have shaped process of economic globalization. Topics include impact on sovereignty, human rights, labor and agendasetting of large and small nation-states.
INR 5062 War, Peace and Conflict Resolution in INR (3). Explores the genesis of interstate conflict, the evolution of crisis, the outbreak of war and peace. Analyzes conflict resolution and post-conflict reconstruction processes in international relations.
INR 5066 Global and Human Security (3). Global and human security is an emerging paradigm intensified by the process of globalization and epitomized by transnational issues affecting the individual, state, region, and global system.
INR 5072 The Media and International Relations (3). Explores impact of visual and print media on practice and theory of international relations. Encourages students to question how representation of international relations issues are produced by everyday media culture. Prerequisite: Graduate standing.
INR 5086 Islam in International Relations (3). Analysis of the role of Islam in shaping the dynamics of contemporary international relations. Emphasis on the ideological, cultural, and political role of Islamic movements and states, and their relations with the West.
INR 5087 Ethnicity and the Politics of Development (3). This course examines the conceptual and substantive dimensions of ethnicity in the context of world politics and political development. The course will highlight ethnicity and ethnic groups as critical factors in North-South politics.
INR 5088 Feminism and International Relations (3). Familiarizes students with major theoretical traditions of feminist thinking and surveys feminist literature in the subfields of security studies, political economy, and global governance. Prerequisites: Graduate standing or permission of the instructor.
INR 5105 American Foreign Policy (3). Compares different perspectives in foreign policy analysis. Provides a
comprehensive understanding of major issues in U.S. policy.
INR 5255 Seminar in African Development (3). Examines political, economic and social development in Sub-Saharan Africa in an international context. Introduces students to sources for research in African international development. Prerequisite: Graduate standing.
INR 5256 Conflict and Peacemaking in Africa (3). An examination of the root and proximate causes of national and transnational conflict in Africa, and the range of approaches used to attempt to restore peace to such conflicts. Prerequisites: Graduate standing or permission of the instructor.

INR 5275 International Relations of the Middle East (3). Focuses on IR of the contemporary Middle East, the foreign policy of major regional states, regional conflicts, and the US and other great powers' involvement, and dynamics of social and religious movements and revolutions. Prerequisites: Graduate standing or permission of the instructor.
INR 5276 Graduate Seminar The International Relations of Iran and the Persian Gulf (3). Study of the contemporary international relations of Iran and the Persian Gulf since the Islamic Revolution in 1979, relations with the Middle East, Eurasia, the Western World and the United States.
INR 5315 Foreign Policy Analysis (3). Comparative examination of theories of foreign policy making, emphasizing the international, domestic, and organizational contexts in which national policies are formulated and enacted. Prerequisites: Graduate standing or permission of the instructor.
INR 5352 Environment and Security (3). Examines the relationship between environmental issues and international security. Surveys such topics as resource scarcity, environmental degradation, and deforestation and their implications for national and regional security. Considers such topics as international environmental law, and international environmental regimes.
INR 5409 International Law I (3). Role of international law in the relations of states; nature, development, theory, sources of law; international personality; jurisdiction, including territory and nationality; dispute settlement.
INR 5507 International Organizations I (3). Study of international organizations and their role in international relations. Emphasis on their legal status, rule-making capacities and role in dispute settlement and maintenance of peace.
INR 5543 International Political Economy of East Asia (3). Introduction to the international political economy of East Asia with a focus on different paradigms that explain the rise and fall of the economy of a number of states in East Asia.
INR 5544 The New Asian Century (3). Critically examines Asian regional identity, Asia's role in the modern world economy, national and regional institution building, new security challenges, and the legacy of the past. Prerequisites: Graduate standing or permission of the instructor.

INR 5607 International Relations and Development (3). An analysis and conceptualization of the process of development as it takes place in the international context. Special attention given to the role of international organizations in promoting development and the manner in which differences in developmental levels conditions international relations.
INR 5609 Contemporary Dynamics of International Relations (3). Surveys the 20th century's large events and important tendencies decade by decade, as registered by intellectual and policy elites at the time.
INR 5615 Research Design in International Relations (3). Introduces graduate students to the principles of formulating and defending a compelling research design, gathering and analyzing evidence, and producing scholarship.
INR 5906 Independent Study (VAR). Directed independent research. Requires prior approval by instructor. Prerequisite: Graduate standing.
INR 5934 Topics in International Politics (3). A rigorous examination of a topic in international politics. Subject matter varies according to instructor. Topic to be announced in advance.
INR 5935 Topics in International Relations (3). Varies according to the instructor. Prerequisites: Graduate standing or permission of the instructor.

INR 5943 Internship in International Relations (1-6). Opportunity to gain practical experience in analysis and conduct of international relations by working at a consulate, governmental agency, non-governmental organization, or non-profit organization. Prerequisites: Graduate standing and permission of the instructor.
INR 5945 Graduate Pedagogy (1). The development of teaching skills required by graduate assistants, including classroom skills, designing examinations, etc. Prerequisite: Graduate Assistants.
INR 6008 Colloquium in International Studies (3). A systemic and International Relations theory supplemented with a consideration of legal, institutional and developmental issues. Prerequisite for MIB students: INR 6603 (World Politics).
INR 6010 Global Governance (3). Surveys contemporary writings on international regimes, global civil society, the relationship of global economics and politics, changing models of world order, and intergovernmental organizations. Prerequisite: Graduate standing.
INR 6019 Seminar in Comparative Area Studies (3). Examines contemporary issues in area studies, with focused attention on the interplay between domestic and international forces and the conditioning effects of global structures. Topics vary by instructor. Prerequisite: Graduate standing.
INR 6056 Environment and Development (3). Examines the relationship of development and the environment from a social theory perspective. Emphasizes Third World problems such as deforestation and soil erosion.
INR 6067 Human Security (3). Explores the debates and dilemmas of human security with an emphasis on the processes and policies actors develop in response to global threats.

INR 6080 Seminar on Non-State Actors (3). Explores the nature of non-state actors in international politics, including cities, interest groups, multi-nationals, and individuals.
INR 6089 International Relations and Human Rights (3). Examination of national and international factors affecting respect for human rights. Special emphasis on international human rights groups, foreign policy, and politics of policy implementation.
INR 6107 U.S. Foreign Policy: Processes and Institutions (3). Examines the structures and processes that shape U.S. policy toward other nations. Topics include: systemic constraints, state/society relations, interest groups, bureaucracy, and leadership.
INR 6209 Comparative Foreign Policy of Latin America (3). Theories, history, and political-economic dynamics of Latin American foreign policies and international relations. (S)

INR 6245 The Military, Latin America and International Security (3). Explores the supra-nationalization of the military institution in Latin America and how this has caused a transformation of its functional missions in the international and regional security and peace. Prerequisite: Graduate standing.
INR 6266 Seminar in Russian Foreign Policy (3). Close analysis of the theoretical foundation and policy evolution of the Soviet/Russian role in international affairs of the 20th century.
INR 6338 Seminar in Strategic Studies (3). Close analysis of key traditional and non-traditional concepts of the field of Strategic Studies, i.e. the genesis of power, war and peace, security and their relevance to and impact on International Relations.
INR 6406 International Law II (3). The course, which is the second of a two course graduate sequence, focuses on special topics, e.g., treaties, state responsibility, force and jurisdiction. Prerequisites: INR 5409 or permission of the instructor.
INR 6604 International Relations Theory I (3). An analysis of the traditional approaches to international relations theory, beginning with the classic works in the field. Emphasizes the philosophical and normative underpinnings of realism, idealism, liberalism and radicalism.
INR 6605 Contemporary International System (3). Study of synthetic review of theories of development and approaches to the study of development as a process of social, political, and economic change. Prerequisites: CPO 5036 and ESC 5025.
INR 6606 Political Psychology of International Relations (3). Study of psychological explanations for political behavior in international relations. Topics include: cognitive, motivational, and bureaucratic decision theories; leadership; and public opinion.
INR 6608 Contemporary International Relations Theory (3). Surveys contemporary theories of International Relations, including neorealism, theories of cooperation among states, approaches to international political economy, and critical theories.

INR 6705 Seminar in International Political Economy (3). Theories of economic cooperation and conflict among nation-states. Liberal, economic nationalists and Marxist theoretical paradigms are explored in an examination of the internationalization of capital, trade and investment and the role of the State in the global economy.
INR 6706 Political Economy of International Relations (3). Examines contemporary theoretical and policy debates in the area of international political economy. Reviews key concepts, theories and approaches used in the study of IPE. Prerequisites: INR 6604 or permission of the instructor.
INR 6936 Seminar in Inter-American Politics (3). Focus on U.S.-Latin American relations. Attempts to link the theoretical literature on U.S. foreign policy with empirical developments.
INR 6967 Preparation: Comprehensive Examination (19). Students prepare for comprehensive examination under the direction of a faculty member.
INR 6975 Thesis (1-6). Registration for students working on their thesis. Prerequisite: All other course work for the Master's in International Studies.
INR 7910 Pre-Dissertation Research (1-9). Students develop a dissertation proposal under the direction of a faculty member.
INR 7980 Ph.D. Dissertation (1-12). Supervised research on an original research project to be submitted in partial fulfillment of doctoral degree requirements. Prerequisites: Permission of the Major Professor and Doctoral Candidacy.
POS 5045 Seminar in American Politics (3). The advanced study of U.S. politics. Students read and discuss major works and theories concerning American politics and government.
POS 5146 Seminar in Urban Politics (3). Examination of processes by which urban areas are governed. Emphasis is on conflicts over structures, power, policy and the politics of ethnicity and class.
POS 5158 Topics in Politics (3). Subject matter varies according to instructor.
POS 5208 Seminar in Political Behavior (3). Analyzes the literature in political behavior. Special emphasis is on voting, socialization, attitudes, partisanship, campaigning, the media, and political participation in the developed democracies. Prerequisite: POS 5706.
POS 5447 Seminar in U.S. Political Parties (3). Students read and discuss the major works and theories on U.S. political parties.
POS 5638 Topics in Public Law (3). A rigorous examination of a topic in public law. Subject matter varies according to instructor. Topic will be announced in advance.
POS 5702 Teaching Political Science (1). Introduces graduate students to the pedagogical and practical aspects of teaching political science. Topics will include selecting books, writing a syllabus, lecturing, running discussion groups, and testing and grading. Covers professional ethics, and student rights and responsibilities.

POS 5706 Research Methodology (3). This course is an introduction to the principal concepts and techniques of quantitative and non-quantitative methodology in the social sciences. It is designed to familiarize the student with the language and format of quantitative and nonquantitative applications in order to permit students to deal effectively with the literature of their field.
POS 5716 Foundations of Political Science (3). Prepares students for the advanced study of politics. Areas of study include history of political science as a discipline, comparison of classical and modern sciences of politics and realpolitik, epistemological foundations.
POS 5728 Comparative Racial Politics (3). This course explores the ways race is socially constructed globally. It will discuss how race and racism are framed by states and different racial norms and patterns of mobilization in each country.
POS 5785 Writing Professionally in Political Science (3). Focus on inductive research process. Refines technical skills for effective written communication. Best practice examples for preparing briefing papers, articles, books, and grant applications.
POS 5909 Independent Study (1-6). Designed for advanced students who wish to pursue specialized topics in political science. Arrangements must be made with instructor during prior semester.
POS 5932 Topics in Urban Politics (VAR). An extensive examination of the processes by which social conflicts in American urban areas are represented and regulated. Emphasis is on the ways in which urban problems are identified and proposed solutions formulated, legitimatized, and administered by urban policy-making processes. Includes a discussion of urban political culture.
POS 6286 Judicial Research (3). Examination of the methodological approaches used to study courts in a political context. Special attention to seminal works that focus on individual, small group and institutional behavior, and extra-legal influences.
POS 6415 Seminar on the U.S. Presidency (3). Examines the most important works on the U.S. Presidency and the evolution of the office since 1789.
POS 6427 Seminar on the U.S. Congress (3). Discussion of the scholarly literature on Congress. Students analyze trends in congressional power and possible reforms.
POS 6612 Seminar on U.S. Supreme Court (3). Seminar covers literature, both current and classic, on U.S. Supreme Court. Topics covered typically include the major paradigms, appointment process, access, agenda setting, decision making and impact.

POS 6639 Seminar in Public Law (VAR). Graduate seminar on special topic in public law. Topic to be announced in advance.
POS 6725 Formal Political Modeling (3). Introduces students to the foundations of public choice. Particular topics may include decision theory, social choice, spatial voting models, and game theory, among others.
POS 6918 Seminar in Political Science Research Methods (3). Examines the methods used to design, execute, and critique empirical research in political
science, addressing a variety of methodological issues. Prerequisites: POS 5706 and POS 5716.
POS 6937 Seminar in Politics (VAR). Subject matter varies according to instructor.
POS 6971 Thesis (1-6). Requires students to enroll for thesis or dissertation research for at least one credit hour every semester in which they are engaged in such research. Prerequisite: All other course work for the Master's.

POS 6976 Research Seminar (3). Required course for all M.A. candidates during completion of their major research project. Also required for second-year Ph.D. students. The course guides student research while in progress. Prerequisite: POS 5706.
POS 7910 Pre-Dissertation Research (1-9). During the term in which students take Ph.D. comprehensive exams, this course enables them to concentrate on completion of their dissertation prospectus. Prerequisite: Completion of all other Ph.D. coursework.
POS 7980 Ph.D. Dissertation (1-12). Supervised research and writing of an original research project. Prerequisites: Permission of Major Professor and Doctoral Candidacy.
POT 5007 Seminar in Political Theory (3). An examination of writings from a diverse list of some of the major political theorists in the Western tradition from antiquity to the present.
POT 5307 Feminist Political Theory (3). Examines feminist political theory in the second half of the twentieth century with a focus on the work of U.S. scholars.
POT 5615 Political Theory and Modernity in a Transnational Perspective (3). Explores and critically evaluates late modern (20th and 21st century) social and political theories central to the thought and practice of international politics.
POT 5635 Islamic Political Thought (3). Intensive study of major thinkers and primary texts of Islamic civilization form the development of Islamic political thought in Late Antiquity to the contemporary era.
POT 5934 Topics in Political Theory (3). An intensive examination of selected topics dealing with political theory. Subjects will vary, depending upon the desires of students and faculty. Allows the student to choose topics of particular interest to him or her.
POT 6015 Seminar in Classical Political Thought (3). Examination of key elements of classical political thought from the Hellenic to early Christian periods.
POT 6056 Seminar in Modern Political Thought (3). Examines important works and theories of political thought from the renaissance to the early 19th century.
POT 6067 Seminar in Contemporary Political Thought (3). Examines political theories of the 19th and 20th centuries. Special emphasis on the tension between modern and post-modern theory.
POT 6208 Seminar in American Political Thought (3). Students read and discuss classic and contemporary interpretations of U.S. political thought, and apply those ideas to modern U.S. politics.

POT 6315 Democratic Theory (3). Examines various theories of democracy in modern and contemporary political thought, including liberal, civic republican, deliberative, and cosmopolitan conceptions of democracy. Prerequisite: Graduate standing.

POT 6416 Seminar in Marxism (3). Analysis of the evolution of Marxism from Marx to the present. Particular attention is given to contemporary Marxist debates.
POT 6603 Political Theory of the Modern State (3). Analyzes evolution and theories of the modern state from the high middle ages to the present. Pre-state formations, classical states, and social science theories of the state are also discussed.

PUP 5934 Topics in Public Policy (1-6). A rigorous examination of a topic in public policy. Subject matter varies according to instructor. Topic will be announced in advance.

PUP 6007 Seminar in Public Policy (1-6). Graduate seminar on special topic dealing with public policy analysis. Subject matter varies according to instructor. Topic to be announced in advance.

## Public Administration

Howard A. Frank, Professor and Chairperson
Mohamad Alkadry, Professor and MPA Director
Susannah Bruns-Ali, Assistant Professor
Agatha Caraballo, Instructor
Can Cheng, Assistant Professor
Shaoming Cheng, Associate Professor
Nazife Emel Ganapati, Associate Professor
Sukumar Ganapati, Associate Professor and PhD Director
Jean-Claude Garcia-Zamor, Professor
Hai Guo, Assistant Professor
Alexander Kroll, Assistant Professor
Milena I. Neshkova, Associate Professor
Meredith A. Newman, Professor
Valerie L. Patterson, Clinical Associate Professor
Keith D. Revell, Associate Professor
Allan Rosenbaum, Professor

## Master of Public Administration

The Master of Public Administration prepares students for careers in public service and non-profit organizations. It also prepares students for private sector positions having significant contact with public organizations. The degree provides pre-service and mid-career students with an appropriate mix of technical and generalist skills needed for management and analytic positions in local, state, and federal government, as well as non-profit organizations. Students are given broad exposure to the field in the core and subsequently develop expertise within their areas of specialization. The degree also provides students with the necessary analytic and substantive background for successful pursuit of doctoral studies within the discipline. Graduates are well-prepared for positions as city manager, finance director, budget analyst, personnel director, special project coordinator and program analyst.

The MPA Program in Public Administration is accredited by the National Association of Schools of Public Affairs and Administration. Accreditation by this agency ensures the student that the program has been reviewed and meets the national standards for graduate studies in the field.

## Admission Requirements

Applicants to the Master of Public Administration (MPA) program must:

1. Have earned a bachelor's degree from an accredited institution;
2. Have a GPA of 3.0 or better in all upper division (undergraduate) course work;
3. Take the Graduate Record Examination (GRE) if their GPA in the upper division 60 credits is less than 3.25 , and submit the score by the application deadline; LSAT and GMAT Scores are also accepted as substitutes for the GRE Score. Students with more than three years of substantial administrative experience (as determined by MPA Director), and students who have more than 18 credits of graduatelevel coursework with the grades of "B" or better, may be exempted from the GRE requirement by the MPA Director;
4. Submit three academic or professional letters of recommendation from faculty members at their
undergraduate institution or from employment supervisors;
5. Submit a current resume; and
6. Demonstrate graduate level writing competency and interest in public service values by submitting a letter-of-intent not to exceed three double-spaced pages explaining how earning the Master of Public Administration is consistent with long-term career goals. Students may also use this letter to discuss their passion for public issues or policies and to communicate to the admission committee if they feel that their admission file does not properly reflect their potential to succeed in graduate school.
All above documents must be submitted by the stated application deadline.

## Exceptions to the graduate admissions requirement

Students with a bachelor's degree from an accredited institution and who have an undergraduate GPA of 2.75 or greater may be admitted to a Public Administration graduate certificate program, subject to the approval of the Program Director or designee. Students admitted to a certificate program who have completed 12 graduate certificate credits may apply to the MPA program through the regular admission process and by the stated deadlines. The full 15 or 18 credits obtained in a Public Administration graduate certificate program may be used to satisfy requirements of the MPA degree, provided the student is admitted to the MPA program prior to the completion of the final six graduate certificate credit hours required to obtain the certificate.

## Degree Requirements

The Master of Public Administration (MPA) program requires 42 credit hours for all students not having a Bachelor of Public Administration from a public university in the State of Florida.

Students with less than three years of public service (public or non-profit sectors) experience in positions with some management or project management responsibilities may be required to complete a public service internship. PAD 6946, Public Administration Internship, may be used as an elective toward satisfaction of the 42 credit requirement for program completion.

## Core Courses ( 24 credits) <br> (Core Courses may be restricted to Degree-seeking or Certificate graduate students in the Department of Public Administration. All other students must seek approval of Department)

The MPA core consists of the following eight courses:
PAD 6053 Political, Social and Economic Context of Public Administration
PAD 6056* The Practice of Public Management
PAD 6227 Public Finance and the Budgetary
PAD 6417 Process $\quad$ Human Resource Policy and Management
PAD 6306 Policy Analysis and Planning
PAD $6701 \quad$ Quantitative Methods in Public
PAD 6434

PAD 6726

> Applied Research Methods for Accountability in Public and Non-Profit Organizations
> (Prerequisite: PAD 6701)

## Electives (18 credits)

Six (6) elective courses required.
Grading, Sequencing, and Substitution Policy
PAD 6053, PAD 6701, and PAD 6726, must be taken during the first 18 credit hours of course work. PAD 6701 is a prerequisite for PAD 6726.
*PAD 6056, The Practice of Public Management is a capstone experience for the program and must be taken after the successful completion of MPA core or last semester of course work. The program reserves the right to withhold the awarding of credit for course work taken out of sequence and without appropriate prerequisites.

Any core course with the exception of PAD 6056 may be waived through petition to the MPA Program Director or designee. The petitioner must demonstrate the equivalence of the previous coursework, and prove that their performance met or exceeded core requirements.

Students must maintain a 3.0 cumulative graduate GPA to graduate. A grade of ' $C$ ' or better is required for every core course. Note: $A$ ' $C$ '' is not acceptable.

## Executive Master of Public Administration Track

The Executive MPA track (EMPA) builds upon the extensive knowledge base that experienced public service professionals possess. The EMPA curriculum provides a hands-on and in-depth exposure to the leadership, managerial and analytic skills critical to advanced public sector professionals. The core courses are the same courses required by the traditional MPA program. The difference between this track and the traditional MPA is the pedagogical approach, delivery format, scheduling, facility and the executive-level cohort.

## Admission Requirements

Applicants to the Executive MPA track must:

1. Have earned a bachelor's degree from an accredited institution;
2. Have a GPA of 3.0 or better in all upper division (undergraduate) course work;
3. Take the Graduate Record Examination (GRE) if their GPA in the upper division 60 credits is less than 3.0, and submit the score by the application deadline; LSAT and GMAT Scores are also accepted as substitutes for the GRE Score. Students with more than 18 credits of graduate-level coursework with the grades of " $B$ " or better, may be exempted from the GRE requirement by the MPA Director;
4. Submit three academic or professional letters of recommendation from faculty members at their undergraduate institution or from employment supervisors;
5. Submit a current resume showing five to ten years of cumulative experience with public or non-profit organizations and at least three years of middle-toupper level managerial experience; and
6. Demonstrate graduate level writing competency and interest in public service values by submitting a letter-of-intent not to exceed three double-spaced
pages explaining how earning the Master of Public Administration is consistent with long-term career goals. Students may also use this letter to discuss their passion for public issues or policies and to communicate to the admission committee if they feel that their admission file does not properly reflect their potential to succeed in graduate school.

## Degree Requirements

The EMPA track requires 42 credit hours.
Core Courses: ( $\mathbf{2 4}$ credits)
(Core Courses may be restricted to Degree-seeking or Certificate-seeking graduate students in the Department of Public Administration. All other students must seek approval of Department)
The MPA core consists of the following eight courses:
PAD 6053 Political, Social and Economic Context of Public Administration
PAD 6056* The Practice of Public Management 3
PAD 6227 Public Finance and the Budgetary Process
PAD 6417 Human Resource Policy and Management
PAD $6306 \quad$ Policy Analysis and Planning 3
$\begin{array}{ll}\text { PAD } 6701 & \begin{array}{l}\text { Quantitative Methods in Public } \\ \\ \text { Administration }\end{array}\end{array}$
PAD 6434 Leadership and Decision-making
PAD 6726 Applied Research Methods for
Accountability in Public and Non-Profit
Organizations
(Prerequisite: PAD 6701)

## Electives (18 credits)

Six (6) elective courses required.

## Grading, Sequencing, and Substitution Policy

The EMPA track is a cohort program. Classes are dynamically scheduled to meet on one weekday evening and on Saturdays. The program is designed with several weekends off in each semester. The EMPA is accelerated in that students can finish the entire program in 16 months.

Any core course with the exception of PAD 6056 may be waived through petition to the MPA Program Director or designee. The petitioner must demonstrate the equivalence of the previous coursework, and prove that their performance met or exceeded core requirements.

Students must maintain a 3.0 cumulative graduate GPA to graduate. A grade of ' $C$ ' or better is required for every core course. Note: $A$ ' $C$-' is not acceptable.

## Juris Doctor/Master of Public Administration Joint Degree Program

The faculties of the College of Law and the Steven J. Green School of International and Public Affairs have approved a joint degree program culminating in both a Juris Doctor degree (J.D.), awarded by the College of Law, and a Master of Public Administration degree (MPA), awarded by the Steven J. Green School of International and Public Affairs. Under the joint degree program, a student can obtain both degrees in significantly less time than it would take to obtain both degrees if pursued
consecutively. Essential criteria relating to the joint degree program are as follows:

1. Candidates for the program must meet the entrance requirements for and be accepted by both programs. Both programs must be informed by the student at the time of application to the second program that the student intends to pursue the joint degree.
2. The joint degree program is not open to students who have already earned one degree.
3. For law students, enrollment in the MPA program is required no later than the completion of 63 credit hours in the J.D. program. For MPA students, enrollment in the J.D. program is required no later than the third semester after beginning the MPA program. A summer session is counted as half a semester.
4. A student must satisfy the curriculum requirements for each degree before either degree is awarded. The Department of Public Administration will allow 9 credit hours of College of Law courses, as approved by the MPA program Director, in consultation with the Dean of the Steven J. Green School of International and Public Affairs, to be credited toward both the MPA and J.D. degrees.
5. Reciprocally, law students may receive 9 hours of credit toward the satisfaction of the J.D. degree for courses taken in the MPA curriculum upon completion of the MPA degree with a grade point average of 3.0 or higher.
6. A student accepted by both degree programs may begin studies in either the College of Law or the Department of Public Administration, but full-time law students must take the first two semesters of law study consecutively and part-time law students must take the first three semesters of law study consecutively. Students electing to begin study in one school under the joint degree program may enter the second school thereafter without once again qualifying for admission so long as they have notified the second school before the end of the first week of the first semester in the second school and are in good academic standing when studies commence in the second school.
7. A student enrolled in the joint degree program will not receive either degree until the student has satisfied all of the requirements for both degrees, or until the student has satisfied the requirements of one of the degrees as if the student had not been a joint degree candidate.

## Master of Science in Criminal Justice/Master of Public Administration Joint Degree Program

The Department of Criminal Justice and the Department of Public Administration have a joint degree program culminating in both a Master of Science in Criminal Justice (MSCJ) and a Master of Public Administration (MPA). The joint degree program prepares graduate students for overlapping careers in criminal justice and public management. It is intended to prepare students for positions in public, private, and nonprofit organizations that require both criminal justice and management knowledge. Under the joint degree program, a student can obtain both degrees in significantly less time than it would
take to obtain both degrees if pursued consecutively. Important criteria relating to the joint degree program are as follows:

1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate in the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
2. Applicants for a joint degree will not be accepted from candidates who have already completed either degree. MSCJ or MPA students must apply and be admitted by no later than the second to last semester in which they are expected to complete their original degree requirements.
3. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate.
4. The joint degree requires a total of 60 credit hours ( 20 courses). Candidates are required to complete the 11 core courses ( 33 credits) included in the MSCJ and MPA programs (completing the graduate level statistics and research method classes as part of the MPA Core or the CJ Core), four criminal justice electives (12 credits), two public administration electives ( 6 credits) and three general electives ( 9 credits) which could be MSCJ, MPA, or other graduate level courses approved by the student advisor.

## Core Courses

PAD 6053 Political, Social and Economic Context
PAD $6306 \quad$ Policy Analysis and Program Planning
3

PAD 6417 Human Resource Policy and $\begin{array}{ll}\text { Management }\end{array}$
$\begin{array}{ll}\text { PAD } 6227 & \begin{array}{l}\text { Public Finance and the Budgetary } \\ \text { Process }\end{array}\end{array}$
PAD 6434 Leadership and Decision-making 3
PAD 6056 The Practice of Public Management 3
CCJ 6025 Criminological Theory 3
$\begin{array}{ll}\text { CCJ } 6676 & \text { Transnational Crime and National } \\ & \text { Security }\end{array}$
CCJ $6485 \quad$ Criminal Justice Policy Analysis 3
CCJ $6705 \quad$ Research Methods in Criminal Justice 3
PAD 6726 Applied Research Methods for Accountability in Public and Nonprofit Organizations
Data Analysis in Criminal Justice 3
Quantitative Methods in Public Administration

## Electives

Four criminal justice electives* 12
Two public administration electives 6
Three general electives (which could be MSCJ, MPA, or other graduate level courses approved by the student advisor
9
*Advanced students intending to enroll in a doctoral degree program are strongly encouraged to complete CCJ

6915 Supervised Research. General electives taken from outside fields must be relevant to criminal justice or public administration and approved by the Graduate Advisor.

## Combined BPA/MPA Degree Program

The combined BPA/MPA degree program offered by the Department of Public Administration allows qualified students to earn both degrees in a shorter amount of time than typically required for earning degrees sequentially. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships.

## Admissions Requirements to the Combined Degree Program

1. Overall GPA of 3.2 or better.
2. Letter of recommendation from a faculty member at FIU or from a supervisor.
3. Current resume.
4. Letter-of-intent not to exceed three double-spaced pages explaining how earning the Master's of Public Administration is consistent with long-term career goals. Students may also use this letter to discuss their passion for public issues or policies and to communicate to the admission committee if they feel that their admission file does not properly reflect their potential to succeed in graduate school.
5. Application to the combined program after having completed at least 75 credit hours but no more than 90 credit hours in the BPA program.
6. Completion of at least 12 credits of Public Administration coursework and at least 24 credits of coursework at FIU.
7. Completion of all lower division requirements, including the University Core Curriculum, prior to acceptance to the combined program.
8. Attainment of a grade of ' $B$ ' or better on all graduate courses completed while in the BPA program.
Courses Counted Toward both Degree Programs Students accepted into the combined degree program may count no more than 4 of the master's courses (maximum of 12 credits) listed below toward satisfying both the BPA and MPA degree requirements:
$\begin{array}{ll}\text { PAD } 6053 & \begin{array}{l}\text { Political, Social and Economic Context } \\ \text { of Public Administration }\end{array}\end{array}$
must be among the four double-counted courses
Students may select 3 of the following courses to be doubled-counted:
PAD 6227 Public Finance and the Budgetary Process
PAD 6306 Policy Analysis and Planning 3
PAD $6417 \quad$ Human Resource Policy and Management
PAD 6434 Leadership and Decision-making 3
PAD $6701 \quad$ Quantitative Methods in Public
Administration
(Prerequisite: PAD 4704)
9. At least one writing sample.

Foreign applicants must demonstrate proficiency in the English language by presenting a minimum score of a 100 on the TOEFL iBT (equivalent to 600 on the paper-based Test of English as a Foreign Language, TOEFL PBT. If applicants take the language proficiency assessment administered by the International English Language Testing System (IELTS), a minimum score of 7.0 is desirable. All students living within a 50 -mile radius are strongly encouraged to interview with the Ph.D. Coordinator during the admissions process. Telephone interviews may be arranged for students living outside a 50-mile radius.

The admission process is competitive and the program considers all of the evidence in the application file in making its decision. Meeting the minimum requirements does not guarantee admission and applicants failing to meet the minimum requirements may be admitted based on other evidence of potential, such as prior research or senior executive status.

Admitted students may transfer a maximum of 12 semester credits (not included in another degree) from other institutions towards Ph.D. degree requirements, subject to the approval of the Doctoral Committee. Admitted students must demonstrate knowledge of American political institutions, basic theories of public administration, social science research methods, and substantive areas of the student's research interest. Students with deficiencies in any of the above mentioned areas may be assigned additional specific coursework.

## Financial Aid

The objective of financial aid is to provide direct assistance to those students who require financial assistance to complete their doctoral programs, and to enhance the reputation of the program by attracting an outstanding cadre of students.

To receive financial aid from University and Program sources, doctoral students must be enrolled full-time (9 semester hours during the term in which they receive financial aid). Students having graduate assistantships cannot hold other employment.

The exact amount of financial assistance depends upon funding provided by the University and the legislature. The current level of Program assistance is approximately $\$ 19,000$ annually. Students on assistantships are eligible for tuition waivers. Assistantships do not cover additional student fees, such as health, parking, athletic fees, and per credit fees.

Program financial aid is awarded in one-year blocks, and is generally provided for up to three years of the student's doctoral study.

The University has a variety of other financial aid opportunities including graduate grants, scholarships, loans, work-study programs and targeted scholarships. Information on these and other opportunities are available through the University' financial aid offices. To apply for assistance, students should notify the Ph.D. Director of their intent at the time of application. For matriculation fee waivers and University assistance, students must file the University's Financial Aid Form (FAF) and the other University aid documents. Information on the university procedures is available in the University's Financial Aid office.

## Degree Requirements

To obtain the degree, admitted students must complete at least 60 semester hours beyond the Master's degree or its equivalent, including 45 semester hours of approved course work and 15 hours of dissertation work after admission to candidacy. In addition, there is a residency requirement of at least 18 semester hours in three consecutive semesters of study during the first year of enrollment in the Ph.D. Program and a minimum of six hours required in all subsequent semesters.

Successful completion of course work and passing scores on the comprehensive examination are required before students can advance to candidacy for the Ph.D. and present a dissertation proposal. Students are advised to consult the doctoral program handbook for any additional information regarding benchmarks for student progress in grade point average, course completion, comprehensive examinations and dissertation work.

## Program of Study

The Doctor of Philosophy in Public Affairs is a 60 semester hour program beyond the Master's degree, with eight required courses ( 24 semester credit hours), six specialization elective courses (18 semester credit hours), a comprehensive examination (minimum of three semester hours), and dissertation (15 semester hours). Students without a Master's degree (i.e. those with a Bachelor's degree only) will need to take minimum of 75 semester credit hours in the doctoral program.

During the first semester of the program, students are required to select, with the assistance and approval of the Ph.D. Director, an Advisor who is a full-time faculty member in the program. By the end of the first year, students are required to develop a program of study with the assistance and approval of their Advisor and the Ph.D. Director. The Advisor may not necessarily be the same as the student's Dissertation Committee Chair at the later stage.

## Core Curriculum (24 credits)

| PAD 7277 | Public Administration and the American <br> Political Economy | 3 |
| :--- | :--- | :--- |
| PAD 7155 | Organizational Development and <br> Change in Public and Nonprofit |  |
|  | Organizations | 3 |
| PAD 7808 | Economic Development and Urban <br> Management | 3 |
|  | (Crosslisted with PAD 5805 Economic <br> PAD 7865 | Development and Urban Revitalization) |
|  | Development Administration <br> (Crosslisted with PAD 6838 | 3 |
|  | Development Administration) |  |
| PAD 7703C | Empirical Methods in Public |  |
| PAD 7705 | Administration <br> Applied Quantitative Analysis I | 3 |
| PAD 7707 | Applied Quantitative Analysis II <br> PAD 7055 | Scope and Theory of Public |
|  | Administration | 3 |

## Specialization Courses (18 credits)

Students are required to take six courses in an area of specialization to be designed with the advisor. The courses must be at the 5000, 6000, or 7000 level and may be taken within the University. These specialization electives may also be especially designed courses
developed in conjunction with the student's advisor and with approval of the Ph.D. coordinator. Specialization areas may include subfields within the discipline of public administration (human resource management; subnational administration and policy, etc.) or may involve cognate disciplines (such as health services administration; criminal justice administration; environmental management; etc.). At least three hours must be URS 7926 (Supervised Readings), taken in conjunction with comprehensive examination preparation.

In developing a specialization and program of studies, students may consult with public administration faculty (and faculty in their major's department, if appropriate). If the student's principal area of interest is in a cognate discipline outside of Public Administration or the major's department, the student and Ph.D. Director should consult with appropriate faculty in designing the program of studies.

## Comprehensive Examination ( 3 credits)

Subsequent to completion of course work, students are required to pass a two-part comprehensive examination. The first component of the comprehensive examination is a written examination testing for knowledge of the Ph.D. core and related material. The second component is the submission of a research proposal that outlines the dissertation research problem, its significance, and the research method.

Students who fail the Comprehensive Examination on the first attempt must retake the examination at its next offering. Students who fail the examination twice are automatically dismissed in accord with general University policy.

## Dissertation (15 credits)

In consultation with the Ph.D. Director and the Advisor, students should identify dissertation committee chair during the first two years of the program. The student should also form the dissertation committee before the comprehensive examination. Upon successful completion of the comprehensive examination, students should finalize their dissertation proposal. Students are expected to defend the dissertation prospectus before the end of the first semester subsequent to passing the Comprehensive Examination.

Upon the public defense and approval of the proposal, the students will initiate formal work on the dissertation. During this time, the students are expected to make appropriate progress toward completing the dissertation, and to enroll continually (at least six credits per semester) until the degree is completed. Upon completion of the dissertation, candidates will formally defend the research at a meeting conducted by the Dissertation Committee. The degree will be awarded upon a positive recommendation of the Committee and compliance with all policies and procedures required by the University.

Award of en route Master's Degree to Ph.D. Candidates: Under certain circumstances, individuals directly admitted into the Ph.D. program following completion of their bachelor's degree, may be awarded a master's degree in public administration or the appropriate major. To be eligible, a student must complete core requirements in the master's program. Upon certification by the student's advisor that this requirement has been met, the Ph.D. committee will approve the award of the
master's degree upon passing of comprehensive examinations.

## Combined M.P.H in Health Policy and Management/Ph.D. in Public Affairs

The combined M.P.H. with a major in Health Policy and Management/Ph.D. in Public Affairs is intended for those students in the program who are interested in research on issues of public health, health policy, health management and related areas. The major is offered as a combined degree in Master of Public Health is offered by the Department of Health Policy and Management and the Ph.D. in Public Affairs is offered by the Department of Public Administration. Students in this combined degree program will need to be admitted to both the M.P.H. and the Ph.D. programs. Students intending to pursue this major must check the Health Policy and Management subplan option in the application. Students will complete the M.P.H. course requirements in the first two years, and will begin the Ph.D. program in the second year.

The admission process and degree requirements for the combined degree program are the same as that of the requirements for the main Ph.D. in Public Affairs. The program curriculum is, however, customized for the combined degree program. In addition to the core classes, the students in this combined degree program will take specialization courses in health policy and management. The students will need to be admitted to both the M.P.H. and the Ph.D. programs.

## Program of Study

The combined M.P.H. with a major in Health Policy and Management/Ph.D. in Public Affairs is a 60 semester hour program (excluding the semester credit hours required for the Master of Public Health program). There are eight core courses ( 24 semester credit hours), six courses in health policy and management major (18 semester credit hours), a comprehensive examination (minimum of three semester credit hours), and dissertation (15 semester credit hours).

During the first semester of the Ph.D. program, students are required to select, with the assistance and approval of the Ph.D. Director, an Advisor who is a fulltime faculty member in the program. By the end of the first year, students are required to develop a program of study with the assistance and approval of their Advisor and the Ph.D. Director. The Advisor may not necessarily be the same as the student's Dissertation Committee Chair at the later stage.

## Core Curriculum (24 credits)

PAD 7277 Public Administration and the American Political Economy
PAD $7155 \quad$ Organizational Development and Change in Public and Nonprofit Organizations Economic Development and Urban Management
(Crosslisted with PAD 5805 Economic Development and Urban Revitalization)
PAD 7865 Development Administration (Crosslisted with PAD 6838 Development Administration)
PAD 7703C Empirical Methods in Public Administration

PAD 7705
Applied Quantitative Analysis I
PAD 7707 Applied Quantitative Analysis II
PAD 7055

Scope and Theory of Public
Administration

## Specialization Courses (18 credits)

Students are required to take six courses in an area of health policy and management. The courses must be at the 5000,6000 , or 7000 level and may be taken within the University. These specialization electives may also be especially designed courses developed in conjunction with the student's advisor and with approval of the Ph.D. Director. Specialization areas may be broadly related to health policy or healthcare management. Nine semester credit hours of the M.P.H. program will be included in the Ph.D. program. At least three hours must be URS 7926 (Supervised Readings), taken in conjunction with comprehensive examination preparation.

In developing a specialization and program of studies, students may consult with faculty in both public administration and health policy and management.

## Comprehensive Examination ( 3 credits)

Subsequent to completion of course work, students are required to pass a two-part comprehensive examination. The first component of the comprehensive examination is a written examination testing for knowledge of the Ph.D. core and related material. The second component is the submission of a research proposal that outlines the dissertation research problem, its significance, and the research method.

Students who fail the Comprehensive Examination on the first attempt must retake the examination at its next offering. Students who fail the examination twice are automatically dismissed in accord with general University policy.

## Dissertation (15 credits)

In consultation with the Ph.D. Director and the Advisor, students should identify Dissertation Committee Chair during the first two years of the program. Either the chair or the co-chair should be from the Department of Public Administration. The student should also form the dissertation committee before the comprehensive examination. Upon successful completion of the comprehensive examination, students should finalize their dissertation prospectus before the end of the first semester subsequent to passing the Comprehensive Examination.

Upon the public defense and approval of the proposal, the students will initiate formal work on the dissertation. During this time, the students is expected to make appropriate progress toward completing the dissertation, and to enroll continually (at least six credits per semester) until the degree is completed. Upon completion of the dissertation, candidates will formally defend the research at a meeting conducted by the dissertation committee. The degree will be awarded upon a positive recommendation of the committee and compliance with all policies and procedures required by the university.

Award of en route Master's Degree to Ph.D. Candidates: Under certain circumstances, individuals directly admitted into the Ph.D. program following completion of their bachelor's degree, may be awarded a master's degree in public health. To be eligible, a student
must complete core requirements in the master's program. Upon certification by the student's advisor that this requirement has been met, the Ph.D. committee will approve the award of the master's degree upon passing of comprehensive examinations.

## Course Descriptions

## Definition of Prefixes

PAD-Public Administration; PAF-Public Affairs; PUPPublic Policy; URP-Urban and Regional Planning; URSUrban and Regional Studies.

PAD 5041 Values and Technology in Modern Society (3). Surveys personal and societal value assumptions in the context of the technological society. Examines organizational-societal value structures, and the ways in which technology creates rapid change and new alternatives in values. Also interrelationship of the past, present and future is explored, through futurism and forecasting techniques.
PAD 5043 Government and Minority Group Relations (3). Explores the pressing contemporary issue of the relationship between government and minorities. Examines the clash between established institutional values and minority group values, and surveys remedial programs aimed at dealing with the problem. Comparative case studies will be used to analyze public agencies' internal relations with minorities (recruiting, selection, etc.), as well as their different responses to the minority groups they serve.
PAD 5256 Public Economics and Cost Benefit Analysis (3). This course provides the quantitative and qualitative tools and case material to solve allocation problems in the public sector. Applied microeconomic theory, welfare economics, and market and government failure are analyzed as are the public alternatives available. Cost-benefit analysis, the ethics of applied practice, and the important skills of communicating with decision makers are included.

PAD 5416 Social Equity and Human Resource Management (3). The course deals with the human resource management issues arising from equity and affirmative action requirements in the workplace.
PAD 5427 Collective Bargaining in the Public Sector (3). The course deals with the nature and implications of collective bargaining for managers and employees in (and students of) public organizations. The course emphasizes similarities and differences between the private and public sectors, as they apply to collective bargaining.
PAD 5435 Administration and the Role of Women (3). The course is designed for women and men who are interested in moving into management positions, or who have done so and want to broaden their understanding of the changing role of women. Classes will allow for experimental as well as academic exploration of the issues. The course will also explore design, implementation, and evaluation of affirmative action programs.
PAD 5443 The Public Administrator and Media Relations (3). Surveys the government-mass communication media relationship, and then concentrates on the ways in which public managers handle media
relations. Emphasis throughout is placed on questions of information-handling unique to public organizations, involving, for example, adherence to Florida's Sunshine Law and the Federal Freedom of Information Act.
PAD 5460 Productivity Improvement (3). Provides measures to improve organizational and worker productivity using applied behavioral science.
PAD 5616 Contracting and Managing Third Party Governments (3). Analyzes the legal foundations, administrative and economic characteristics of government instrumentality's as they are used to pursue public policy. Analyzes how and why different combinations of instrumentality's are used in different policy areas.
PAD 5660C Applied Legal Context of Public Administrators (3). An overview of constraints and latitude the legal system grants to public administrators and managers. Provides the applied legal information required to make effective decisions in the public sector.
PAD 5661C Management of Court-Agency Relations (3). Examines applied judicial-administrative relations with particular emphasis on administrative policymaking. Covers the legal, environmental, and political factors that influence administrative strategies of policy and program compliance.
PAD 5805 Economic Development and Urban Revitalization (3). This course is an interdisciplinary examination of research and practice in contemporary economic development, with emphasis on successful implementation in a variety of settings.
PAD 5934 Contemporary Issues in Public Administration (3). An analysis of major conceptual issues currently facing public administrators. May be repeated for credit.
PAD 6038 Policy Formulation and Legitimation (3). This course examines the social, political and economic factors which influence the development, formulation, and legitimation perspective of public policy with emphasis on public administrators.
PAD 6042 Democracy and the Administrative State (3). Juxtaposes the contemporary administrative condition of American government with the values of the democratic state. Different approaches to democracy - in practice as well as in theory - will be analyzed, and their implications for public organizations and individual administrators examined.
PAD 6053 Political, Social and Economic Context of Public Administration (3). Examines the context in which public organizations operate, stressing the relationship between such organizations and their multifaceted environment. Emphasis is on examining relevant social and cultural mores and patterns, political values and processes, governmental institutions, economic systems, resource availability, and other environmental factors currently significant to public organizations. Prerequisite: Admission to the majors.
PAD 6056 The Practice of Public Management (3). This capstone course for the MPA Program will deploy skills, concepts, and knowledge acquired in previous course work in analytic exercises related to students' areas of specialization. Prerequisite: Admission to the majors.

PAD 6106 Organization Theory and Administrative Behavior (3). Historical perspective and philosophical foundations of contemporary and emerging organization theory and administrative behavior, with emphasis on concepts of administrative leadership, the organization's members and systems, group dynamics, sociopsychological aspects of organization and management.
PAD 6142 Management of Nonprofit Organizations (3). Studies the characteristics, roles, and challenges of nonprofit entities. Topics include structure and governance, financial reporting and accountability, financial development, and contract management. Prerequisite: Admission to the majors.
PAD 6156 Applied Organization Theory and Behavior
(3). Contemporary approaches to improving the overall effectiveness of public organizations through the utilization of the applied behavioral sciences: personal and executive development programs, team building, action research, etc. Survey of research on the effects of organizational development programs, with special reference to public organizations.

PAD 6205 Public Financial Management (3). Capital asset administration, debt administration, revenue systems, public employee retirement programs, purchasing, inventorying, and risk management.
PAD 6209 Financial Management in Public and Nonprofit Organizations (3). Processes, tools and methods used in financial planning and control of public and nonprofit entities with focus on utilization of critical performance indicators deployed over agency budget and life cycles. Prerequisites: PAD 6227, admission to the majors.
PAD 6224 Advanced Seminar in Public Budgeting (3). A review of the state of the art in public budgeting, emphasizing conceptual areas for significant research and appropriate methodological design for addressing them. Prerequisites: PAD 6227, PAD 6229, and PAD 6205.
PAD 6225 Comparative Public Budgeting (3). Public budgeting is a common activity in all governments and international organizations. Covers the differences in budgeting and explores patterns implicit in those differences.
PAD 6227 Public Finance and the Budgetary Process (3). Examines the theory and practice of public budgeting and its relationship to the administrative processes of control, management and planning. Special emphasis will be given to the social balance question; the kinds and scope of government expenditures; the fiscal role of government in a mixed economy; sources of revenue available to government; administrative, political and institutional aspects of the budget and the budgetary process; and problems and trends in intergovernmental financial relations. Prerequisite: Admission to the majors.
PAD 6229 Advanced Management Techniques (3). Explores quantitative revenue and expenditure models and other techniques which address public sector decision making under conditions of resource constraint. Prerequisites: PAD 6205 or permission of the instructor.
PAD 6306 Policy Analysis and Program Planning (3). This course presents techniques and tools for the practice of policy analysis in public, nonprofit, and health
organizations, with emphasis on constructing policy analysis useful to decisionmakers. Prerequisite: Admission to the majors.
PAD 6366 Policy and Program Implementation (3). This course examines and evaluates the legal, socio-political administrative factors influencing the implementation of public policy and programs. Prerequisite: PUP 6015. (S)
PAD 6379 Homeland Security Risk Assessment (3). Provide the technical framework needed for design, implementation, and evaluation of risk assessments used in local, regional, and state Homeland Security administration.

PAD 6399 Homeland Security Management for State and Local Government (3). Provides a broad overview of the legal, technical, financial, and organizational environment in which Homeland Security initiatives are designed and successfully implemented.
PAD 6417 Human Resource Policy and Management (3). The course focuses on the role of the personnel manager and how the manager performs tasks connected to human resources development, policy and management in public and nonprofit organizations. Prerequisite: Admission to the majors.

PAD 6434 Leadership and Decision-making (3). Readings and case studies examine how effective leaders in the public and non-profit sectors make decisions in fluid and challenging environments. Prerequisite: Admission to the majors.
PAD 6436 Professionalism and Ethics (3). Examines behavioral approaches toward understanding the personal world of public managers with emphasis on knowledge, skills, and abilities which aid effective goal accomplishment.
PAD 6437 Dynamics of Individual Growth (3). This course focuses on the importance of small group theory to the personal growth of the administrator, and the role of interpersonal abilities in effectively serving client groups. The course also deals with the expansion of the phenomenological world view of each student; and will look at existential theory and the dilemma of personal growth.
PAD 6605 Administrative Law and Procedures (3). Emphasizes the responsibilities public administrators have under local, state, and federal laws. Explores such concepts as client responsiveness under the law; the regulatory process; state administrative law systems; the executive order process; the relationship between administrative law and the checks-and-balances system; discretionary justice; and others.
PAD 6701 Quantitative Methods in Public Administration (3). An intensive introduction to statistical and forecasting tools appropriate for public, nonprofit, and health professionals. Prerequisite: Admission to the majors.
PAD 6710 IT and E-government (3). Studies the electronic delivery of government information and services and the problems of managing information technology in the public sector. Survey technology principles of IT and E-government. Prerequisite: Admission to the majors.

PAD 6715 Public Monitoring Systems for Government Organizations (3). Focuses on the formal information system which is or can be used to guide a public organization and judge its performance.
PAD 6717 GIS Applications for Urban Management (3). Geographic Information System Applications for urban decision makers and social scientists.

PAD 6726 Applied Research Methods for Accountability in Public and Nonprofit Organizations (3). Tools, methods, and concepts employed to reengineer public and nonprofit agencies and to design performance indicators needed to enhance customer satisfaction and strategic service delivery. Prerequisites: PAD 6701, admission to the majors.
PAD 6807 Urban and Municipal Government Administration (3). Detailed examination of problems facing the municipal administrator; of the pressures upon the contemporary urban environment; and of the administration of large metropolitan areas comprised of numerous entities. Emphasis will be on determination of current trends, discussion of cases, and arrival at suggested solutions.
PAD 6816 Regional and State Government Administration (3). Surveys the historical development of regional administration, analyzes present administrative problems of the states, and explores contemporary and suggested remedial policies. Emphasizes the complex problems of the institutional relationships among local, state and regional governments, and their implications for public policy-making.
PAD 6836 International Public Administration (3). The role of public administration systems around the world; and the impact of political and socio-cultural frameworks on administration. Focus on national and state organizations' politics, economics, problems, and possibilities. A review of scope and programs of contemporary international public administration organizations.

PAD 6838 Development Administration (3). The role of public administration in national development, with specific attention to theories of economic aid from external sources, and the effects of this aid. Theories and policies of economic and social development are explored; and particular attention is given to the role of the United States in strengthening administrative capabilities as an important means for achieving developmental goals in selected countries.
PAD 6839 Comparative Public Policy (3). This course addresses policy formulation and implementation as a general process of administrative action that can be investigated among the varying nation-states. It covers the differences in policy and explores patterns implicit in those differences. Prerequisites: PAD 6836 or PAD 6838.
PAD 6855 Introduction to Public Procurement (3). Course covers each phase of contract and project cycle, with an emphasis on tools and techniques to manage a public contract or project.

PAD 6856 Contract and Project Management (3). Overview of public procurement as a basic function of government. Public/private contracting arrangements
studied in context of organizational structure, regulations, and current procurement issues.
PAD 6907 Independent Study in Public Administration (1-6). (Normally 3 credit hours) Individual conferences; supervised readings; reports on personal investigations and similar undertakings. Prerequisites: Completion of required courses in public administration is expected. Consent of faculty sponsor and Program Director required.
PAD 6915 Independent Research in Public Administration (1-6). (Normally 3 credit hours) An individualized research project and report which, if feasible, should include field work with a public organization. Prerequisites: Completion of required courses in public administration is expected. Consent of faculty sponsor and Program Director required.
PAD 6946 Public Administration Internship (1-6). (Normally 3 credit hours) Supervised work in a public or quasi-public organization. Should not be undertaken until completion of required courses in public administration program. Prerequisite: Approval of internship coordinator.
PAD 7026 Proseminar in Public Administration and Policy (3). An intensive introduction to American Public Administration and Public Policy making and implementation by "The Fourth Branch" of government.
PAD 7055 Scope and Theory of Public Administration (3). An integrative capstone seminar in which traditional models of Public Administration are explored and employed to analyze the structures and dynamics of public organizations and to develop alternative models and new theoretical perspectives concerning the scope and theory of the field.

PAD 7102 Advanced Organization Theory (3). Philosophical foundations of contemporary organization theory, with emphasis on dynamic interfaces between the environmental contexts and organizations, critical analysis of both the normative and incremental orientation of concepts, theories, models, and applications. Prerequisites: PAD 6106 or equivalent.
PAD 7155 Organizational Development and Change in Public and Nonprofit Organizations (3). Explores the unique challenges to implementing effective management environments in public and nonprofit organizations. Emphasis on organizational diagnosis and performance measures.
PAD 7257 Economic Context of Government (3). This course examines interdisciplinary approaches to collective decision making and the delivery of public goods and services.
PAD 7277 Public Administration and the American Political Economy (3). An analysis of the origins and growth of the American administrative state within the broader socioeconomic and cultural context, with particular emphasis on the post-World War II era.
PAD 7607 Legal Context of Public Administration (3). This course analyzes the administrative significance of delegation, judicial review, rule making, freedom of information and sunshine laws, legislative veto, and liability for administrators. Prerequisite: PAD 6053.

PAD 7703C Empirical Methods in Public Administration (3). An advanced research seminar
focusing on research design and proposal development in public policy and administration. Particular attention is given to qualitative research methods.
PAD 7705 Applied Quantitative Analysis I (3). Introduction to and application of selected linear multivariate statistical and quantitative models to the field of public administration. Prerequisites: PAD 6701 and PAD 6726.
PAD 7707 Applied Quantitative Analysis II (3). Advanced non-linear statistical and quantitative modeling methods for public administration research; topics include regression models for count data and for discrete and limited dependent variables. Prerequisite: PAD 7705.
PAD 7808 Economic Development and Urban Management (3). Details the theory and practice of contemporary urban management, with particular emphasis on development of the economic base as a requisite in a competitive federal system.
PAD 7865 Development Administration (3). Policies and institutions fostering decentralization and the rise of civil society in less-developed nations; strategies for change and political, cultural, and economic drivers of progress.
PAD 7929 Dissertation Prospectus Development (3). To provide students with the analytic and conceptual frameworks needed for crafting defensible dissertation prospectuses.
PAD 7960 Comprehensive Examination in Public Administration (3). Intensive preparation for the comprehensive examinations in Public Administration in both the core and areas of specialization. Students may repeat for credit. Prerequisite: Completion of program of studies.
PAD 7980 Ph.D. Dissertation (1-12). This course provides dissertation guidance to doctoral candidates in the Ph.D. program in public administration. Prerequisite: Permission of Major Professor and Doctoral Candidacy.
PAF 7002 Foundations of Policy Analysis (3). Intensive exploration of models, theories, and designs applied to quantitative and qualitative methods of public policy analysis. Instruction and case studies cover a wide range of normative and policy issues. Prerequisites: PAD 6306 and PAD 6053.
PUP 6006 Public Policy Analysis and Evaluation (3). A framework for evaluating public policy-making will be presented. The emphasis will be on criteria and methodologies available for choosing among alternative courses of action. The systems approach, alternative futures, and nth-order consequences of policies will be analyzed.
PUP 6015 Public Policy (3). An intensive analysis of the normative theories of public policy making, with emphasis on the processes by which policy choices are made and implemented by government agencies. The current trends and perspectives of effective policy development (such as participatory democracy, multi-valued choice, etc.) are examined.
URP 5426 Emergency Management and Planning (3). This course focuses on the concepts, processes, and techniques associated with developing and implementing
emergency management plans in public, nonprofit, and health organizations.

URP 6315 Introduction to Urban Planning and Growth Management (3). An historic overview of land use planning and the rise of growth management with emphasis on implementation in complex market and political environments.
URS 5645 Strategic Planning in Public and Non-Profit Organizations (3). This course exposes students to the concepts associated with strategic planning of public and nonprofit organizations and provides them with practical experience in their use.
URS 5647 Continuous Quality Improvement (3). This course provides an in-depth exposure to the concepts, principles, and techniques associated with continuous quality improvement (CQI) applied to public, nonprofit, and health organizations.
URS 6806 Applied Research and Evaluation Techniques (3). Theories and concepts of research and evaluation. Specific focus given to action components of the research process: design and formulation, strategies and methodological tools for conducting research. Discussion of the role of research in administrative decisions and in testing ways to implement public policy. A review of contemporary critiques on research design. Prerequisite: PAD 6701.
URS 6930 Special Topics in Urban and Regional Studies (3). Selected topics receiving current attention by leading scholars in the emerging urban and regional studies discipline.
URS 7031 Information and Telecommunications Design and Policy (3). The managerial and public policy implications of innovations in the 'information super highway'; establishment of intra and interorganization capacity for dealing with continued development in the field. Prerequisites: Ph.D. status or permission of the instructor.
URS 7156 Research Practicum (6). An integrative studio course intended to produce a defensible dissertation prospectus and significant empirical research project; may be repeated for credit. Prerequisites: Completion of Ph.D. tool requirement, and URS 7157.
URS 7157 Applied Research Methods (3). Extensive exploration of designs utilized in contemporary social and policy science research with emphasis on triangulated models. Prerequisites: Completion of tools requirement in program of studies or permission of the instructor.
URS 7379 Leadership Development and DecisionMaking (3). Leadership as the focal point for organizational development, resource allocation, and 'fit' within the environment; emphasis on effective leadership in the public, health, and nonprofit sectors. Prerequisites: Ph.D. status or permission of the instructor.
URS 7380 Contemporary Management Issues and Problems (3). A proseminar on workplace issues such as AIDS, the Americans with Disability act, and 'the Glass Ceiling'. Special emphasis on diversity and increased utilization of contractual employees. Prerequisites: Ph.D. status or permission of the instructor.

URS 7644 Managing Public Financial Resources (3). An integrative seminar treating taxation, public budgeting, debt management, and evaluation, in the context of a globally competitive economy. Prerequisites: Ph.D. status or permission of the instructor.
URS 7655 Evaluating Organizational and Program Performance (3). Methodology and conceptual frameworks needed to augment organizational effectiveness while enhancing the accountability of public, health, and nonprofit organizations. Prerequisites: Ph.D. or permission of the instructor.
URS 7926 Supervised Readings (3). Extensive reading and review in area of concentration taken in preparation for comprehensive examinations; supervised by Chair of Program Advisory Committee, may be repeated for credit. Corequisite: URS 7156.

## Religious Studies

Erik W. Larson, Associate Professor and Chairperson
Iqbal S. Akhtar, Assistant Professor
Daniel R. Alvarez, Senior Instructor and Undergraduate Program Director
Whitney A. Bauman, Associate Professor
Ana Maria Bidegain, Professor
Steven Heine, Professor
Lesley Northup, Associate Professor
Tudor V. Parfitt, President Yitzhak Navon Professor of Sephardic-Mizrahi Studies
Oren B. Stier, Associate Professor
Steven M. Vose, Assistant Professor
Albert Kafui Wuaku, Associate Professor and Graduate
Program Director

## Affiliated Faculty <br> Thomas A. Breslin <br> Kenton Harris <br> Mohiaddin Mesbahi <br> Meri-Jane Rochelson <br> Dennis W. Wiedman

## Master of Arts in Religious Studies

FIU's Master of Arts in Religious Studies is designed to give students maximum flexibility in pursuing their research interests, while providing a firm foundation in both the general academic study of religion and the student's area of specialization.

The M.A. is a 36 -credit hour program: 9 hours of core seminars, 12 hours of 'track' courses, and either 9 hours of electives and 6 hours of thesis work, or 15 hours of electives.

## Requirements for Admission

Application to the Master of Arts program in Religious Studies is made through FIU's Graduate Admissions Office. The usual minimum requirements for admission include a baccalaureate degree from an accredited college or university and:

1. A graduate degree in the humanities or social sciences from an accredited college or university or
2. A score of 156 or higher on the verbal portion of the Graduate Record Examination (GRE) or
3. A UG 60 GPA of 3.25

A student who does not meet any of these three requirements may qualify for admission with a UG 60 GPA of 3.0 and either:
a. A GPA of at least 3.0 in 9 or more hours of graduate study in departmental courses (as a special student, excluding Independent Study courses)
or
b. A score of at least 152 on the verbal portion of the GRE.
4. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.

Applications for admission are available from the FIU Office of Graduate Admissions and are evaluated by the Departmental Graduate Studies Committee.

## Degree Requirements

1. Prerequisite: undergraduate course REL 3308, Studies in World Religions, to be completed by the end of the first semester of graduate work.
2. Three core seminars: RLG 6935 "Seminar on Sacred Texts", RLG 6013 "Modern Analysis of Religion", and RLG 5038 "Advanced Fieldwork in Religious Studies".
3. A track of four related courses chosen in consultation with the Graduate Program Director.
4. Either 9 hours of elective courses and a thesis (involving either 6 hours of thesis credit or 3 of thesis and 3 of independent research), or 15 hours of electives and no thesis. Students must register with the Department's Graduate Committee for thesis track or non-thesis track during the semester in which they will complete 12 hours of credit in the program. Registration in the thesis track will require securing the agreement of a member of the Graduate Faculty to serve as Thesis Advisor.

All courses must be completed with a grade of "B" or above. The Department of Religious Studies does not regard the non-thesis track as appropriate preparation for further graduate study in Religious Studies.

## Combined BA/MA in Religious Studies

To be considered for admission to the combined bachelor's/master's degree program, students must have completed at least 75-90 credits in the bachelor's degree program at FIU and meet the admissions criteria for the graduate degree program to which they are applying. Students need only apply once to the combined degree program, but the application must be submitted to Graduate Admissions before the student starts the last 30 credits of the bachelor's degree program. A student admitted to the combined degree program will be considered to have undergraduate status until the student applies for graduation from their bachelor's degree program. Upon conferral of the bachelor's degree, the student will be granted graduate status and be eligible for graduate assistantships. Only 5000 -level or higher courses, and no more than the number of credits specified by the program catalog, may be applied toward both degrees.

## Admission Requirements

1. Current enrollment in the Bachelor's Degree program in Religious Studies, or any humanities major that allows at least 12 hours of electives.
2. Current GPA must be 3.4 or higher.
3. Two letters of recommendation.
4. Approval of the Graduate Committee.
5. Submission of acceptable writing sample, complete with bibliography, to Turnitin.com.

## Requirements

Completed BA at FIU including,
REL $4931 \quad$ Religious Studies Seminar or
REL 4030 Methods in the Study of Religion

At least two of the following three core courses:
RLG 5038 Advanced Fieldwork in Religious Studies
RLG 6935 Seminar in Sacred Texts
RLG 6013 Modern Analysis of Religion
Three or six additional hours of graduate credit in Religious Studies (for majors, graduate level enrollment in three or six hours of Focus Courses) must also be taken as Graduate courses. The total number of graduate hours taken concurrently with the BA should be 12 credit hours.

## Required for the MA:

The remaining core course (if not already taken).

- A four course track, either in one religious tradition, or one theme across religious traditions, approved by the Graduate Director.
- Six credits of electives selected from the Religious Studies Graduate Course Offerings.
- Six hours of thesis, or six additional hours from the Religious Studies Graduate Course Offerings.


## Combined M.A. in Religious Studies/Ph.D. in International Relations

The combined M.A. in Religious Studies/Ph.D. in International Relations program allows qualified graduate students to pursue both degrees simultaneously. Students must fulfill the requirements for both programs, and up to 36 credits completed as part of the M.A. in Religious Studies will be counted toward the 75 credit Ph.D. in International Relations.

## Admission Requirements

Applicants must meet the following minimum requirements to be considered for admission.

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.2 on a 4.0 scale (or equivalent) for the last two years of undergraduate work and/or a GPA of 3.5 on any previous graduate work;
3. Official Graduate Record Exam (GRE) scores;
4. Minimum 156 GRE verbal score or a minimum 3.5 on a 4.0 scale (or equivalent) for the last two years of undergraduate work.
5. International graduate student applicants whose native language is not English and who have not obtained a degree from an English-speaking academic institution are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 90 on the internetbased TOEFL (equivalent to 575 on the paper-based version) or 6.5 overall on the IELTS is required.
Although admissions decisions typically are made in the spring, decisions for students who have not yet received their bachelor's degree will be conditional, pending confirmation of the B.A. Meeting the minimum requirements does not guarantee admission into the program. All applications are subject to review by the members of the Department of Politics and International Relations and the Religious Studies Department.

## Admission Procedures

To be accepted into this program, students must submit an application to the Ph.D. in International Relations with a sub-plan for a M.A. in Religious Studies. This designation will appear in the menu of programs in the graduate application. The application must be submitted by January 15 in the year in which they wish to begin their studies.

The following documents must be submitted and will be reviewed by the Admissions Committees from both units.
The following must be submitted as part of the on-line application:

1. Online application and application fee;
2. Official transcripts for all undergraduate and graduate coursework;
3. Official GRE scores;
4. Official TOEFL scores, if applicable;
5. A statement of research interests, including reasons for seeking the M.A./Ph.D., future career goals, and a summary of scholarly preparation for this program;
6. Three letters of reference from academic sources or others able to judge academic abilities and potential; and
7. A curriculum vitae.

## Masters of Arts in Religious Studies Degree Requirements ( $\mathbf{3 6}$ credits)



Students who choose the thesis exit option must include at least one Politics and International Relations faculty member, though the majority must be from Religious Studies.

## Doctor of Philosophy in International Relations Degree Requirements

Students will begin study towards the Ph.D. in International Relations immediately following their satisfactory completion of M.A. in Religious Studies requirements. A minimum of 39 credits beyond the M.A. degree in Religious Studies will be necessary to satisfy the requirements of the Ph.D. Program in International Relations.

Degree Requirements beyond the M.A. in Religious Studies are the following:

## 9 Core Course credits:

GEO 6473 Space, Place and Identity 3
INR 6604 International Relations Theory I 3
INR 6608 Contemporary International Relations
Theory

## 12 Major Field credits in either:

1. Global Institutions and Issues,
2. Comparative Area Studies,
3. Foreign Policy and Security Studies, or
4. International Law.

With advisor approval, these may include 3 credits taken in satisfaction of the requirements for the M.A. in Religious Studies.

## 9 Minor Field credits in either:

1. a second field from the above major field list, or
2. a field offered within another Ph.D. program at FIU (with approval of the Graduate Program Director), or
3. a petition field (with approval of the Graduate Program Director).
With advisor approval, these may include 3 credits taken in satisfaction of the requirements for the M.A. in Religious Studies.

## Elective Credits:

Elective credits necessary to bring total credits earned beyond the M.A. in Religious Studies to a minimum of 24.

## Dissertation Credits:

15 credits of dissertation research.

## Comprehensive Exams

After completing 60 hours of course work (or in the semester in which they expect to do so), students may take their written comprehensive examinations on the core sequence and in both of their fields. Students must sit for these examinations within 6 months of completing the minimum 60 hours of coursework unless granted an extension by the International Relations Graduate Program Director. Before advancing to candidacy, students must also demonstrate an ability to use a foreign language other than English for scholarly purposes.

## Dissertation

Within 3 months of passing the comprehensive examinations, students should publicly present a dissertation proposal that is acceptable to a committee of at least four qualified scholars. Three members of the committee, including the dissertation supervisor, must be graduate faculty members of the Department of Politics and International Relations. One must be from outside the department, but inside FIU. Other members must be approved by the International Relations Graduate Program Director. To complete program requirements, Ph.D. degree candidates must enroll for a minimum of 15 dissertation credits and maintain enrollment for 3 credits every semester until the degree is awarded.

## Course Descriptions <br> \section*{Definition of Prefixes}

ASN-Asian Studies; RLG-Religion Graduate; SRKSanskrit Language

ASN 5120 Religion and Society in Japan (3). Examines the relation between religion and the state, the growth of new religious movements, the role of religion during times of war and conflict, issues of religious freedom and legality, the impact of religious institutions on gender and ethnicity.

ASN 5130 Zen and the Arts (3). Examines the history, theory, and practice of Chado (Way of Tea), a Zen inspired art that has had, and still exerts, a long-lasting influence on Japanese society.
RLG 5018 Religion, Literature, and Critical Theory (3). Examines intersections between world religions and contemporary literature in light of modern theories of interpretation. Themes explored include scriptural rereadings and spiritual journeys. Prerequisites: Graduate standing or permission of the instructor.
RLG 5023 Religious Ritual (3). Examines the critical relationship of ritual, religious practice and belief, and culture, while introducing the principles and methods of ritual studies. Prerequisites: Graduate standing or permission of the instructor.
RLG 5025 Myth and Religion (3). Investigates the role, function, and meaning of myth in religious experience and practice through an examination of specific myths, mythic patterns, and critical theories. Prerequisites: Graduate standing or permission of the instructor.
RLG 5038 Advanced Fieldwork in Religious Studies (3). Techniques of ethnography used in Religious Studies beginning with research design and including participant observation, interviews, surveys.
RLG 5065 Latinas and Religion in the Americas (3). This course will review the practices, beliefs, social and political activism, and theological and biblical reflections of Latinas in the Americas from a historical perspective to modern day.
RLG 5106 Religions, Latinolas and Immigration (3). The course will analyze the relationships between the complex phenomenon of Latinos/as immigration and religions. This area of study necessarily demands an interdisciplinary approach including gender.

RLG 5122 African-American Religion (3). Survey of development of African-American Religions with emphasis on North American experience during slavery, Jim Crow and contemporary eras. Prerequisites: Graduate standing or permission of the instructor.
RLG 5125 Religion and Public Life (3). Examines the relationship of religion and government in the United States, with focus on the First Amendment and issues of separation of church and state. Prerequisites: Graduate standing or permission of the instructor.
RLG 5137 North American Religion (3). Historical examination of religious groups and influences in North America, focusing on their contributions and cultural impact. Prerequisites: Graduate standing or permission of the instructor.
RLG 5138 Sects, Cults, and New Religions (3). Explores and critically analyzes the multiplicity of new American religious movements and the unique combination of factors that has encouraged them. Prerequisites: Graduate standing or permission of the instructor.

RLG 5144 Women and Religion (3). Examines the influence of religion on social construction of gender and the definition of woman's nature and role, with a focus on Western developments. Prerequisites: Graduate standing or permission of the instructor.

RLG 5149 Religion, Violence, and Conflict (3). Is religion peaceful or violent? Theoretical analysis of the role of religion in violent, social and political conflicts, such as the Crusades, the Arab-Israeli conflict, and the Haitian Revolution. Prerequisites: Graduate standing or permission of the instructor.
RLG 5165 Science and Religion (3). Surveys the interaction between science and religion from conflict models to integration; special attention to specific natural sciences including cosmology and biology. Prerequisites: Graduate standing or permission of the instructor.
RLG 5182 Religion and Ethics (3). Investigation of methods, resources for ethics in world religions, and some examples of issues. Prerequisites: Graduate standing or permission of the instructor.
RLG 5183 Religion, Nature, and Globalization (3). Through exploring sources for contemporary attitudes and values about "nature", this course examines environmental ethical issues surrounding the process commonly referred to as globalization. Prerequisites: Graduate standing or permission of the instructor.
RLG 5184 Sexuality, Religion and Social Change (3). Traces various religions' accommodation to and rejection of both new scientific research on sexuality and new economic and social trends. Prerequisites: Graduate standing or permission of the instructor.
RLG 5192 Seminar in Mysticism (3). The issues of consciousness, language, and morality in mystical tradition of the East and west, including Kabbalah, Neoplatonism, Sufism, Yoga, Taoism, and Zen. Prerequisites: Graduate standing or permission of the instructor.
RLG 5193 Brazil: Religion and Liberation (3). To study the genealogy of the Liberation Theology movement in Brazil as Second Vatican Council's resonance. The changes undertaken may be compared to the Reformation of the 16th century.
RLG 5211 Bible I: The Hebrew Scriptures (3). Extensive reading in the Hebrew Scriptures, how the various texts of the Hebrew Scriptures came to be written, and how they can be interpreted - both within the context of faith communities and within the cultural contexts out of which the texts were written. Prerequisites: Graduate standing or permission of the instructor.
RLG 5232 Hebrew Exegesis I (3). Provides a comprehensive survey of the fundamentals of the language of the Hebrew Bible designed to equip the student for the task of exegesis. Prerequisites: Graduate standing or permission of the instructor.
RLG 5233 Hebrew Exegesis II (3). A continuation of Hebrew Exegesis I emphasizing the reading of select passages of the Hebrew Bible to develop skills in translation and interpretation. Prerequisites: RLG 5232 and graduate standing.
RLG 5242 New Testament and Qumran (3). Detailed investigation of the possible contacts between the New Testament and Qumran in such areas as Biblical Exegesis, Apocalypticism, Eschatology, and Messianism. Prerequisite: Graduate standing.

RLG 5244 Bible II: The New Testament (3). History, theology, and interpretation methods of the New Testament. Prerequisites: Graduate standing or permission of the instructor.
RLG 5262 New Testament Greek Exegesis I (3). A detailed overview of the principles of Greek grammar that shows the student how to use Greek in the study of the New Testament. Prerequisite: Graduate standing.
RLG 5263 New Testament Greek Exegesis II (3). Careful reading of selected passages of the New Testament and early Christian literature designed or selected to develop skills in translation and interpretation. Prerequisite: RLG 5262 and graduate standing.
RLG 5284 Studies of the Dead Sea Scrolls (3). Overview of the Dead Sea Scrolls explores the new techniques being used in their study. Prerequisites: Graduate standing or permission of the instructor.
RLG 5331 Religions of India (3). Topics include: religion in prehistoric and ancient India, classical Hindu texts and schismatic movements, medieval theism, the acculturation of extrinsic religions, Hindu-Muslim-Sikh syncretism, and the modern period. Prerequisites: Graduate standing or permission of the instructor.
RLG 5334 Studies in Diaspora Hinduisms (3). Research methods and theory in the study of Hinduisms in the Diaspora, with a special focus on Hindu institutions in Florida.
RLG 5338 Classical Hinduism (3). A study of the textual and philosophic traditions of classical India, as well as theoretical and methodological issues pertinent to their study. Prerequisites: REL 3330 or REL 3333 or RLG 5331.

RLG 5346 Seminar on Buddhism (3). The central doctrines and rituals of the Buddhist tradition, including the views on causality, mindfulness, monasticism, salvation, purity, and ethics in the Theravada, Tantric, and Zen schools. Prerequisites: Graduate standing or permission of the instructor.
RLG 5352 Religions of East Asia (3). The history, philosophy, and cultural impact of the major religious traditions of East Asia, including Confucianism, Taoism, Buddhism, Shinto, and syncretic folk religions. Prerequisites: Graduate standing or permission of the instructor.
RLG 5360 Classical Arabic (3). Introduces the grammar and vocabulary of classical Arabic necessary for developing the ability to read classical texts.
RLG 5364 Advanced Topics in Islamic Mysticism (Sufism) (3). Explores the depth and breadth of the mystical tradition of Islam (Sufism) through primary and secondary texts which look at the esoteric dimensions of mystical practice in the Islamic World.
RLG 5366 Advanced Interpretation of the Quran: Gender and Jihad (3). History, interpretation and translation of the Quran through a close examination of passages related to issues of gender and jihad.
RLG 5369 Voice of the Prophet (3). Familiarizes students with the position and history of prophetic traditions (Hadith) in Islam.

RLG 5372 The Globalizing of African Spirituality (3). Intensive investigation of select forms of traditional spirituality in sub-Saharan Africa, including ritual, sacrifice, and spirit possession, and Africanized Christian and Islamic devotion. Prerequisites: Graduate standing or permission of the instructor.
RLG 5384 Rasta, Vodou, Santeria (3). Critical, sociological and phenomenological analysis of the history, beliefs, rituals, and social significance of Rastsfarianism, Vodou, and Santeria on the Caribbean and the United States. Prerequisites: Graduate standing or permission of the instructor.
RLG 5385 Native American Religions (3). An advanced study of Native American religions and the methods employed to investigate them. Attention will be given to traditional and contemporary expressions. Prerequisites: Graduate standing or permission of the instructor.
RLG 5387 Native Religions of Latin America (3). Focuses on major culture areas, history of tribes, changes in religious practice through contact with Christianity.
RLG 5388 Latinas' Religious Experience (3). Focus on the diversity of religious experiences among women born and educated in Latin cultures such as: Brazil, Haiti and Hispanic American, including Hispanic in the U.S.
RLG 5394 Jewish Mystical Texts (3). A study of the major movements and figures in the development of Jewish mysticism through its significant texts, from biblical times up to the present. Prerequisites: Graduate standing or permission of the instructor.
RLG 5397 Yoga Theory and Practicum (3). An in-depth graduate seminar addressing theory and practice of the eight limbs of yoga. Includes critical analysis of Patanjali's text, the Yoga Sutras.
RLG 5435 Feminist Theory and Religion (3). Surveys the development of feminist work in religion based in general feminist theory; includes work in major world religions. Prerequisite: Graduate standing.
RLG 5455 Seminar on Jain Sacred Sources (3). In depth study of selected primary texts of Jainism, examining diverse scriptures, including prose, verse, philosophical conversations, and narrative stories of different Jain sects. Basic knowledge of Jainism necessary.
RLG 5462 Religion and Philosophy (3). Examines the use of philosophical reasoning to justify religious belief or its rejection. Such topics as natural theology, atheism and fideism will be examined. Prerequisites: Graduate standing or permission of the instructor.
RLG 5488 Theology and Liberation Movements (3). Comparison of Latin American, feminist, and African American theologies of liberation, including methods, social analysis, social location, interlocutor, ecclesiology, theology, eschatology and use of scripture. Prerequisites: Graduate standing or permission of the instructor.
RLG 5495 Interreligious Dialogue (3). The intellectual basis, the classical formulations, and the contemporary practice of interreligious dialogue in a variety of cultural settings. Prerequisites: Graduate standing or permission of the instructor.

RLG 5501 History of Christianity I (3). Christianity from its origins to the Middle Ages. Doctrinal and organizational development of the church and characteristic aspects of its spiritual life. Prerequisites: Graduate standing or permission of the instructor.
RLG 5502 Saints, Witches and Missionaries (3). Survey of movements, reforms, divisions, and major ideas within institutional Christianity, 1400 to present. Prerequisites: Graduate standing or permission of the instructor.
RLG 5515 History of Early Christianity (3). Origin and growth of Christianity from the first to the fifth century, and the adaptation of its message to the Greco-Roman world. Prerequisites: Graduate standing or permission of the instructor.
RLG 5520 Colonialism, Christianity, Globalization (3). It analyzes the European expansion since the 15th to the 20th centuries and the interrelation between religion, economic and politics in western and colonial societies.
RLG 5565 Modern Catholicism (3). Theology and liturgical practice in the Roman Catholic Church from Trent (16th c) to the present, with primary and secondary sources. Prerequisites: Graduate standing or permission of the instructor.
RLG 5605 Studies in Judaism (3). Historical overview of Jewish belief and practice, with special consideration of Jewish ritual life. Prerequisites: Graduate standing or permission of the instructor.
RLG 5606 Rabbinic Judaism (3). The theology and ideologies of the 1700-year period in the history of Judaism known as Rabbinic Judaism. Prerequisites: Graduate standing or permission of the instructor.
RLG 5613 Religion, Culture and Politics in Israel (3). Exploration of the history of modern Israel. Discussion of issues, state and religion, ethnic and denominational tensions, democratic characters of the state and the Israeli-Palestinian conflict.
RLG 5614 Ancient Judaism (3). The history, literature and characteristic institutions of Judaism from the Persian period to Amoraic times. Attention given to developments in the land of Israel and the diaspora. Prerequisites: Graduate standing or permission of the instructor.
RLG 5615 Medieval Judaism (3). The works of major thinkers in Medieval Judaism, including Maimonides, Nahmanides, Halevi, Luzatto, and such topics as Jewish mysticism (Kabalah) and Hasidism. Prerequisites: Graduate standing or permission of the instructor.
RLG 5617 Jews and Muslims in the Middle Ages (3). Study of Jewish culture from the rise of Islam in the 7th century -- usually considered the start of Jewish Medieval Era -- to the end of the Middle Ages.
RLG 5618 Modern Judaism (3). Explores the ways in which religious beliefs and traditional concepts of Jewish self-identity have changed as a result of emancipation and participation of Jews in the modern Western world. Prerequisites: Graduate standing or permission of the instructor.
RLG 5619 Holocaust Representations: Religion and Remembrance (3). Examines the symbolic and cultural representations of the Holocaust through its religious/theological discourse and its remembrance.

Implications for Jewish life and thought are also explored. Prerequisites: Graduate standing or permission of the instructor.
RLG 5620 Kabbalah and Gender (3). Exploration of the theme of Gender within the context of Jewish mysticism. Analysis of central Kabbalistic texts pertaining to the issue of gender and sexuality.
RLG 5628 Jewish Thought and Thinkers (3). The principal of Sephardic and oriental thinkers since the Middle Ages includes philosophers, rabbinics.

RLG 5629 Kabbalah, Peace and War (3). Study of the basic categories of Kabbalah as an esoteric doctrine and evaluate its unique approach to peace and war within the historical context of the Jewish mystical experience.
RLG 5698 Sephardic and Oriental Jewry Colloquium (3). In depth examination of important issues in the study of Sephardic and Oriental Jewry.
RLG 5907 Independent Study in Sephardic and Oriental Jewry (1-6). For advanced students who possess proven significant knowledge of the field of Sephardic and Oriental Jewry, to engage in a guided research on the topic of their choice within the field. Prerequisites: REL 4610, RLG 5617, REL 3695, SYD 4606.

RLG 5911 Independent Research (1-5). Topics are selected to meet the academic needs of the individual student. Prerequisites: Permission of the instructor is required.
RLG 5934 Graduate Pedagogy (1-3). Advanced work in Religious Studies pedagogy, including classroom teaching, assignment development and grading, and seminar discussion of pedagogical issues.
RLG 5937 Special Topics (3). Topics will be selected to meet the academic needs of groups of students.
RLG 5945 Internship in Sephardic and Oriental Jewry (1-3). Work and study with the leadership of and research one of the Sephardic and Oriental communities in Florida. This serves as field study in which the classroom learning comes alive. Prerequisites: REL 4610, RLG 5617, REL 3695, SYD 4606.
RLG 6013 Modern Analysis of Religion: Classic Texts in Religious Studies (3). Surveys history of religious approaches to religion (Eliade, Otto), social scientific approaches to religion (Freud, Durkheim, Weber, Geertz), and postmodern / poststructuralist approaches (Foucault, de Certeau, Baumann, Braudillard, Butler etc.). Prerequisites: Graduate standing or permission of the instructor.
RLG 6094 Seminar in Religious Fundamentalism (3). Evolution of Fundamentalism from inception to our times as it began to encompass a wider umbrella of global organizations with a focus on the 3 Abrahamic traditions and advanced analysis of their texts.
RLG 6096 Advanced Religious Fundamentalism: A Viewpoint for National Security (3). Evolution of Fundamentalism from inception to our time as it began to encompass a wider umbrella of global organizations with a focus on the 3 Abrahamic traditions and advanced analysis of their texts.

RLG 6097 Muslim Concepts of War: A Perspective for National Security (3). Intended to acquaint students with the history and development of Muslim concepts of war prepare them to make meaningful contributions to policy deliberations.

RLG 6175 Ethics and Development (3). Examines problems in development programs, such as bribery and corruption, labor rights, child labor, gender justice, environmental sustainability, from both religious and secular justice traditions.

RLG 6176 Religions and Human Rights (3). Examines sources of human rights theory in the West and compares it to a variety of religious conceptions of the rights of human beings.
RLG 6195 Sociological Approaches to Religion (3). Sociological Method/Theory in religious studies scholarship on religious ritual around life cycle events. Individual and group projects. Prerequisites: Graduate standing or permission of the instructor.
RLG 6285 Biblical Archaeology (3). Introduces the methods used in archaeological excavations. Finds from the Bronze Age to the Greco-Roman period are examined for the ways they bring new understanding to the texts of the Bible. Prerequisites: Graduate standing or permission of the instructor.

RLG 6319 Seminar in Asian Religions (3). Asian religious traditions, texts, rituals, or artifacts. May be repeated with change in content. Prerequisites: Graduate standing or permission of the instructor.
RLG 6322 Seminar in Western Religions (3). Similarities and differences in the three Western monotheistic religions of Judaism, Christianity and Islam during their historical development. Prerequisites: Graduate standing or permission of the instructor.
RLG 6332 Studies in Modern Hinduisms (3). Research methods and theory in the study of modern Hindu movements and issues in contemporary Hinduism.
RLG 6348 Seminar on Tibetan Buddhism (3). Study of influential Tibetan texts in their historical contexts. Prerequisites: REL 4340 or REL 3344 or equivalent or permission of instructor.
RLG 6349 Seminar on Pali Buddhism (3). The "original" teachings of the Buddha as preserved in the Pali Tipitaka and its commentaries readings in translation. Students knowing Pali will work with instructor. Prerequisites: REL 4340 or equivalent or permission of instructor.
RLG 6442 Religion in the Contemporary World (3). Society and religion in processes of secularization and pluralism. Attention to religious interpretations of sociocultural processes. Prerequisites: Graduate standing or permission of the instructor.
RLG 6697 Indian Judaism (3). The stories, rituals, interactions and identities of four Indian Jewish communities and their implications for Indo-Israeli relations and contemporary American Judaism. Prerequisite: Graduate standing.
RLG 6921 Colloquium (1). Students attend a minimum of three lectures, conferences, or professional presentations, with seminar report and discussion. May be repeated. Prerequisite: Graduate standing.

RLG 6930 Pedagogy Workshop (1). Two-day teaching workshop offered by the Academy for the Art of Teaching. Prerequisite: Graduate standing.
RLG 6931 Pedagogy Seminar (1). Provide Teaching Assistants with pedagogical skills, such as lecture preparation, exam preparation and grading, advising and small group work. Prerequisite: Graduate standing.
RLG 6935 Seminar in Sacred Texts (3). Sacred texts with a common theme from several religions. Problems of interpretation are a central concern. Prerequisites: Graduate standing or permission of the instructor.
RLG 6938 Pedagogy Forum (1). Students attend at least six (6) teaching forums for certificate offered by the Academy for the Art of Teaching. Prerequisite: AAT Summer Teaching Workshop.
RLG 6940 Teaching Religious Studies (3). Assist the instructor in an introductory course and attend seminar meetings. Topics: 'faith' vs 'objectivity' in the classroom; student diversity; religious studies as a profession; designing an introductory course. Prerequisites: Graduate standing or permission of the instructor.
RLG 6942 Teaching Internship (1-3). Advanced work in Religions Studies pedagogy, including classroom teaching, assignment development and grading, and seminar discussion of pedagogical issues. Prerequisite: Graduate standing.
RLG 6946 Advanced Field Work in Jain Studies (3). Supervised field work among Jain communities and institutions in India and in the Jain Diaspora. Prerequisites: Graduate standing, IRB project clearance, CU.
RLG 6971 Thesis (1-6). For students working on the thesis for the M.A. in Religious Studies. Prerequisites: Graduate standing and permission of the instructor.
RLG 6972 Thesis Proposal Development (3). Elements of thesis construction, including thesis statement, feasibility research, bibliography, methodology. Initial 3 credits of thesis may be required for some students by GPD and thesis advisor. Prerequisite: Permission of instructor.
SRK 5001 Sanskrit Exegesis I (3). Application of both modern and traditional interpretations of selected readings from classical Sanskrit texts. Prerequisites: SRK 2101 or permission of the instructor.
SRK 5002 Sanskrit Exegesis II (3). Reading of extended classical Sanskrit text (such as the Bhagavad Gita) with attention to exegetical methods, philology and advanced grammar. Prerequisites: SRK 5001 or permission of the instructor.
SRK 5004 Introduction to the Prakrit Languages (3). Phonology, morphology and grammar of the Prakrit languages with emphasis on building reading competency in Buddhist and Jain literatures. Prerequisites: SRK 3202 or SRK 5202 or permission of the instructor.
SRK 5005 Advanced Prakrit Reading (3). Intensive reading of a text in a selected Prakrit language with emphasis on cultivating advanced reading techniques and the development of a research project. May be repeated with change in content. Prerequisites: SRK 3202 or SRK 5202 and SRK 5004, or permission of the instructor.

SRK 6105 Sanskrit I (3). Sanskrit grammar, its rules of transliteration and translation. The pronunciation and reading skills will be trained.
SRK 6106 Sanskrit II (3). Sanskrit grammar rules, rules of tense, rules of transliteration and translation.

## Certificate Programs

## African and African Diaspora Studies Graduate Certificate Program

## Faculty:

Iqbal S. Akhtar, Assistant Professor, Religious Studies and International Relations
Pascale S. Bécel, Chair and Associate Professor, Modern Languages
Ferial Maya Boutaghou, Assistant Professor, Modern Languages and Women's and Gender Studies
Jean-Robert J. Cadély, Associate Professor, Modern Languages and African and African Diaspora Studies
Phillip Carter, Assistant Professor, English and Linguistics
John F. Clark, Professor, Politics and International Relations
Danielle Pilar Clealand, Assistant Professor, Politics and International Relations
Alexandra Cornelius, Lecturer, History and African and African Diaspora Studies
Annette B. Fromm, Assistant Professor and Coordinator, Frost Art Museum
Jenna M. Gibbs, Associate Professor, History
Brittany VanderBerg Gilmer, Assistant Professor, Criminal Justice
Robert (Ted) Gutsche, Jr., Assistant Professor, Journalism and Mass Communication
Tometro Hopkins, Associate Professor, English
Hilary J. Jones, Associate Professor, History and African and African Diaspora Studies
Assefa Melesse, Associate Professor, Earth and Environment
April R. Merleaux, Assistant Professor, History
Aurora Morcillo, Professor, History
Roderick Paul Neumann, Professor, Global and Sociocultural Studies
Ulrich Oslender, Assistant Professor, Global and Sociocultural Studies
Okezi T. Otovo, Associate Professor, History and African and African Diaspora Studies
Tudor Parfitt, Research Professor, Religious Studies
Vrushali B. Patil, Associate Professor, Global and Sociocultural Studies and Women's and Gender Studies
Valerie L. Patterson, Clinical Associate Professor, Public Administration
Andrea Queeley, Associate Professor, African and African Diaspora Studies and Global and Sociocultural Studies; and Director, African and African Diaspora Graduate Program
Jean Muteba Rahier, Professor, Global and Sociocultural Studies and African and African Diaspora Studies
David Rifkind, Associate Professor, Architecture
Heather Russell, Associate Professor, English
Derrick Scott, Instructor, Global and Sociocultural Studies
Moses Shumow, Assistant Professor, Journalism and Mass Communication
Vicky Silvera, Head, Special Collection, Library
Linda Spears-Bunton, Associate Professor, College of Education
Juan Torres-Pou, Professor, Modern Languages
Chantalle F. Verna, Associate Professor, History and

Politics and International Relations
Eric Von Wettberg, Assistant Professor, Biology Donna Weir-Soley, Associate Professor, English
Kirsten E. Wood, Associate Professor, History
Albert Kafui Wuaku, Associate Professor, Religious Studies

The African and African Diaspora Studies (AADS) Graduate Certificate seeks to provide graduate-level multidisciplinary instruction in the diverse fields of African and African Diaspora Studies. Specifically, the Certificate seeks to provide students with an interdisciplinary approach to the study of the global, economic, cultural, and historical experiences of people of African descent, both in Africa and in the Diaspora. The Certificate complements students' work in their major fields of study. Thanks to the diversity of areas of research interests of the core and affiliate AADS faculty, students may choose courses that will allow them to focus more specifically on either U.S. born African Americans, Continental Africans, or communities of the African diaspora internationally. Students may also choose courses that will bring them to learn about all three or any other combination of these areas. This certificate program is open to degree-seeking students only.

## Certificate Requirements: (15 credits)

Required Course
AFA 5005 African and African Diaspora Studies Theory (Offered every fall semester)
The 12 remaining credit hours may be drawn from courses in the Humanities and Social Sciences as listed below. Note that students are expected to complete 6 credits from each list. Students should consult with advisors since new courses are frequently added, and special topic courses sometimes concern Africa and the African Diaspora. Students may also select other courses not listed below with approval from the Director of AADS or from the Director of AADS Graduate Programs after submitting the appropriate syllabus. Not all courses are offered every semester.

## List I: The Humanities

Students must choose between 6 and 9 credits from the list below:
AFA 5932 Special Topics in African and African Diaspora
AFA 5107 Teaching the African American Experience
AFA 5341
AFA 6245
AFH 5905
AFH 5935
FRE 5508
HAI 5235
LAH 5465
LAS 6025
LIN 6602
LIT 5359
LIT 5358
MUH 5025
MUH 5067 Music of the Caribbean
RLG 5122 African-American Religion

RLG 5372
RLG 5384
RLG 5488
SPN 5536
SPN 5539
SPW 5776
SPW 6368

WOH 5236

WOH 5237 The African Diaspora Since the End Of
The Globalizing of African Spirituality Rasta, Vodou, Santeria Theology and Liberation Movements Afro-Cuban Culture Special Topics in Afro-Hispanic Culture Black Literature in Latin America 19th Century Spanish-Caribbean Narrative the Slave Trade The Transatlantic Slave Trade and the Making of the African Diaspora, 1441-1807

## List II: The Social Sciences

Students must choose between 6 and 9 credits from the list below:

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AFA 5600
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National and Transnational Policy Analysis: The African Diaspora
AFA 6851
AFA 6217 Sex, Race, and Power in European Colonialisms
SYD 6796
ANG 6473
ANG 5397
ANG 5396 Representations of Africa and Africans in Films
ANT 6319 The African Diaspora: Anthropological Perspectives
CPO 5325
CPO 6350
CPO 6376
CPO 6206
CYP 6766
ECS 5406
ECS 6436
ECS 7435
INR 5087
INR 5255
INR 6936
SYD 6705

Politics of the Caribbean
Seminar in Brazilian Politics
Seminar in Central American Politics Seminar in African Politics The Psychology of Crosscultural Sensitization in a Multicultural Context Latin American Economies The Economies of Caribbean Migration Economics of the Caribbean Ethnicity and the Politics of Development
Seminar in African Development Seminar in Inter-American Politics Comparative Analysis of Ethnicity and Race

## Graduate Certificate in Afro-Latin American Studies

Coordinating Committee
Danielle Pilar Clealand, Politics \& International Relations
Ulrich Oslender, Global \& Sociocultural Studies
Okezi Otovo, History and African \& African Diaspora Studies
Mark B. Padilla, Global \& Sociocultural Studies
Juan Torres-Pou, Modern Languages
Andrea Queeley, Global \& Sociocultural Studies and African \& African Diaspora Studies
Jean Muteba Rahier, Professor, Global \& Sociocultural Studies and African \& African Diaspora Studies
Moses Shumow, Journalism and Mass Communication
Vicky Silvera, Head, Special Collections, Library
African and African Diaspora Studies (AADS) encompasses the study of, and research on, the peoples
of Sub-Saharan Africa and their experiences, and on communities of the African diaspora both in continental Africa and elsewhere in the Americas, Europe, Asia, and Australia. It also involves the dissemination of knowledge about Sub-Saharan continental African peoples and diasporic Africans internationally. Housed within the Steven J. Green School of International and Public Affairs, and more specifically in the African \& African Diaspora Studies Program (AADS), the Afro-Latin American Studies Graduate Certificate provides students with an interdisciplinary approach to the study of the global, economic, cultural, and historical experiences of all peoples of African descent in the Latin American region. We understand these communities of the African diaspora in Latin America have encompassing both those communities issued from the Transatlantic slave trade and their descendants, and more recent migration movements. The Certificate complements students' work in their major fields of study at the graduate level while fostering greater understanding of traditionally marginalized topics. Thanks to the diversity of areas of research interests of the core and affiliate AADS faculty, students will be able to choose courses that focus more specifically on Afro-Latin Americans living in both the region and in other geographic areas where Afro-Latin Americans have migrated to.

The Certificate places a strong emphasis on Afro-Latin American cultural expressions in all their national, subregional, temporal, and socioeconomic diversities. It offers coordinated insights into the ongoing challenges Afrodescendant communities face locally, nationally, and internationally. It also focuses on the ways in which AfroLatin American communities and individuals have developed political and creative strategies for survival in the midst of, and resistance to, racism and political, economic, and social oppression. The Certificate will provide numerous opportunities for enrolled students to explore Afro-Latin American populations in economic processes of various kinds, underlining the specific challenges they might face. The Certificate is based on a number of courses that can be combined as described below, and that come from both the social science and humanities. This certificate program is open to degreeseeking students only.

## Certificate Requirements (18 credits)

## General Requirements

Students complete 18 credit hours of study from disciplines as diverse as geography, history, international relations, journalism, sociology, anthropology, literature, music, and political science. The two required courses (6 credits) should be taken at the start of the Certificate Program. The other 12 credits must come from the elective courses, comprising both Arts and Humanities courses, and Social Sciences courses. The program director may approve other courses upon request. Students requesting an exception from these lists must present a syllabus for the course they would like to enroll in, prior to enrollment. The courses considered for such an exception should have at least a $35 \%$ Afro-Latin American content. Not all courses are offered every semester.

## Required Core Courses: ( 6 credits)

AFA 5005
African and African Diaspora Studies Theory

|  | and |
| :---: | :---: |
| AFA 6245 | The African Diaspora in Latin America |
| Electives (Arts and Humanities, Social Sciences) |  |
| Courses: (12 credits) |  |
| AFA 5302 | Africana Visual Arts |
| AFA 5600 | National and Transnational Policy Analysis: The African Diaspora (with relevant course focus) |
| AFA 5932 | Special Topics in African and African Diaspora Studies (with relevant course focus) |
| AFA 6325 | Pedagogy in the African Diaspora: Literacy, Culture, Race and Gender (with relevant course focus) |
| AFA 6905 | Independent Study (with relevant course focus) |
| AFA 6911 | Research Paper / Proposal Writing in African and African Diaspora Studies (with relevant course focus) |
| AFA 6920 | African and African Diaspora Studies Graduate Colloquium |
| AFA 6940 | Community Project/Internship Research in African and African Diaspora Studies (with relevant course focus) |
| ANT 6319 | The African Diaspora: Anthropological Perspectives |
| ANG 5396 | Representations of Africa and Africans in Films |
| ANG 5397 | Advanced African Diaspora Cultures and Performativity |
| ANG 6339 | Seminar on Latin America (with relevant course focus) |
| ANG 6472 | Anthropology of Globalization (with relevant course focus) |
| ANG 6473 | Diasporas, Migration, and Globalization |
| ECS 5406 | Latin American Economies |
| LAS 5907 | Independent Study (with relevant course focus) |
| LAH 5905 | Readings in Latin American History (with relevant course focus) |
| LAH 5935 | Topics in Latin American History (with relevant course focus) |
| LAH 6906 | Advanced Readings in Latin American History (with relevant course focus) |
| LAH 6915 | Research in Latin American History (with relevant course focus) |
| LAH 6932 | Research Seminar in Latin American History I (with relevant course focus) |
| LAH 6933 | Research Seminar in Latin American History II (with relevant course focus) |
| RLG 5384 | Rasta, Vodou, Santeria |
| RLG 5488 | Theology and Liberation Movements |
| SPN 5536 | Afro-Cuban Culture |
| SPN 5539 | Special Topics in Afro-Hispanic Culture |
| SPW 5776 | Black Literature in Latin America |
| SPW 6368 | $19^{\text {th }}$ Century Spanish-Caribbean Narrative |
| SYD 6626 | Cuba Seminar |
| WOH 5237 | The African Diaspora Since the End of the Slave Trade |
| WOH 5236 | The Transatlantic Slave Trade and the Making of African Diaspora, 1441-1807 |

## Graduate Certificate in Asian Globalization

Steven Heine, Director, Asian Studies
Coordinating Committee
Ana Maria Bidegain, Religious Studies
Matthew David Marr, Global and Sociocultural Studies
Mohiaddin Mesbahi, Politics and International
Relations
John F. Stack, Jr., Politics and International Relations
This certificate program offers a 15 -credit sequence of courses that provides graduate students with an in-depth learning experience of an increasingly important region in comparison with another world region such as Africa, Europe, Latin America or the Middle East. The program requires students to take 9 credits of courses in Asian studies in addition to 6 credits of courses in another specific region. This program allows students the opportunity to study thematic issues related to Asia such as migration, identity, trade, education, technology, environment, and international affairs from a multidisciplinary, multiregional approach. This certificate program is open to degree-seeking students only.

## Certificate Requirements ( 15 credits)

## Required Courses: (3)

ASN $5315 \quad$ Topics in Modern Asia
ASN $5050 \quad$ Methods in Asian Studies
Electives in Asian Studies: (6)
See sample listing of courses below

## Electives in Globalization: (6)

See sample listing of courses below. For additional courses in other world regions inquire with the Department.

## Sample Courses in Asian Studies (6)

Courses in studies of Asia or a sub region. Choose from the following list (additional courses will be considered):
ASH 5446 Readings in Japanese History
ASH $5905 \quad$ Readings in Asian History
ASN $5120 \quad$ Religion and Society in Japan
ASN $5130 \quad$ Zen and the Arts
ASN $5131 \quad$ Zen and the Arts II
ASN 5171 International Relations of Contemporary China
ASN $5211 \quad$ Asian Cultures and Influences
ASN 5306 Applying Asian Cultural Values in Business
ASN 5605
Silk Road: Then and Now
ASN 5815 Studies of East Asian Texts
ASN 5910 Independent Research in Asian Studies
ASN 5932 Special Topics in Asian Studies
ASN 6930 Seminar in Asian Studies
ECO 5206 Economics of Asia
INR 5544 The New Asian Century
INR 5086 Islam in International Relations
RLG 5346 Seminar on Buddhism
RLG $5352 \quad$ Religions of East Asia
RLG 6319 Seminar in Asian Religions
SYD 6655 Seminar on Social Change in Asia

## Sample of Courses in Globalization

## African Studies

AFH 5905 Readings in African History
CPO 6206 Seminar in African Politics
INR 5255 Seminar in African Development
RLG 5372 African Spirituality
ANT 6319 African Diaspora: Anthropological
Perspectives

## European Studies

ARH $5663 \quad$ Graduate Art in Spain and Her Colonies
ENG 5220 Major British Literary Figures
ENL $5505 \quad$ Periods in English Literature
EUH 5905 Readings in European History
EUH $5935 \quad$ Topics in European History
Latin American Studies

| ARH 5671 | Seminar in 20th Century Latin American |
| :--- | :--- |
|  | Art |
| LAH 5905 | Readings in Latin American History |
| LAS 6003 | Survey of Latin America |
| LAS 6017 | Intelligence Issues in Latin America |
| INR 6936 | Seminar in Inter-American Politics |

Middle Eastern Studies
HIS $5930 \quad$ Special Topics
CPO 6407 Seminar in Politics of the Middle East
INR 5086 Islam in International Relations
INR 5275 International Relation of the Middle East
INR 6338 Seminar in Strategic Studies
In addition to the courses listed above, relevant special topics, independent study, study aboard credits, and area studies or comparative studies may also be applied.

## Language

Language proficiency as appropriate for student's area specialization.

For more information, contact the Asian Studies office, SIPA 505. Email: asian@fiu.edu; phone: (305) 348-1914; website: http://asian.fiu.edu.

## Graduate Certificate in Asian Studies

Steven Heine, Director, Asian Studies
Coordinating Committee
Matthew David Marr, Global and Sociocultural Studies
Amy Bliss Marshall, Japanese History
Jin Zeng, Politics and International Relations
The objective is to provide interdisciplinary graduate instruction in international/global studies that requires specialization in Asia or a sub-region such as East, South, Southeast, or Central Asia. The program is geared towards students whose studies emphasize a traditional area studies approach to culture and society. This certificate program is open to degree-seeking students only.

## Certificate Requirements: (15 credits)

Core Course: (3)
ASN $5315 \quad$ Topics in Modern Asia
ASN $5050 \quad$ Methods in Asian Studies

## Regional Studies Courses: (12)

Courses in studies of Asia or a sub region. Choose from the following list (additional courses will be considered):
ASH $5446 \quad$ Readings in Japanese History
ASH 5905 Readings in Asian History
ASN $5120 \quad$ Religion and Society in Japan
ASN $5130 \quad$ Zen and the Arts
ASN 5131 Zen and the Arts II
ASN 5171
ASN 5211
ASN 5306
ASN 5605
ASN 5815
ASN 5910
ASN 5932
ASN 6930
ECO 5206
INR 5544
INR 5086
RLG 5346
RLG 5352
RLG 6319
SYD 6655

International Relations of Contemporary China
Asian Cultures and Influences
Applying Asian Cultural Values in
Business
Silk Road: Then and Now
Studies of East Asian Texts Independent Research in Asian Studies
Special Topics in Asian Studies
Seminar in Asian Studies
Economics of Asia
The New Asian Century
Islam in International Relations
Seminar on Buddhism
Religions of East Asia
Seminar in Asian Religions
Seminar on Social Change in Asia

For more information, contact the Asian Studies office, SIPA 505. Email: asian@fiu.edu; phone: (305) 348-1914; website: http://asian.fiu.edu.

## Graduate Certificate in Community Development

Mohamad G. Alkadry, Co-Chair and MPA Director Sukumar Ganapati, Co-Chair
The Graduate Certificate in Community Development is intended to provide critical tools and analytic frameworks useful to local decision-makers responsible for developing and managing sustainable, high-wage communities in an increasingly competitive world economy. Course material will address the critical drivers of local and regional development in the context of South Florida's "gateway" status for commerce and immigration. Content will address spatial, managerial, and social components of development. The certificate is aligned with FIU's urban mission of providing engaged learning in its service area as well as the Departmental mission of our NASPAAaccredited Master of Public Administration (MPA) program which primary student body is in the local government sector. This certificate program is open to degree seeking students only.

## Admissions

All applicants must hold a baccalaureate degree from an accredited college or university and have an upper division GPA of at least 3.0. Applicants with GPA lower than 3.0 may be considered if they submit a GRE, LSAT or GMAT Score. Students must be admitted to the certificate program to start taking classes. Admission to a certificate does not guarantee admission to the Master of Public Administration (MPA) program.
Note: Those students who apply for and are admitted to the Master of Public Administration degree program may have certificate courses credited toward the MPA degree provided each course has a grade of " B " or higher and the
student is admitted to the master's degree program prior to the completion of no more than 12 Graduate Certificate credits.

## Certificate Requirements: (18 credits)

Required: ( 9 credits)

| URP 6315 | Introduction to Urban Planning and Growth Management |
| :---: | :---: |
| PAD 5805 | Economic Development and Urban Revitalization |
| URP 5426 | Emergency Management and Planning |
| Electives: (9 credits) |  |
| Certificate must take certificate take two a | ents who are not also MPA students D 6907 (Independent Study) as a one. If they do, they will only have to nal elective courses ( 6 credits) |
| PAD 6399 | Homeland Security Management for State and Local Government |
| PAD 6379 | Homeland Security Risk Assessment |
| PAD 6807 | Urban and Municipal Government Administration |
| PAD 6306 | Policy Analysis and Program Planning |
| PAD 6946 | Public Administration Internship |
| PAD 5934* | Contemporary Issues in Public Administration |
| PAD 6710 | IT and E-government |
| PAD 6717 | GIS Applications for Urban Management3 |
| REE 6715 | Regional Real Estate Development |
| REE 6045 | Real Estate Markets, Institutions and Practices |

Students may take up to two electives outside the Department. These electives must be selected from a list of approved electives or must be approved by Certificate Co-Chairs.
*Depending on the topic of the course and pending MPA Program approval, PAD 5934 (Contemporary Issues) may be counted as a certificate elective.

## Graduate Certificate in Conflict Resolution and Consensus Building

Judith Bernier, Director, Center for Labor Research and Studies

## Faculty:

Danay Barata, Labor Studies
Ali Bustamante, Labor Studies
Nora Femenia, Labor Studies
George Gonos, Labor Studies
Ira Horowitz, Labor Studies
Pamela A. Izvănariu, Labor Studies
Abdolrahim Javadzadeh, Labor Studies
Gleema Nambiar, Labor Studies
The Conflict Resolution and Consensus Building Certificate offers students at the post-baccalaureate level the opportunity to pursue an interdisciplinary concentration in the study of conflict resolution and to gain an intellectual background in the theories and methodologies of conflict resolution and consensus building. The certificate enhances interdisciplinary connections among Business, Criminology, Education, Human Resource Management, International Relations, Labor Studies, Law, Political Science, Psychology, Public Administration, Sociology,

Women's and Gender Studies, and complements studies in other areas. This certificate program is open to both degree- and non-degree seeking students.

## Certificate Requirements

Students are required to take 18 credit hours (6 courses) of graduate level course work outlined below. Four of the six courses must be within the LBS designation.
Two Required Core Courses: ( 6 credits)
LBS 5465 Mediation Techniques
LBS $5485 \quad$ Fundamentals of Conflict Resolution
Two Conflict Resolution Courses: ( 6 credits)
LBS $5155 \quad$ Workplace Diversity
LBS 5215 Women in the Workplace
LBS 5466 Family Mediation
LBS 5467 Civil Mediation
LBS 6945 Internship in Labor Studies/Alternative Dispute Resolution

## Two Electives: (6 credits)

The courses should be understood to be a partial list; students should consult with the advisor of the certificate program about current course offerings. Students are required to take courses from a minimum of two departments. Other related courses may be accepted as electives pending approval from the Labor Center Academic Program Director.

## Labor Studies

| LBS 5155 | Workplace Diversity |
| :--- | :--- |
| LBS 5215 | Women in the Workplace |
| LBS 5406 | Collective Bargaining and Labor <br> Relations |
| LBS 5464 | Labor Arbitration |
| LBS 5466 | Family Mediation |
| LBS 5486 | Dynamics of Conflict Management |
| LBS 5507 | Labor and Employment Law |
| LBS 5930 | Topics in Labor Studies |
| LBS 5931 | Topics in the Philosophy and Methods <br> of Conflict Research or <br> an equivalent research course |
|  | Directed Individual Study |
| LBS 6906 | Internship in Labor Studies/Alternative |
| LBS 6945 | Dispute Resolution |


| EDF 6367 | Interactive Conflict Resolution: A Third- <br> Party Perspective <br> Selected Topics in International <br> Development Education: Current Policy |
| :--- | :--- |
| EDF 6658 | Issues and Problems <br> Cultural and Cross-Cultural Studies |
| EDG 5707 | Access and Choice in Higher Education <br> EDH 6055 <br> EDH 7405Advanced Seminar on Law and Higher <br> Education <br> EDS 6050 |
| Supervision and Staff Development |  |

Global and Sociocultural Studies
ANT $6302 \quad$ Gender Identity in Comparative
Perspective
ANT 6319 The African Diaspora
SYD 5447 Sociology of International Development
SYD 6236 International Migration and Refugees
SYD 6325 Seminar in Comparative Sociology of
SYO 6536 Comparative and Global Inequality
SYD 6625 South Florida Socio-Cultural Systems
SYD 6705 Comparative Systems of Ethnicity and Race
SYP 6907 Comparative and Global Social Change
Hospitality
HMG 5547
HMG 6225
HMG 6226
HMG 6246 Organizational Behavior in the
Hospitality Industry

## International Relations

INR 5007 Seminar in International Politics
INR 5xxx International Negotiations and Conflict Resolution
INR $5062 \quad$ War, Peace and Conflict
INR 5086 Islam and International Relations
INR 5087
INR 5105
INR 5275
INR 5315
INR 5409
INR 5507
INR 6080
INR 6089
INR 6107 U.S. Foreign Policy: Processes and Institutions
INR 6338 Seminar in Strategic Studies
INR 6606 Political Psychology of International Relations
INR 6705 Seminar in International Political Economy

## Management

MAN 6066
MAN 6121
MAN 6209
Business Ethics
Interpersonal Behavior and Analysis Organizational Design and Behavior
MAN $6295 \quad$ Conflict in Organizations
MAN 6405
MAN 6411
Labor Relations
Collective Bargaining Topics
International Management International Labor-Management Relations

MAN 6703 Colloquium In Managing Organizational Ethics

Politics and International Relations
POS 5045 Seminar in American Politics
POS 5146 Seminar in Urban Politics
POS 5326 Seminar in Class Analysis
POS 5932 Topics in Urban Politics
Psychology
CYP $5534 \quad$ Groups as Agents of Change
CYP 6766 The Psychology of Cross-cultural
SOP 6752 Sensitization in a Multi-cultural Context
SOP 6752 Psychology of Juries
Public Administration
PAD $5043 \quad$ Government and Minority Group Relations
PAD $5427 \quad$ Collective Bargaining in the Public Sector
PAD 6028 Policy Analysis and Planning
PAD 6417 Human Resource Policy and Management
PAD $6436 \quad$ Professionalism and Ethics
PAD 6434 Leadership in Decision Making
Public Health
PHC 6115 International Public Health
PHC 6311 Environmental Health Risk Assessment
PHC $6355 \quad$ Occupational Health and Safety
PHC 6356 Fundamentals of Industrial Hygiene
PHC 6315 Public Health and Environmental Management
PHC $6589 \quad$ Health Promotion in Institutional Settings
Religious Studies
RLG 5149 Religion, Violence and Conflict

## Graduate Certificate in European and Eurasian Studies

Markus Thiel, Director, Politics and International Relations

Coordinating Committee
Rebecca Friedman, History
Tatiana Kostadinova, Politics and International Relations
Renée Silverman, Modern Languages
Oren Stier, Religious Studies
Mira Wilkins, Economics
This multidisciplinary certificate brings together faculty expertise and student interest in European Studies. This Certificate will be open to our Master's and Doctoral students and will required at least 15 credits of course work on Europe, from at least two disciplines. Certificate students will be asked to take a variety of courses with European content from a number of disciplines that reach across the humanities, social sciences and the arts. This Graduate Certificate is designed so that students can demonstrate substantive knowledge about specific aspects of European culture, history, politics, economics and society, as well as demonstrate language competency and gain a broader understanding of Europe, the EU and its relationship to other parts of the globe.

This certificate program is open to degree seeking students only. The program is ideal for students interested in a broader, multidisciplinary area studies perspective. At

15 credits (5 courses) this program provides both an overview of European history, culture, societies and politics and more nation-specific knowledge and training, as per the interests and goals of our students.

## Admission Requirements

1. Baccalaureate degree from an accredited institution for higher education (or equivalent);
2. Minimum cumulative grade point average of 3.0 on a 4.0 scale (or equivalent) for the last two years of undergraduate work.

## Prescribed Courses and Other Requirements

Students must take five European-content classes in at least two academic disciplines (different course prefixes). Available courses will be listed on our website www.europe.fiu.edu each semester. All students are to choose from the courses listed below and earn a grade of " B " or better. These courses represent a partial list. Courses not included on the semestral lists of approved courses may count toward meeting the requirement of the certificate only with the permission of the certificate director.

## Sample Courses in European Studies

## Social Sciences:

CPO 6105 Politics of the European Union 3
CPO 6106 Seminar on European Politics 3
CPO 5091 Seminar in Comparative Politics 3
ECO 7617 Seminar in Economic History 3
INR 5507 International Organizations I 3
INR 6010
Global Governance
3
Humanities:
ENL 5220
Major British Literary Figures 3
Topics in European History: Women \& Gender in Europe
EUH $5935 \quad$ Topics in European History: Russian Revolution
EUH $5905 \quad$ Readings in European History: Early Modern Court Societies
EUH 5905 Readings in European History: European Historical Film 3
EUH $6932 \quad$ Research Seminar in European History 3
FRW 5934 Special Topics in Language Literature 3
FRW 5938 Graduate Seminar on French Literature 3
RLG 5515 History of Early Christianity 3
RLG 5619 Holocaust Representations: Religion and Remembrance

## Graduate Certificate in Homeland Security and Emergency Management

## Mohamad G. Alkadry, Co-Chair and MPA Director Nazife Emel Ganapati, Co-Chair

The Graduate Certificate in Homeland Security and Emergency Management is designed to provide critical analytic skills to "first-responders" and those in related fields. The certificate will help professionals navigate a complex intergovernmental policy framework with an eye to best practice allocation of scarce local and regional resources devoted to preventing or mitigating the potential impacts of natural and human-made perils. Coursework will focus on the roles and responsibilities of public, nonprofit, and private organizations in the context of South

Florida's vulnerable operating environment. The content of this certificate is aligned with FIU's urban mission of providing engaged learning in its service are as well as the Departmental mission of our accredited Master of Public Administration (MPA) program which primary student body is in the local government sector. This certificate program is open to degree seeking students only.

## Admissions

All applicants must hold a baccalaureate degree from an accredited college or university and have an upper division GPA of at least 3.0. Applicants with GPA lower than 3.0 may be considered if they submit a GRE, LSAT or GMAT Score. Students must be admitted to the certificate program to start taking classes. Admission to a certificate does not guarantee admission to the Master of Public Administration (MPA) program.

Note: Those students who apply for and are admitted to the Master of Public Administration degree program may have certificate courses credited toward the MPA degree provided each course has a grade of " B " or higher and the student is admitted to the master's degree program prior to the completion of no more than 12 Graduate Certificate credits.

## Certificate Requirements (18 credits)

Required: ( 9 credits)
URP 5426 Emergency Management and Planning 3
PAD 6399 Homeland Security Management for State and Local Government
PAD 6379 Homeland Security Risk Assessment
Electives: ( 9 credits)
Certificate students who are not also MPA students must take PAD 6907 (Independent Study) as a certificate capstone. If they do, they will only have to take two additional elective courses ( 6 credits).
URP 6315 Introduction to Urban Planning and Growth Management
PAD 5443 The Public Administrator and Media
PAD $5043 \quad$ Government and Minority Group
Relations 3
PAD 6605 Administrative Law and Procedures 3
PAD 6710 IT and E-government 3
PAD 6717 GIS Applications for Urban Management3
CPO $6771 \quad$ Politics of Disaster 3
DSC 6020 Terrorism and Homeland Security 3
$\begin{array}{lll}\text { EVR } 5122 & \text { Natural Disasters and Social } \\ & \text { Vulnerability }\end{array}$
GIS $5050 \quad$ Environmental GIS 3
INR $5066 \quad$ Global and Human Security 3
INR $6067 \quad 3$
MAN $6706 \quad$ Crisis Management 3
PHC 6251 Disaster and Emergency Epidemiology 3
PHC 6374 Environmental Disasters and Human Health

3
SYG $6932 \quad$ Special Topics in Disaster Studies 3
PAD 5934* $\begin{aligned} & \text { Contemporary Issues in Public } \\ & \text { Administration }\end{aligned}$
PAD 6946 Public Administration Internship 3
Students may take up to two electives outside the Department. These electives must be selected from a list of approved electives or must be approved by Certificate Co-Chairs.
*Depending on the topic of the course and pending MPA Program approval, PAD 5934 (Contemporary Issues) may be counted as a certificate elective.

## Graduate Certificate in Human Resource Policy and Management

Mohamad G. Alkadry, Co-Chair and MPA Director Valerie Patterson, Co-Chair

Human Resource Policy and Management is designed to give graduate students a range of policy-analysis and management skills. It provides training in alternative personnel systems, (civil service, collective bargaining, privatization and service contracting), personnel techniques for productivity improvement, current issues, and ethics and professionalism. This certificate emphasizes the application of behavioral science concepts and techniques to employers in a multicultural context. This certificate program is open to degree seeking students only.

## Certificate Requirements

## Admissions

All applicants must hold a baccalaureate degree from an accredited college or university and have an upper division GPA of at least 3.0. Applicants with GPA lower than 3.0 may be considered if they submit a GRE, LSAT or GMAT Score. Students must be admitted to the certificate program to start taking classes. Admission to a certificate program does not guarantee admission to the Master of Public Administration (MPA) program.
Note: Those students who apply for and are admitted to the Master of Public Administration degree program may have certificate courses credited toward an outside specialization in Human Resource Policy and Management. All the credits earned in a Graduate Certificate Program may be used in a master's degree program provided the student is admitted to the master's degree program prior to the completion of no more than 12 Graduate Certificate credits. All transferred courses must have a grade of ' $B$ ' or better.

## Program of Study: (15)

The following three courses are required
PAD 6417 Human Resource Policy and Management
PAD 5427 Collective Bargaining and the Public Sector
PAD 6605 Administrative Law 3
Two of the following nine courses must be taken to complete the certificate.
Certificate Students who are not also MPA students must take PAD 6907 (Independent Study) as a certificate capstone. If they do, they will only have to take one additional elective course (3 credits).
PAD 5043 Government and Minority Group Relations
PAD 5435 Administrator and the Role of Women
PAD $5460 \quad$ Productivity Improvement 3
PAD $5616 \quad$ Contracting and Managing Third Party Governments
PAD 6436 Professionalism and Ethics 3
PAD 6710 IT \& E Government 3

| PAD 6156 | Applied Organization Theory and <br> Behavior | 3 |
| :--- | :--- | :--- |
| PAD 5934* | Contemporary Issues in Public |  |
| PAD 6946 | Administration <br> Public Administration Internship | 3 |

Students may take up to two electives outside the Department. These electives must be selected from a list of approved electives or must be approved by Certificate Co-Chairs.
*Depending on the topic of the course and pending MPA Program approval, PAD 5934 (Contemporary Issues) may be counted as a certificate elective.

Students must earn a minimum of 3.0 cumulative GPA. All course grades must be " C " or better.

## Graduate Certificate in Iberian Studies

Aurora G. Morcillo, Director, History<br>Coordinating Committee<br>Ana María Bidegain, Religious Studies<br>Annette B. Fromm, Art History<br>Maria Gómez, Modern Languages

This Graduate Certificate will consider the importance of Iberian cultures and their strong Mediterranean roots in the context of debates on European histories and societies. Likewise, it will strengthen the Latin American and Caribbean scholarly expertise of our university. The Certificate also fits very well within the university's strategic pillar and mission of globalization. In particular, the Iberian Peninsula, as well as the Mediterranean, constitute more than just a geopolitical space but rather represent a regional mélange connecting among a variety of cultures. These two regions also connect to the Caribbean and the larger Florida peninsula in various ways that could in turn translate into an innovative and unique program for the Green School's interdisciplinary focus. This certificate program is open to degree-seeking students only.

## Certificate Requirements

Students must be enrolled in a Master or Ph.D. program at FIU. A total of 18 credit hours ( 6 courses) of graduate course work, with a cumulative GPA of 3.25 and a grade of "B" of higher in all courses applied toward certificate requirements.

## Language Requirement

Students must be proficient in reading and comprehension of Spanish and/or Portuguese to be able to undertake research.

## Required Courses

The Graduate Certificate in Iberian Studies is 18 credits. Four (4) courses required. NINE credits from among the participating disciplines, no more than one per discipline: History, Art History, Religious Studies, and Modern Languages plus THREE internship course credits.

## History

EUH 5935 Topics in European History
Religious Studies
RLG 5565 Modern Catholicism

| RLG 5628 | Jewish Thought and Thinkers <br> RLG 5698Sephardic and Oriental Jewry <br> Colloquium |
| :--- | :--- |

Colloquium

## Modern Languages

SPW 5277 Twentieth Century Spanish Narrative 3
SPW 5428 Theatre in Calderon and Lope 3
SPW 5606 Cervantes 3
FIL 5825
Spanish Film 3

Art History
ARH 5663
Graduate Art of Spain and Her Colonies 3
ARH 4844 Spanish Art

## Electives

The remaining SIX credits might be chosen from the electives listed every semester.

## History

EUH 5935
EUH 5935

Topics in European History: History of Early Modern Spain

## Modern Languages

SPN $5525 \quad$ Spanish American Culture 3
SPW 5277 Twentieth Century Spanish Narrative 3
SPW 5405 Medieval Spanish Literature 3
SPW 5407 The Renaissance in Spain 3
SPW $5486 \quad$ Modern Spanish Women Writers 3
SPW $5535 \quad 3$
SPW 5546 Hispanic Neoclassicism 3
SPW 5556 Spanish Realism and Naturalism 3
SPW $5729 \quad$ Major Writers of the Generation of '98 3
SPW 5781 The Representation of Women in
Spanish Literature and Film

## Religious Studies

RLG 5565 Modern Catholicism 3
RLG 5615 Medieval Judaism 3
RLG 5628 Jewish Thought and Thinkers 3
RLG $5698 \quad \begin{aligned} & \text { Sephardic and Oriental Jewry } \\ & \text { Colloquium }\end{aligned}$
RLG 5907 Independent Study in Sephardic and Oriental Jewry
RLG 5945 Internship in Sephardic and Oriental Jewry
Art History
ARH 5663
Graduate Art of Spain and Her Colonies 3

## Joint Certificate in Integrated Marketing Communications: Latin American Certification

The Joint Graduate Certificate in Integrated Marketing Communications: Latin American Certification is an 18hour program with two required courses each from ICAP and International Relations, plus several electives from both areas. The objective of this graduate level certificate program is to prepare working communications professionals with the skills necessary to develop and implement communications programs in Latin America. It is also appropriate to provide international relations professionals who have gained communications responsibilities with a broad overview of the basic concepts and tasks of mass communications.

| Certificate Requirements |  |  |
| :--- | :--- | :--- |
| Required Courses - ICAP Program |  |  |
| PUR 6806 | Global Account Planning <br> (Prerequisite: Permission of the <br> instructor) <br> Global Strategic Communication <br> Management <br> (Prerequisite: PUR 6806) | 3 |
| PUR 6607 | 3 |  |
| Elective Courses - ICAP Program |  |  |
| MMC 6402 | Theories of Mass Communication <br> (Prerequisite: Permission of the | 3 |
| instructor) |  |  |

Current selections from the Latin American and Caribbean Center as offered.

## Graduate Certificate in International and Comparative Public Administration

Mohamad G. Alkadry, Co-Chair and MPA Director Jean-Claude Garcia Zamor, Co-Chair

The Certificate in International and Comparative Public Administration is designed as a specialization for students interested in international policy and administrative affairs. The certificate program will expose students to international policy aspects such as globalization, immigration, information technology, transnational institutions and other related areas. This certificate program is open to degree seeking students only.

## Admission Requirements

All applicants must hold a baccalaureate degree from an accredited college or university and have an upper division GPA of at least 3.0. Applicants with GPA lower than 3.0 may be considered if they submit a GRE, LSAT or GMAT Score. Students must be admitted to the certificate program to start taking classes. Admission to a certificate program does not guarantee admission to the Master's Degree in Public Administration (MPA) program.

In order to have certificate courses credited toward the MPA, each course must have a grade of ' $B$ ' or higher and the student must be admitted to the master's degree program prior to the completion of no more than 12 Graduate Certificate credits.

## Program Requirements (18 credits)

## Three Required Courses

| PAD 6836 | International Public Administration | 3 |
| :--- | :--- | :--- |
| PAD 6838 | Development Administration | 3 |
| PAD 6436 | Professionalism and Ethics | 3 |

Three Elective Courses
Certificate Students who are not also MPA students must take PAD 6907 (Independent Study) as a certificate capstone. If they do, they will only have to take two additional elective courses ( 6 credits).
GEO 5557 Globalization
GEO 6603 Cities and Regions in Global
INR 5507
Perspective
INR 6010
International Organizations I
Global Governance
POS 5146
Seminar in Urban Politics
PAD 5934* Contemporary Issues in Public Administration
PAD 6946 Public Administration Internship
Students may take up to two electives outside the Department. These electives must be selected from a list of approved electives or must be approved by Certificate Co-Chairs.
*Depending on the topic of the course and pending MPA Program approval, PAD 5934 (Contemporary Issues) may be counted as a certificate elective.

Students must earn a minimum of 3.0 cumulative GPA. All course grades must be "C" or better.

## Graduate Certificate in Japanese Studies

Steven Heine, Director, Asian Studies
Coordinating Committee
Matthew Marr, Global and Sociocultural Studies and Asian Studies
Amy Marshall, Japanese History
Eric Messersmith, Asian Studies
Lidu Yi, Art and Art History
The objective is to provide interdisciplinary graduate instruction in the culture and society of Japan within the context East Asian area studies. This program is available to students who are enrolled in the Asian Studies M.A., as well as students in other programs who wish to develop a specialized focus on Japan. This certificate program is open to degree-seeking students only.

## Certificate Requirements: (15 credits)

## Core Courses: ( 9 credits)

Must choose three of the following:
ASN $5050 \quad$ Methods in Asian Studies 3
ASN 5130 Zen and the Arts 3
ASN $5315 \quad$ Topics in Modern Asia 3
ASH 5446 Readings in Japanese History 3
FOW 5934 Special Topics in Language/Literature 3
SYD 5656 Global Japan 3
Electives: (6 credits)
ARH $5550 \quad$ Advanced Arts of China and Japan 3
ASH 5905 Readings in Asian History 3
ASH 5930 Topics in Asian History 3
ASN 5120 Religion and Society in Japan 3
ASN 5131 Zen and the Arts II 3

ASN $5211 \quad$ Asian Cultures and Influences 3
ASN $5306 \quad \begin{aligned} & \text { Applying Asian Cultural Values in } \\ & \text { Business }\end{aligned}$
ASN 5815 Studies of East Asian Texts 3
ASN 5910 Independent Research in Asian Studies 1-6
ASN 5932 Special Topics in Asian Studies 3
ASN 6930 Seminar in Asian Studies 3
INR 5543 International Politics Economy of East Asia

3
INR 5544 The New Asian Century 3
RLG 5352 Religions of East Asia 3
RLG 6319 Seminar in Asian Religions 3
SYD 6655 Seminar on Social Change in Asia 3
Other courses can be approved by permission of the Program Director and Coordinating Committee.

For more information, contact the Asian Studies office, SIPA 505. Email: asian@fiu.edu; phone: (305) 348-1914; website: http://asian.fiu.edu.

## Graduate Certificate in Latin American and Caribbean Studies

Frank O. Mora, LACC, Director
Liesl Picard, Associate Director
Okezi T. Otovo, Academic Programs Director
José Miguel Cruz, Research Director

## LACC Faculty Advisory Board

Ana María Bidegain, Professor, Religious Studies
Leonardo Ferreira, Professor and Worlds Ahead Scholar, Journalism and Mass Communication
Manuel Gómez-Law, Associate Dean, International and Graduate Studies and Associate Professor, College of Law
Hilary Landorf, Director, Global Learning Initiatives and Associate Professor, College of Education
Ronaldo Parente, Associate Professor, College of Business
Marifeli Pérez-Stable, Professor, Global and Sociocultural Studies
Jordana Pomeroy, Director, Patricia \& Phillip Frost Art Museum
Gene Rosenberg, Instructor, Biological Sciences
Juan Pablo Sarmiento, Co-Director, Disaster Risk Reduction Program and Research Professor, Public Health
Chantalle F. Verna, Associate Professor, Politics and International Relations and History
Augusta Maria S. Vono, Instructor of Portuguese, Modern Languages

Offered through the Kimberly Green Latin American and Caribbean Center (LACC), this graduate certificate provides an interdisciplinary approach to the study of Latin America and the Caribbean. The certificate may be awarded to both degree and non-degree seeking students who complete the requirements. For students pursuing a degree, the certificate is a complement to the student's discipline or major area of studies. For non-degree seeking students, the certificate provides a means for understanding more about Latin America and the Caribbean without pursuing a longer degree program.

## Certificate Requirements

1. A total of 15 credit hours of graduate course work with a grade of ' B ' or higher. Courses must come from the approved Latin American and Caribbean Studies course listing or be approved by the certificate faculty advisor. Courses may include those in the student's departmental major, but must be selected from at least two disciplines outside the student's major. A student may elect to focus on a country, region, or topic for the certificate (such as political science, Cuban studies, international business, art history, migration, etc.) or pursue a broader selection of courses in a variety of disciplines.
2. Each student is required to demonstrate reading proficiency in either Spanish or Portuguese, or in another regional language such as French, Haitian Creole, or Dutch when justified by research interests. Proficiency is demonstrated by scoring at least 'intermediate-high' on the ACTFL/ETS exam for Spanish, Portuguese, or French. For other languages, corresponding tests of proficiency may be accepted upon approval of the graduate advisor.
NOTE: Intermediate-high on the ACTFL/ETS exam (1plus on the US government scale) can normally be attained by students with two undergraduate semesters of basic language instruction and at least one undergraduate semester of intermediate (3000/4000 level) instruction. Attainment of the required language proficiency is the responsibility of the student and extra courses to achieve the required proficiency level must be taken outside the certificate curriculum.

All LACC approved courses are posted at http://lacc.fiu.edu. (Under "Academic Programs", select "Master in Arts Program," then select on the left "LACC Certificate Programs and click Approved Courses" or by semester on the FIU class schedule at http://lacc.fiu.edu/catalog; under "Special Programs and Certificate Programs", select "Latin American \& Caribbean Studies.") All courses listed from 5000 through 7000 series may be applied to the certificate. Approved courses are also posted each semester outside LACC (DM 353).

Students interested in pursuing a Latin American and Caribbean Studies Graduate Certificate should contact the certificate advisor at (305) 348-2894 or email lacccert@fiu.edu.

## Graduate Certificate in Middle East and Central Asian Studies

Mohiaddin S. Mesbahi, Director, Middle East Studies
Coordinating Committee
Iqbal S. Akhtar, Religious Studies/Politics and International Relations
Daniel R. Alvarez, Religious Studies
Cyra Choudhury, College of Law
Peter R. Craumer, Global and Sociocultural Studies
Eric S. Lob, Politics and International Relations
Benjamin N. Smith, Global and Sociocultural Studies
The Middle East is the most significant and consequential region shaping contemporary world politics and dynamics. Strong knowledge of the Middle East is a major asset to graduates seeking employment in governmental institutions and the private sector, or going on to graduate
school and into academia. The Graduate Certificate in Middle East and Central Asian Studies, which is offered through the Middle East Studies (MES), provides students with the opportunity for a rich multidisciplinary learning experience. Students have a choice of courses in the fields of international relations, geography, history, political science, religious studies, sociology/anthropology, and modern languages, among others. The program defines the "Middle East" broadly, encompassing the study of adjacent regions including Central Asia and the larger Muslim world. For more information contact Middle East Studies (MES) at the Steven J. Green School of International and Public Affairs, SIPA 501. Email: mesc@fiu.edu; phone (305) 348-1792; Website: http://mideast.fiu.edu.

## Admission Requirements

Baccalaureate degree from an accredited institution for higher education (or equivalent), with a minimum cumulative grade point average of 3.0 for the last two years of undergraduate work, and current enrollment in an FIU graduate program. This certificate program is open to degree seeking students only.

## Certificate Requirements:

A total of 18 credit hours of graduate course work, with a cumulative GPA of 3.0 and a grade of C or higher in all courses applied toward certificate requirements.

## 1) Core Requirements ( 6 credits):

Three credits from each group below.
Group A (3 credits):
CPO $6407 \quad$ Seminar in Middle East Politics
INR 5275 International Relations of the Middle East
INR 5086 Islam in International Relations
INR 5276 IR of Iran and the Persian Gulf
Group B (3 credits):
INR 5086 Islam in International Relations
RLG 6097 Muslim Concepts of War: A Perspective for National Security
RLG 6094 Seminar in Religious Fundamentalism
RLG 6096 Advanced Religious Fundamentalism: A Viewpoint for National Security

Note: Students may choose to take additional courses from Groups A and B as "Electives".

## 2) Elective Courses ( 12 credits):

Four courses ( 12 credits) from the courses listed below:
ASN 5605 Silk Road: Then and Now
CPO $6084 \quad$ War, Peace and the Military
HIS 5289 Comparative History*
HIS 5930 Special Topics in History*
INR 5352 Environment and Security
INR $5062 \quad$ War, Peace and Conflict Resolution in INR
INR $5276 \quad$ Graduate Seminar the International Relations of Iran and the Persian Gulf
RLG 5907 Independent Study in Sephardic and Oriental Jewry
INR 6266 Seminar in Russian Foreign Policy
INR 6338 Seminar in Strategic Studies*
RLG 5394 Jewish Mystical Texts
RLG 5360 Classical Arabic

RLG 5366 Advanced Interpretation of the Quran: Gender and Jihad
RLG $5369 \quad$ Voice of the Prophet
RLG 5613 Religion, Culture and Politics in Israel
RLG 5617 Jews and Muslims in the Middle Ages
RLG 5629 Kabbalah, Peace and War
RLG 6442 Religion in the Contemporary World
EVR 5353 International Energy Policy
SYD 5045 Population and Society*
SYD 6236 International Migration and Refugees*
SYO $6536 \quad$ Comparative and Global Inequality*
WOH 5935 Topics in World History *
*Seminars and Special Topics are appropriate for certificate when dealing with issues of the broader Middle East (Eligibility to be determined by Program Director).

In addition to the courses listed above, new courses (as they become available), relevant special topics, independent studies, study abroad credits, and area studies or comparative studies courses may also be applied with the prior approval of the certificate program director. Students may consult the list of eligible courses announced at the beginning of the academic year or semester through Middle East Studies (MES) http://mideast.fiu.edu.

## Graduate Certificate in National Security Studies

Brian Fonseca, Director
Coordinating Committee
John H. Boyd III, Economics
Edward Glab, College of Business
Christine E. Gudorf, Religious Studies
Steven Heine, Religious Studies and History
Mohiaddin Mesbahi, Politics and International
Relations
Richard Olson, Politics and International Relations
Ediberto Roman, College of Law
Luis P. Salas, Criminal Justice
Richard S. Tardanico, Global and Sociocultural Studies
Victor Uribe, History
Offered through the Jack D. Gordon Institute for Public Policy and Citizenship Studies, the certificate may be awarded to both degree and non-degree seeking students who complete the requirements. For students pursuing a degree, the certificate is a complement to a student's discipline or major area of studies. For non-degree seeking students, the certificate provides a means for understanding more about national security in the 21st century.

## Certificate Requirements

1. A total of 18 credit hours of graduate course work with a grade of " $B$ " or higher. Courses must come from the approved GCNSS course listing or be approved by the certificate advisor. Courses may include those in the student's departmental major, but must also be selected from at least two disciplines outside the student's departmental major. With the approval of the Director, courses other than those listed herein may be substituted on a case-by-case basis.
2. A two-course introductory language sequence at FIU with a grade of " B " or higher. Exemption from this
requirement may be obtained through a proficiency examination administered by the FIU Department of Modern Languages. Language courses may not be counted toward the fulfillment of requirement \#1 above.

Note: Intermediate-high on the ACTFL exam (1-plus on the US government scale) can normally be attained by students with two undergraduate semesters of basic language instruction and at least one undergraduate semester of intermediate (3000/4000) instruction. Attainment of the required language proficiency is the responsibility of the student, and extra courses to achieve the required proficiency level must be taken outside the GCNSS curriculum.
Skill Requirement: (3 credit hours)

| POS 5785 | Writing Professionally in Political Science |
| :---: | :---: |
| ISS 5388 | Communicating Analytically |
| Core Requirement: (6 credit hours) |  |
| Select one of the following courses: |  |
| GIS 5620 | Surveillance, Intelligence, and International Relations |
| POS 5706 | Research Methodology |
| SYA 6305 | Research Methods I |
| Select one of the following courses: |  |
| INR 5007 | Seminar in International Politics |
| INR 5105 | American Foreign Policy |
| INR 5315 | Foreign Policy Analysis |
| INR 5615 | Research Design in International Relations |
| INR 6107 | U.S. Foreign Policy: Processes and Institutions |
| INR 6338 | Seminar in Strategic Studies |

National Security Studies: (3 credit hours)
ISS $5135 \quad$ National Security Essentials
Electives: ( 6 credit hours)
Select two of the following courses:
Business, Finance \& Management
FIN $6644 \quad$ Global Financial Strategy
FIN 6636 International Finance
Criminal Justice
CCJ $6040 \quad$ Comparative Crime and Criminal Justice Systems
CCJ 6056 History of the American Criminal Justice
CJL $6421 \quad$ Legal Issues in Criminal Justice Administration
CCJ 6935 Special Topics
PAD 6701 Quantitative Methods in Public Administration
CCJ 6676 Transnational Crime and National
DSC 6020 Terrorism and Homeland Security
Economics
ECO 6225
ECO 6416
Economics of Asset Markets
Applied Quantitative Methods in Economics
ECO 7206 Macroeconomic Theory I
ECO 7207 Macroeconomic Theory II
ECO 7236 Money, Banking and Monetary Policy
ECO 7424 Economic Metric Methods I

ECO 7425
ECO 7705
ECO 7716
ECS 5406
ECS 6436
ECS 7405
ECS 7435
ECS 7445
ECO 5709
ECP 5707
ECS 5005
ECS 5027

Global and Sociocultural Studies
GEA 6409
Landscapes of Violence and Healing in the Americas
GEO 5557 Globalization
GEO $6473 \quad$ Space, Place and Identity
ANG 6303 Comparative Feminisms
ANG 6339 Seminar on Latin America
ANT $6302 \quad$ Gender Identity in Comparative
Perspective
SYD $5045 \quad$ Population and Society
SYD 6236 International Migration and Refugees
SYD 6705 Comparative Analysis of Ethnicity and
Race
SYG 6932 Special Topics in Disaster Studies
SYP 6306 Comparative Social Movements
SYP 6907
GIS 5935
GIS 5038
GEO 5415
SYO 6306
SYP 5447
History
AFH 5905
AFH 5935
AMH 5905
AMH 5935
EUH 5905
EUH 5935
HIS 6059
LAH 5905
LAH 5935
WOH 5237
HIS 5939
AMH 5935
EUH 5935

## Law

LAW 625
LAW 6255
LAW 6280
LAW 6264
LAW 6103
LAW 7268
LAW 6263
LAW 6282
LAW 6260

ECS 7015 Development Economics: Theory
ECS 7026 Development Economics: Planning and Policy
Economic Metric Methods II
International Trade
International Money
Latin American Economies
Economics of Caribbean Migration
Economics of Latin America
Economics of the Caribbean
Economics of Central America
The World Economy
International Economic Problems
Comparative Economic Systems
Economic Development of Emerging Nations

Comparative and Global Social Change
Topics in Geographic Information Systems
Remote Sensing
Topics in Social Geography
Political Sociology
Development and Post-Development

Readings in African History
Topics in African History
Readings in American History
Topics in American History
Readings in European History
Topics in European History Historical Methods
Readings in Latin American History Topics in Latin American History The African Diaspora Since the End of the Slave Trade
Special Topics
Topics in American History
Topics in European History

Comparative Constitutional Law
Comparative Law: Constitutions and the Judicial Process
European Union Law
Immigration Law
International Criminal Law
International Environmental Law
International Human Rights Law
Law and Politics in Latin America
Public International Law

LAW 7930
LAW 6506
LAW 6936 Topics: Seminar in National Security and the Constitution

## Politics and International Relations

CPO 5325
Politics of the Caribbean
CPO 6105 Politics of the European Union
CPO 6106 Seminar in European Politics
CPO 6206 Seminar in African Politics
CPO 6307 Seminar on South American Politics
CPO 6350 Seminar in Brazilian Politics
CPO 6376 Seminar in Central American Politics
CPO $6407 \quad$ Seminar in Politics of the Middle East
INR 6089 International Relations and Human
CPO $6316 \quad$ Rights $\quad$ Seminar in Latin American Democratic
INR 5087 Ethnicity and the Politics of Development
INR 6936 Seminar in Inter-American Politics
POS $6725 \quad$ Formal Political Modeling
POS 6918 Seminar in Political Science Research
INR 5036
INR 5086
INR 5087
INR 5255
INR 5275
INR 5409
INR 5507
International Organizations I
INR 5607 International Relations and Development
INR 5609 Dynamics of International Relations in the 20th Century
INR 6209 Comparative Foreign Policy of Latin America
INR 6266
INR 6406
INR 6605
Russian Foreign Policy
International Law II
Contemporary International Systems
INR 6706 Political Economy of International Relations
CPO $5036 \quad$ Politics of Development
CPO 5936 Seminar in Comparative Political Parties
CPO 6092 Seminar in Comparative Political Culture
INR 5036 Politics of Globalization
INR 5062 War, Peace and Conflict Resolution in INR
INR $5934 \quad$ Topics in International Politics
INR 6705 Seminar in International Political Economy

## Religious Studies

RLG 5025 Myth and Religion
RLG 5144 Women and Religion
RLG 5149 Religion, Violence, and Conflict
RLG 5352 Religions of East Asia
RLG 5488 Theology and Liberation Movements
RLG 6322 Seminar in Western Religions
RLG 6319 Seminar in Asian Religions
RLG 6442 Religion in the Contemporary World

## Graduate Certificate in Public Finance, Procurement, and Contract Management

Mohamad G. Alkadry, Certificate Chair and MPA Director David Guo, Public Administration

The Certificate in Public Finance, Procurement and Contract Management is designed as a specialization for students interested in careers in budgeting, finance, purchasing, and contract management in the public and non-profit sectors. The certificate program will expose students to competencies in areas like contact and project management, public finance and the budgetary process, procurement and ethics, and legal aspects of procurement and public finance.

The Graduate Certificate in Public Finance, Procurement, and Contract Management has the following learning outcomes:

1. Appraise basic concepts in public finance and budgeting;
2. Evaluate the characteristics of a "good" public revenue system;
3. Understand of the field of public procurement and critical issues facing the field;
4. Know how to write a request for proposals/bid/quotes;
5. Learn how to solicit bids;
6. Understand different bases of accounting and their use by state/local governments and nonprofit organizations;
7. Apply various forecasting techniques and determine their accuracy;
8. Understand the basics of cash and debt management;
9. Assess the financial condition of an organization; and
10. Learn the basics of pension planning and administration.

## Admissions

All applicants must hold a baccalaureate degree from an accredited college or university and have an upper division GPA of at least 3.0. Applicants with GPA lower than 3.0 may be considered if they submit a GRE, LSAT or GMAT Score. Students must be admitted to the certificate program to start taking classes. Admission to a certificate program does not guarantee admission to the Master of Public Administration (MPA) program.
Note: Those students who apply for and are admitted to the Master of Public Administration degree program may have certificate courses credited toward the MPA degree provided each course has a grade " B " or higher and the student is admitted to the master's degree program prior to the completion of no more than 12 Graduate Certificate credits.

This graduate certificate program will consist of four required courses and two electives (18 credits total) that are taken for-credit. This certificate program is open to degree seeking students only.

## Certificate Requirements (18 credits)

Certificate students who are not also MPA students must take PAD 6907 (Independent Study) as a certificate capstone. If they do, they will only have to take one additional elective course ( 3 credits).

## Required Courses (12 credits)

| PAD 6227 | Public Finance and the Budgetary Process | 3 |
| :---: | :---: | :---: |
| PAD 6209 | Financial Management in Public and |  |
|  | Nonprofit Organizations | 3 |
| AD 6855 | Introduction to Public Procurement | 3 |
| PAD 6856 | Contract and Project Management | 3 |
| Electives (6 credits) |  |  |
| PAD 5256 | Public Economics and Cost Benefit Analysis | 3 |
| PAD 5460 | Productivity Improvement | 3 |
| PAD 6229 | Advanced Management Techniques | 3 |
| PAD 6436 | Professionalism and Ethics | 3 |
| PAD 6605 | Administrative Law and Procedures | 3 |
| PAD 6710 | IT and E-government | 3 |
| PAD 5934* | Contemporary Issues in Public |  |
|  | Administration | 3 |
| PAD 6946 | Public Administration Internship | 1-6 |
| *Depending on the topic of the course and pending MPA |  |  |
| Program approval, PAD 5934 (Contemporary Issues) may be counted as a certificate elective. |  |  |

## Graduate Certificate in Public Management

Mohamad G. Alkadry, Certificate Chair and MPA Director

This graduate certificate program provides students with a thorough understanding of the managerial concepts and techniques of public administration and is designed particularly for those who already have a professional field of specialization. The Certificate is designed for nonMaster of Public Administration (MPA) students, although students who are admitted into this Certificate program may apply for admission to the MPA program. Current MPA students may not be admitted to this Certificate.

## Certificate Requirements

## Admissions

All applicants must hold a baccalaureate degree from an accredited college or university and have an upper division GPA of at least 3.0. Applicants with GPA lower than 3.0 may be considered if they submit a GRE, LSAT or GMAT Score. Students must be admitted to the certificate program to start taking classes. Admission to a certificate program does not guarantee admission to the Master of Public Administration (MPA) program. This certificate program is open to degree seeking students only.
Note: Those students who apply for and are admitted to the Master of Public Administration degree program may have certificate courses credited toward the MPA core. All the credits earned in a Graduate Certificate Program may be used in a master's degree program provided the student is admitted to the master's degree program prior to the completion of no more than 12 Graduate Certificate credits. Courses with a grade of less than ' $B$ ' may not count toward MPA program if they were taken as certificate courses.
Program of Study: (15)
The following four courses are required:
PAD 6053 Political, Social, and Economic Context of PA

| PAD 6156 | Applied Organization Theory and <br> Behavior | 3 |
| :--- | :--- | :--- |
| PAD 6227 | Public Finance and \& Budgetary |  |
| PAD 6306 | Process | Policy Analysis and Program Planning |

One of the following electives must be taken to complete the certificate:
Certificate Students who are not also MPA students must take PAD 6907 (Independent Study) as a certificate capstone. If they do, they will have no additional elective courses to choose.

| PAD 5043 | Government and Minority Group <br> Relations | 3 |
| :--- | :--- | :--- |
| PAD 5435 | Administration and the Role of Women | 3 |
| PAD 6436 | Professionalism and Ethics | 3 |
| PAD 6209 | Financial Management in Public and |  |
|  | Nonprofit Organizations | 3 |
| PAD 6605 | Administrative Law and Procedures | 3 |
| PAD 6710 | IT \& E Government | 3 |
| PAD 6807 | Urban and Municipal Government |  |
|  | Administration | 3 |

Students must earn a minimum of 3.0 cumulative GPA. All course grades must be "C" or better.

## Graduate Certificate Program in Religious Studies

The purpose of the Graduate Certificate Program is to offer an alternative to the MA degree program for students who wish to pursue an organized program of study at the graduate level, but have no need of a degree and wish a shorter term project. This certificate program is open to degree-seeking students only.

## Certificate Requirements

1. Students must either have taken the undergraduate course REL 3308 World Religions as a prerequisite before entering the certificate program, or must complete it within the program, usually in the first semester of coursework.
2. Students must complete 18 credit hours of graduate level courses in the general area of religion.
3. Students must have a minimum GPA of 3.0 in their graduate religion courses.
4. Earned grades in the 18 hours of graduate religion courses must be "B" or better; grades of "B-" or below will not be counted toward the 18 .
5. Students in the Graduate Certificate Program in Religious Studies who wish to transfer into the MA program must meet the requirements for matriculation.

## Graduate Certificate in Sustainable Communities

## Coordinating Committee

Marta Canaves, Landscape Architecture
Richard S. Olson, Politics and International Relations
Christine E. Gudorf, Religious Studies
John H. Boyd, III, Economics
Joel Heinen, Earth and Environment
The Graduate Certificate in Sustainable Communities offers students an introduction to the theoretical and
methodological tools necessary to critique and conduct research on society/environment interactions. The objective of the certificate is to prepare students to participate in current environmental debates, whether through scholarship and teaching, non academic professional activities or activism. The certificate requires eighteen credits of interdisciplinary courses.

This certificate will appeal to an interdisciplinary graduate student population at FIU drawing students from the Green School, the College of Arts and Sciences, as well as other schools and colleges (as reflected in the requirements below). In particular, the certificate will aid students interested in natural resource management and conservation, regional and urban planning, as well as domestic and international development and policy issues. This certificate program is open to degree-seeking students only. The certificate will serve students interested in pursuing careers in local, national and international government and non-governmental organizations, as well as academic careers.

## Certificate Requirements

1. Application to the Certificate Program.
2. Acceptance to and good standing in a graduate degree program at FIU.

Core Course
ISS 5166
Seminar in Sustainable Communities

## Electives

12 credit hours chosen from the list below. A 3 credit course can be substituted for any one of the listed electives with the approval of the Certificate Program Director.

Economics
ECP 6305 Advanced Environmental Economics

## Earth and Environment

EVR 6330 Tropical Ecosystem Management
EVR 5355 Environmental Resources Policy
EVR $6360 \quad$ Protected Area Management
EVR $7322 \quad$ Methods of Sustainable Resource Management
Parks and Recreation Management
LEI $5605 \quad$ Philosophical and Social Basis of Parks and Recreation

Politics and International Relations
CPO $6771 \quad$ Politics of Disaster
Religious Studies
RLG 5183 Religion, Nature, and Globalization
Global and Sociocultural Studies
ANG 5267 Environmental Anthropology
SYD 6901 GIS and Social Research
GEO 6473 Space, Place and Identity
INR 6056 Environment and Development

## Landscape Architecture

LAA 5243 Regional Landscape Issues
LAA 6551 Sustainable Landscapes
LAA 5541 South Florida Landscapes
LAA 6521 Tropical Landscapes
Possible Further Course Offerings
Development and Indigenous Peoples (Dept. Global and Sociocultural Studies)

Historical Ecology/Landscape History (Dept. Global and Sociocultural Studies)
Eco-Capitalism and Cultural Politics (Dept. Global and Sociocultural Studies)
Latin American Social Movements (Dept. Global and Sociocultural Studies)
Political Ecology of the Environment (Dept. Earth and Environment)

## Directed Research: (3 credits)

In consultation with the Certificate Program Director, student will produce an independent research paper or comparable piece of work on sustainable communities.

## Graduate Certificate in Transnational and Regional Studies

Steven Heine, Director, Asian Studies

## Coordinating Committee

Ana Maria Bidegain, Religious Studies
Nathan Katz, Religious Studies
Mohiaddin Mesbahi, Politics and International
Relations
The objective is to provide interdisciplinary graduate instruction in international/global studies that require specialization in one of the following main world regions, including Asia, Europe, Middle East, Russia or Central Asia. (Students interested in Latin America or Africa may wish to consult those programs). For more information on the graduate degree, contact the School of International and Public Affairs, SIPA 530, telephone (305) 348-6561, fax (305) 348-6562, email: riosm@fiu.edu or visit our website: http://international.fiu.edu.

The Program requires 15 graduate-level credit hours (5 courses). Students will be advised by the Program Director and by the committee member with expertise in the region of specialization. Courses must be passed with " B " or better ( $B$ - is not acceptable). This certificate program is open to degree-seeking students only.

## Certificate Requirements

## Course Requirements: $\mathbf{1 5}$ credits

Core Course in Global Studies: (3 credits)
A course in comparative or global studies, such as:
CPO 5091 Seminar in Comparative Politics
ECO 5709 The World Economy
ECP 5704 International Economic Problems and Policy
FOW 5587 Comparative Studies
HIS $5289 \quad$ Comparative History
INR $5017 \quad$ Approaches to Area Studies
MUH 5057 Music of the World
RLG 5138 Sects, Cults, and New Religions
SYP 5447 Development and Post-Development

## Regional Studies Courses: ( 9 credits)

Courses in studies of the specialty region-Asia, Europe, Middle East, Russia, or Central Asia. The courses can be taken in any relevant discipline, but must come from at least two different departments or disciplines.

## Directed Research: (3 credits)

Supervision of an intensive research paper, fieldwork studies, or a comparable in-depth specialized project in studies of the region.

Language Requirements (credits cannot be applied to the certificate)

One year of study, or equivalent, in a language appropriate to the specialty region (such as Chinese or Japanese for Asian Studies, Hebrew or Arabic for Middle Eastern Studies).

## Steven J. Green School of International and Public Affairs

Executive Director/Dean Designate Associate Director/Associate Dean Designate, Graduate Studies and Innovation
Associate Dean Designate, Planning and Administration
Executive Director Designate, Operations

John F. Stack, Jr.

## Shlomi Dinar

Jeff Gonzalez<br>Pedro Botta

## Chairpersons and Program Directors:

African and African Diaspora Studies
TBA
Asian Studies
Steven Heine
Criminal Justice
Economics
Global and Sociocultural Studies
History
Kimberly Green Latin American and
Caribbean Center
Modern Languages
Politics and International Relations
Public Administration
Religious Studies Lisa A. Stolzenberg Ali Cem Karayalcin Roderick P. Neumann Victor M. Uribe

Frank O. Mora Pascale S. Becel John F. Clark Howard A. Frank Erik W. Larson

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[^0]:    * FIU is in the process of re-numbering all special courses to comply with the State Wide Course Numbering sequence above. Therefore, some of the special courses listed in the catalog may change.

[^1]:    ${ }^{1}$ Must include a vocal diction course if placement test suggests need for further training in this area. Choral conducting candidates must take placement tests in diction. Depending on the results of these tests, two of these elective credits may have to be devoted to the MUS 5206 (Graduate Review Diction) course.
    ${ }^{2}$ May substitute MUH 5815 Jazz History: The Innovators

[^2]:    International Political Economy of Asia Concentration Electives:
    ECO $5709 \quad$ World Economy
    ECO 5735 Multinational Corporations

