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Florida International University

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University Catalog 1982 • 1983 Miami, Florida

# Florida International University



# ACADEMIC CALENDAR 1982-83\*

## FLORIDA INTERNATIONAL UNIVERSITY

### FALL SEMESTER 1982

May 26	Last day for receipt of Admissions application for International Students for Fall Term
July 19-23	Official Registration Week (Degree-Seeking Students) by appointment only for Fall Term
July 26-August 6	Open Registration for Fall Term
July 30	Last Day for receipt of Applications (including appropriate credentials) to insure consideration for admission for Fall Term.
August 23	Registration Day
August 25	Classes Begin
September 3	Last day to complete Late Registration by 3:00 p.m.
	<ul style="list-style-type: none"> <li>● Drop/Add Period ends</li> <li>● Last day to drop courses or withdraw from the University without incurring a financial liability</li> <li>● Last day to pay fees without incurring a late fee.</li> <li>● Last day to pay fees to avoid cancellation of enrollment</li> </ul>
September 6	Labor Day Holiday (University closed)
September 14	Last day to apply for Fall Term graduation
September 24	Last day to complete withdrawal with a 25% refund of tuition less bonding fees.
October 22	Last day to drop a course with a DR grade, by 3:00 p.m.
	<ul style="list-style-type: none"> <li>● Last day to withdraw from the University with a WI grade.</li> <li>● Last day for reinstatement of cancelled courses due to non-payment.</li> </ul>
November 11	Veterans Day Holiday (University Closed)
November 15-19	Official Registration Week (Degree-seeking Students) by appointment only for Spring Term.
November 25-26	Thanksgiving Holiday (University Closed)
November 29-	
December 10	Open Registration for Spring Term.
December 10	Classes End
December 13-17	Official Examination Period
December 24-25	Christmas Holiday (University Closed)

\*Calendar dates are subject to changes. Appropriate offices should be contacted for verification and updated information.

### SPRING SEMESTER 1983

October 5	Last day for receipt of Admissions application for International Students for Spring Term.
November 15-19	Official Registration Week (Degree-Seeking Students) by appointment only for Spring Term
November 29-	
December 10	Open Registration for Spring Term
December 1	Last Day for receipt of applications (including appropriate credentials) to insure consideration for admission for Spring Term.
December 31-	
January 1	New Years Holiday (University closed)
January 3	Registration Day
January 5	Classes Begin
January 14	Last day to complete Late Registration by 3:00 p.m.
	<ul style="list-style-type: none"> <li>● Drop/Add Period ends</li> <li>● Last day to drop courses or withdraw from the University without incurring a financial liability</li> <li>● Last day to pay fees without incurring a late fee.</li> <li>● Last day to pay fees to avoid cancellation of enrollment</li> </ul>
January 25	Last day to apply for Spring Term graduation
February 4	Last day to complete withdrawal with a 25% refund of tuition less bonding fees.
March 4	Last day to drop a course with a DR grade.
	<ul style="list-style-type: none"> <li>● Last day to withdraw from the University with a WI grade, by 3:00 p.m.</li> <li>● Last day for reinstatement of cancelled courses due to non-payment.</li> </ul>
April 4-8	Official Registration Week (Degree-Seeking Students) by appointment only for Complete Summer Term, Term A, and Term B.
April 11-15	Open Registration for Complete Summer Term, Term A, and Term B.
April 15	Classes End.
April 18-22	Official Examination Period

# Florida International University

1982-83 Catalog

Miami, Florida

Member of the State University System

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Florida International University believes in equal opportunity practices which conform to all laws against discrimination and is committed to non-discrimination with respect to race, color, creed, age, handicap, sex, or national origin. Additionally, the University is committed to the principle of taking the positive steps necessary, to achieve the equalization of educational and employment opportunities.

*Note:* The programs, policies, requirements and regulations published 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 Regents and the Florida Legislature. Changes in programs, policies, requirements and regulations may be made without advance notice.

The fees given in this catalog are tentative pending legislative action.



# General Information

## General Information

### State Board of Education

D. Robert Graham	<i>Governor</i>
George Firestone	<i>Secretary of State</i>
James C. Smith	<i>Attorney General</i>
Gerald Lewis	<i>Comptroller</i>
Doyle Conner	<i>Commissioner of Agriculture</i>
Ralph D. Turlington	<i>Commissioner of Education</i>
William D. Gunter, Jr.	<i>Treasurer</i>

### Florida Board of Regents

Hon. DuBose Ausley, <i>Chairman</i>	<i>Tallahassee</i>
Hon. Betty Anne Staton	<i>Orlando</i>
Hon. James Blount	<i>Student Regent</i>
Hon. J. Hyatt Brown	<i>Daytona</i>
Hon. J. J. Daniel,	<i>Jacksonville</i>
Hon. Murray H. Dubbin	<i>Miami</i>
Hon. Robin Gibson	<i>Lake Wales</i>
Hon. Raleigh Greene	<i>St. Petersburg</i>
Hon. William F. Leonard	<i>Ft. Lauderdale</i>
Hon. William L. Maloy	<i>Pensacola</i>
Hon. Frank P. Scruggs, II	<i>Miami</i>
Hon. T. Terrell Sessums	<i>Tampa</i>
Hon. Barbara Newell	<i>Chancellor,</i>
	<i>State University System</i>

### Florida International University Officials

Gregory Baker Wolfe	<i>President</i>
Steve Altman	<i>Provost &amp; Vice President for Academic Affairs</i>
Patricia H. Lutterbie	<i>Vice Provost</i>
Ronald A. Arrowsmith	<i>Vice President for Administrative Affairs</i>
Henry B. Thomas	<i>Vice President for Student Affairs</i>
Hanna Saxon	<i>Vice President for University Relations and Development</i>

### History

Florida International University was established by the Florida State Legislature on June 22, 1965. It is a member institution of the State University System of Florida.

Classes began at the Tamiami Campus on September 19, 1972 with an initial enrollment of almost 6,000 upper-level undergraduate and graduate students.

The Florida Board of Regents appointed Charles E. Perry as the first president on July 11, 1969. He was succeeded on June 1, 1976, by President Harold Brian Crosby. Gregory Baker Wolfe was named the third and current president on February 16, 1979. President Wolfe came to the University from the American University in Washington, D.C., where he was Dean and Professor of International Relations. Earlier, Dr. Wolfe served as President of Portland State University in Oregon and has had a distinguished international career in business as well as government. He served on the White

House staff for the development of Washington's mass transit system, has been in the U.S. Foreign Service and has advised international chiefs of state on economic and political development.

For nine years (1972-81), FIU offered upper-level and graduate programs of study. In July, 1981, the Legislature funded the University to become a four-year institution. In August, 1981 the first freshman class was admitted.

### Goals

The University's academic programs are designed to achieve three goals: Provide university education with emphasis on the liberal arts to qualified lower division students, preparing them for careers in social service, business, industry, education and other professions at upper division and graduate levels; enrich their intellectual experience in an effort to cultivate effective members for a modern global society; and offer them the opportunity to absorb and contribute to the richness of South Florida's cultural, aesthetic and technological environments.

Serve the broad community, with special concern for Greater Miami and South Florida, enhancing the metropolitan area's capacity to meet its cultural, economic, social and urban challenges.

Become a major international education center by helping create greater understanding among the people of the Americas and the world.

### Campuses

The University has two campuses: Tamiami in the southwest Dade County about 10 miles west of downtown Miami on Tamiami Trail (S.W. 8th Street) between 107 and 117 Avenues, and Bay Vista Campus located on Biscayne Bay between N.E. 135 and 151 Streets. Both campuses operate under a central administration.

#### Tamiami Campus

The Tamiami Campus occupies 344 acres in west central Dade County. Since 1970, six buildings have been constructed at a cost of 38 million dollars. The campus development plan includes provisions for additional facilities to accommodate anticipated growth needs.

#### Bay Vista Campus

In 1973, a 200 acre tract of land was deeded to the University by the Florida Board of Regents for a second campus. The first building of this waterside facility was completed during 1976. Bay Vista's development plan is designed to accommodate growth needs of Dade and Broward County residents.

As an extension of the Bay Vista School of Education, an FIU Center has been opened at Broward Community College South Campus in Pembroke Pines, a suburb of Fort Lauderdale. The Center offers degree programs and certification courses to serve the needs of public and private school teachers as well as pre-service teachers in South Broward County.

Both Tamiami and Bay Vista Campuses are served by a total of nine major buildings of award-winning design, enhancing the University family's enjoyment of South Florida's natural beauty. Student-guided tours of both campuses are available upon request to all visitors.

### General Academic Information

Florida International University offers a variety of academic programs and courses at the bachelor's and master's degree levels, all designed to respond to the changing needs of the growing metropolitan area of Dade County and South Florida. Upper level bachelor's programs and courses are offered in the College of Arts and Sciences and the six professional schools—Business and Organizational Sciences, Education, Hospitality Management, Nursing, Public Affairs and Services, and Technology. Graduate study at the master's level is available in the College of Arts & Sciences and the Schools of Business and Organizational Sciences, Education, Hospitality Management, Public Affairs and Services, and Technology. Graduate study at the Doctoral level is available in selected concentrations through the School of Education.

### Accreditation and Memberships

All academic programs of the University are approved by the State Board of Education and the Board of Regents of Florida.

The University is an accredited member of the Southern Association of Colleges and Schools. The professional programs of the respective schools of the University are accredited or approved by the appropriate professional associations, or are pursuing full professional accreditation or approval.

The University is also an affiliate member of the Association of Upper Level Colleges and Universities, the American Association of State Colleges and Universities, the Florida Association of Colleges and Universities, the Association of Caribbean Universities and Research Institutes, the American Association of Community and Junior Colleges, a Charter Member of the Southeast Florida Educational Consortium, and numerous other educational and professional associations. The following agencies have accredited professional programs at Florida International University:

- The American Dietetics Association
- The American Physical Therapy Association
- The American Occupational Therapy Association
- The American Medical Association
- National Accreditation Agency for Clinical Lab Sciences
- The American Society of Clinical Pathologists
- The American Medical Records Association
- The Council on Social Work Education
- The Accreditation Board for Engineering and Technology
- The American Home Economics Association



## Southeast Florida Educational Consortium

Florida International University, Broward Community College, and Miami-Dade Community College are charter members of the Southeast Florida Educational Consortium established in 1977. The organization links the member institutions in planning, maintaining, and evaluating cooperative efforts in academic programs, student services, and administrative support services. The overall objectives of the Consortium are to:

- 1) Increase and improve educational opportunities.
- 2) Ensure smooth transition from the community college to the university.
- 3) Provide easy access to institutional services for students and faculty.
- 4) Effectively utilize human and fiscal resources.

The Office of the Consortium is located at 11011 S.W. 104 Street, Miami, Florida 33176.

The Consortium is governed by a Steering Committee, has an Executive Director, and currently has 16 committees/task forces: Academic Programs; Admissions, Registration, Records; Academically Underprepared Students; Audio-Visual; Career Planning and Placement; Cooperative Education; Facilities; Financial Aid; Handicapped Students; Institutional Research; Libraries; Physical Plant; Public Information; Student Activities; Superior Students; Veterans Affairs; *Ad Hoc* groups are formed to meet other specific needs.

Descriptions of specific cooperative arrangements between the Consortium campuses—and student/faculty procedures—are given in the appropriate sections of this Catalog.





## Academic Programs

The **COLLEGE OF ARTS and SCIENCES** offers academic programs leading to:

### BACHELOR OF ARTS in:

Chemistry  
Earth Science  
Economics  
English  
Environmental Studies  
French  
German  
History  
Humanities  
International Relations  
Italian  
Liberal Studies  
Philosophy  
Political Science  
Portuguese  
Psychology  
Religious Studies  
Spanish

### BACHELOR OF SCIENCE in:

Biological Science  
Chemistry  
Computer Science  
Earth Science  
Environmental Studies  
Mathematics  
Mathematical Sciences  
Physics  
Statistics

### BACHELOR OF MUSIC

### BACHELOR OF FINE ARTS

### BACHELOR OF ARTS with a major in:

Anthropology/Sociology

### MASTER OF SCIENCE in:

Biology (offered jointly with FAU)  
Chemistry (offered jointly with FAU)  
Computer Science  
Economics  
Environmental and Urban Systems (offered jointly with School of Technology)  
General Psychology  
International Studies  
Mathematical Sciences  
Physics (offered jointly with FAU)  
Psychology (offered jointly with FAU)

The **SCHOOL OF BUSINESS and ORGANIZATIONAL SCIENCES** offers academic programs leading to:

### BACHELOR OF BUSINESS

### ADMINISTRATION with majors in:

Accounting  
Finance  
Insurance and Risk Management  
International Business  
Management  
Management Information Systems  
Marketing  
Personnel Management  
Real Estate  
Transportation

### MASTER IN BUSINESS ADMINISTRATION

### MASTER IN INTERNATIONAL BUSINESS

### MASTER OF SCIENCE IN MANAGEMENT with majors in:

Accounting  
Finance  
Real Estate  
Information Systems

The **SCHOOL OF EDUCATION** offers academic programs leading to:

### BACHELOR OF SCIENCE in:

Art Education  
Business Education  
Childhood Education  
English Education  
Health Occupations Education  
History Education  
Home Economics Education  
Industrial Arts  
Mathematics Education  
Modern Language Education  
(with majors in French, German or Spanish)  
Music Education  
Parks and Recreation  
Physical Education  
Science Education  
(with majors in Biological Science and Physical Science)  
Social Studies  
Special Education  
(with majors in Emotional Disturbance, Mental Retardation, and Specific Learning Disabilities)  
Vocational Education  
(with majors in Technical Education and Vocational Industrial Education)

### MASTER OF SCIENCE in:

Adult Education  
(with majors in Adult Education, and Administration of Adult Education)  
Art Education  
Business Education  
Counselor Education  
Diagnostic Teaching  
(with majors in Emotional Disturbance, Mental Retardation, and Specific Learning Disabilities)  
Early Childhood Education  
English Education  
Health Occupations Education  
Home Economics Education  
Industrial Arts  
Mathematics Education  
Music Education  
Parks and Recreation Administration  
Physical Education  
School Administration and Supervision  
(with majors in Education Administration and Supervision, Elementary Education, and Secondary Education)

### MASTER OF SCIENCE in:

Adult Education  
(with majors in Adult Education, and Administration of Adult Education)  
Art Education  
Business Education  
Counselor Education  
Diagnostic Teaching  
(with majors in Emotional Disturbance, Mental Retardation, and Specific Learning Disabilities)  
Early Childhood Education  
English Education  
Health Occupations Education  
Home Economics Education  
Industrial Arts  
Mathematics Education  
Music Education  
Parks and Recreation Administration  
Physical Education  
School Administration and Supervision  
(with majors in Education Administration and Supervision, Elementary Education, and Secondary Education)  
School Psychology  
Science Education  
Social Studies  
Modern Language Education (Spanish, French)  
Teaching English to Speakers of Other Languages (TESOL)  
Vocational Education  
(with majors in Administration Supervision, Technical and Vocational Education)  
Cooperative Doctoral Programs: (Ed.D)

- a. In collaboration with the University of Florida  
— Educational Administration  
— Curriculum and Instruction:  
Instructional Leadership
- b. In collaboration with Florida State University  
— Adult Education

The **SCHOOL OF HOSPITALITY MANAGEMENT** offers academic programs leading to:

### BACHELOR OF SCIENCE with a major in General Hospitality Management

### MASTER OF SCIENCE in

Hotel and Food Service Management

The **SCHOOL OF NURSING** offers an academic program leading to:

### BACHELOR OF SCIENCE IN NURSING

The **SCHOOL OF PUBLIC AFFAIRS and SERVICES** offers academic programs leading to:

### BACHELOR OF SCIENCE in:

Criminal Justice  
Social Work

### BACHELOR OF HEALTH SERVICES ADMINISTRATION

### BACHELOR OF PUBLIC ADMINISTRATION

### MASTER OF SCIENCE in: Criminal Justice

### MASTER OF HEALTH SERVICES ADMINISTRATION

### MASTER OF SOCIAL WORK

### MASTER OF PUBLIC ADMINISTRATION

### MASTER OF SOCIAL WORK

The **SCHOOL OF TECHNOLOGY** offers academic programs leading to:

### BACHELOR OF SCIENCE in:

Apparel Management  
Architectural Technology  
Civil Engineering  
Civil Engineering Technology  
Communication Technology  
Construction Engineering Technology  
Construction Management  
Dietetics and Nutrition  
Electrical Engineering  
Electrical Engineering Technology  
Environmental Technology and Urban Systems  
Home Economics

Industrial Technology  
Interior Design  
Mechanical Engineering Technology  
Medical Records Administration  
Medical Technology  
Occupational Therapy  
Physical Therapy

### BACHELOR OF TECHNOLOGY in: Industrial Technology

**MASTER OF SCIENCE in:**  
Dietetics  
Environmental and Urban Systems

## BAY VISTA CAMPUS PROGRAMS

College of Arts and Sciences

*Undergraduate level:*

Humanities

International Relations (minor in Political Science)

Psychology

School of Business and Organizational Sciences\*

*Undergraduate level:*

Accounting

Finance

Insurance

Management

Marketing

*Graduate level:*

Business Administration

School of Education

*Undergraduate level:*

Elementary Education

Emotional Disturbances\*

Mental Retardation\*

Specific Learning Disabilities\*

*Graduate level:*

Bilingual Education

Curriculum and Instruction\*

Early Childhood Education

Educational Administration & Supervision

Elementary Education

Reading

Specific Learning Disabilities\*

School of Nursing

*Undergraduate level:*

Nursing

School of Public Affairs and Services

*Undergraduate level:*

Criminal Justice

Health Services Administration

Public Administration

Social Work

*Graduate level:*

Criminal Justice

Health Services Administration

Public Administration

Social Work

School of Technology

*Undergraduate level:*

Communication Technology

Construction Engineering Technology

Interior Design

Medical Records Administration

gree from the university. A minor is not interdisciplinary.

The College of Arts and Sciences offers

Minor Programs in:

Art History

Chemistry

Computer Science

Earth Science

Economics

English

Environmental Studies

General Translation Studies

History

Human Biology

International Relations

Mathematics

Philosophy

Physics

Political Science

Portuguese

Psychology

Religious Studies

Sociology/Anthropology

Statistics

Theatre

Visual Arts

The School of Public Affairs and Services offers a Minor Program in:

Criminal Justice

## CERTIFICATES

Certificate Programs are structured combinations of courses with a common base of interest from one or more disciplines into an area of concentration available for selection by students.

Successful completion of a Certificate Program is entered on the student's transcript and records.

There are two types of Certificates:

1. *Academic Certificates:* awarded by an academic unit to a student at the time of awarding the Bachelor's Degree; or upon completion of the appropriate course work to a student who already has a Bachelor's Degree.

An Academic Certificate shall not be awarded to a student who does not either possess a Bachelor's Degree or does not complete a Bachelor's Degree Program. An Academic Certificate is to be interdisciplinary in nature, to the greatest extent possible.

2. *Professional Certificates:* awarded by an academic unit to an individual who completes the appropriate course work in the area of concentration. The Professional Certificate does not need to be interdisciplinary or associated with a degree program.

For details and course requirements, refer to the individual section of each College/School.

The College of Arts and Sciences offers Academic Certificates in:

American Studies

Consumer Affairs

Environmental Studies

Ethnic Studies

Latin American and Caribbean Studies

Linguistic Studies

Marine Science

Tropical Commercial Botany

Western Social and Political Thought

Women's Studies

The School of Business and Organizational Sciences offers Certificates in:

Banking

Insurance

Marketing

Personnel Management

Savings and Loans

Transportation Management

The School of Education offers Professional Certificates in:

Adult Learning Systems

Business Education

Emotional Disturbance

Guidance

Health Occupations Education

Reading and Language Arts

Specific Learning Disabilities

Vocational Education for the Handicapped

The School of Hospitality Management offers certificates in:

Hotel and Restaurant Management

Travel and Tourism Management

The School of Technology offers Professional Certificates in:

Apparel Manufacturing/Management

Heating, Ventilation and A/C Design

Industrial and Labor Relations

Industrial Safety

Production and Manufacturing

and an Academic certificate in:

Management and Consumer Affairs

## Office of Admissions

FLORIDA INTERNATIONAL UNIVERSITY ENCOURAGES APPLICATIONS FROM QUALIFIED APPLICANTS WITHOUT REGARD TO SEX, PHYSICAL HANDICAP, OR CULTURAL, RACIAL, RELIGIOUS, OR ETHNIC BACKGROUND OR ASSOCIATION.

### Admission Procedure

Undergraduate and graduate degree-seeking students may obtain an application for admissions, and other material from the Office of Admissions, Tamiami Campus, Tamiami Trail, Miami, Florida 33199 or Bay Vista Campus Office of Admissions, North Miami, Florida 33181.

Completed admission application and all supporting credentials must be on file with the Office of Admissions before a final decision can be made regarding the acceptance of an applicant. The following credentials are required by the Florida Board of Regents for admissions:

*Application for Admission:* A fifteen dollar (\$15) *non-refundable* application fee must accompany the completed application form. The deadline for accepting applications each semester is contained in the University Calendar given in the Catalog.

Non-admitted degree-seeking student applications will be kept on file for one year from the requested date of entry.

*Freshman Applicants:* In addition to the application for admission, the official secondary school transcript must be sent from that school and either the Scholastic Aptitude Test scores or the American College Test scores must be received from the testing agency. A 500 word

\*The complete program of studies is not available on the Bay Vista Campus. The student is expected to complete course work on the Tamiami Campus.

## Minors

A minor program is an arrangement of courses enabling a student to develop a degree of expertise and knowledge in an area of study in addition to his/her major academic program of study.

To receive a minor, a student must also complete the requirements for a baccalaureate de-



autobiographical essay, handwritten by the applicant, must also be submitted in support of an application to the Lower Division Program.

**Transfer Applicants:** Official transcripts must be forwarded to the Office of Admissions by the Registrar of all college-level institutions attended. It is the responsibility of the applicant to initiate requests for necessary transcripts (including final transcripts) from each post-secondary institution attended. Transcripts must be received no later than 15 days preceding the first day of class.

**Student Health Form:** Every student must complete a student health form. The forms will be supplied by the University.

## Freshman Requirements

Beginning freshmen may apply up to one year in advance to the University. It is desirable to enter in the early part of the senior year. The entering freshman class is limited in number, and priority will be given to those applicants whose records indicate the greatest likelihood of success in the lower division program. The Committee on Admission for the Lower Division is responsible for administering admissions to this program.

### Requirements:

1. Graduation from an accredited secondary school.
2. Twelve academic units in college preparatory courses.
3. An overall "B" average in academic courses.
4. A total score of at least 1000 on the Scholastic Aptitude Test or a composite score of 23 on the American College Test.
5. A record of good conduct.
6. 500 word autobiographical statement.
7. A personal interview when required.

## Faculty Scholars Program

Outstanding high school graduates are selected each year for the distinguished Faculty Scholars Program.

This exclusive program offers merit scholarships and a rigorous academic curriculum for full-time students. Faculty Scholars staff and mentors create a supportive atmosphere which encourages students to grow personally and intellectually in their college careers.

### Admission criteria:

- Satisfactory completion of the high school diploma. Generally an overall academic average of at least 3.5 (of a 4.0 scale) is expected for the 9th, 10th, 11th, and 12th year.
- Satisfactory completion of the SAT or ACT. Generally a score of 600 on each section of the SAT or 25 on the ACT is expected.
- Two recommendations by high school guidance counselor and/or teachers or community leaders.
- A 500 word autobiographical essay submitted with the application.
- Personal interview of the student with the Faculty Scholars Director or his designee.

Faculty Scholars staff takes a personal interest in each individual scholar from the time he or she is a prospective student until graduation.

The staff assists scholars in becoming acquainted with the program and the University, in planning academic programs, and in choosing an academic major.

Once students have declared a major, they will be assigned individual mentors in their particular field. These professors will serve as advisors to the scholars in their junior and senior years. This relationship with a distinguished professor is intended to fulfill the student's potential as a scholar and a professional.

Faculty Scholars must complete the Core Curriculum and maintain an overall grade point average of 3.5. For detailed information concerning the Faculty Scholars Program, phone 554-2893.

## Undergraduate Transfer Requirements

A student who has completed an *Associate of Arts* degree at a Florida public community college, or has earned 60 semester hours of college credit at any other regionally accredited institution at an acceptable performance level, and has completed the general education requirements (or the equivalent) is eligible for admission to the University.

A student who has completed an *Associate of Science* degree, or has earned 60 semester hours of credit at a Florida public community college, is eligible for admission to the University, provided his overall GPA is at least 2.00.

A student who meets the above admission requirements, but who has not completed the remaining general education course requirements and/or the prerequisite courses for admission to a particular degree program, may complete his or her preparatory work either (a) at a Florida public community college or accredited institution, or (b) in the College and Schools of Florida International University, or (c) by achieving a satisfactory score on the appropriate CLEP examination(s).

The School of Technology normally regards the *Associate of Science* degree in an appropriate technical discipline as the full equivalent of the first two years (60 semester hours) of the *Bachelor of Technology* Program.

**Note: Additional Requirement—School of Education:** All applicants for teacher education programs must score at or above the 40th percentile on a standardized college entrance test, (i.e. 835 or above total score on the S.A.T., or 17 or above on the A.C.T.) It is possible for an applicant who fails to meet this criteria to appeal the admission decision and be considered under the 10 percent waiver rule.

Applicants with less than 60 semester hours of transfer credits, must satisfy the same admission requirements as beginning freshmen and, demonstrate above satisfactory performance in previous college level studies.

An undergraduate student who has been denied admission to a program of the University for academic reasons may appeal the decision. He or she should contact the Chairperson of the program, then the Dean of the College or School of the program, and finally, if necessary, the Vice President for Academic Affairs. An undergraduate student who has been denied admission to

the University for other than academic reasons may appeal to the University Registrar.

Effective September 1, 1976, all students entering a university in the State University System with less than 60 hours credit shall be required to earn at least 9 credit hours prior to graduation by attendance at one or more summer terms. University Presidents may waive the application of this rule in cases of unusual hardship to the individual.

## General Education Requirements

Florida International University requires that all undergraduate students must have completed a general education program prior to graduation. The general education program as presently defined by the Board of Regents consists of 36 semester hours. The University requires the following general education program: 6 semester hours each in the areas of social science, natural science, humanities; and mathematics, 12 Semester hours of English composition. Following is a list of possible courses that will fulfill the general education requirements:

English Composition: Composition, Creative Writing or Expository Writing.

Humanities: Music (non-performing), Drama, Literature, Foreign Language, Logic, Philosophy, Art, Religion, Speech, History, or West/East Civilization.

Mathematics: Trigonometry, Analytical Geometry, College Algebra, Statistics, Calculus, College Mathematics, or Business Mathematics.

Natural Science: Physical Science, Astronomy, Chemistry, Earth Science, Biology, Botany, Geology, Geography (Phy. Sci.), Zoology, Environmental Studies, Food Science, or Physics.

Social Science: Anthropology, Sociology, Psychology, Geography, Economics, International Relations, or Political Science.

The following policies have been established:

- a student who has graduated from a Florida public community college with an *Associate of Arts* degree shall be considered as having met the general requirements of Florida International University;
- a student who has met the general education requirements of any institution in the State University System of Florida shall be considered as having met the general education requirements of Florida International University;
- a student who has taken his or her freshman and sophomore years in an accredited college other than a Florida public community college or at an institution in the State University System of Florida may similarly receive credit for such courses shown on his or her transcripts as meeting the general education requirements;
- a student may be admitted before completion of an equivalent general education program, provided such a program can be completed through an inter-institutional registration arrangement with a Florida

public community college or through some other arrangement designed to meet individual needs as noted in the section describing undergraduate admission standards.

The College Level Examination Program (CLEP) is another acceptable alternative to fulfill these general education requirements. CLEP scores are acceptable at the 50th percentile and above.

General Examination Test . . . . . CLEP

- *English Composition with Essay* — a student will be awarded up to six semester hours credit for English less hours previously earned in any college level English course, if a minimum score of 610 is achieved.
- *Humanities* — a student will be awarded up to six semester hours of credit if a minimum scaled score of 489 is achieved.
- *Mathematics* — a student will be awarded up to six semester hours of credit if a minimum scaled score of 497 is achieved.
- *Natural Science* — this test is divided into two parts, biological and physical science. If a minimum subtest score of fifty (50) is achieved in biological science, 3 semester hours will be awarded. If a minimum subtest score of forty-nine (49) is achieved in physical science, 3 semester hours will be awarded. If a total score of 489 is achieved, 6 semester hours will be awarded.
- *Social Science* — a student will be awarded 6 semester hours of credit if a minimum scaled score of 488 is achieved.

For additional information regarding the CLEP Subject Exams, please contact the Office of Admissions.

**NOTE:** CLEP for students admitted with less than 45 hours of transfer credit, refer to "CLEP and Advanced Placement for Lower Division."

## Lower Division Core Requirements

Core requirements are for all students entering FIU with less than 45 semester hours. Students transferring with 45 semester hours or more may opt to fulfill the University's general education requirements instead of the following:

1. The Writing Requirement: 6 semester hours  
All students must satisfactorily complete 6 semester hours in expository writing within the first 30 semester hours of study. Students with substantial writing deficiencies may be required to take remedial courses prior to beginning the expository writing sequence. Students demonstrating exceptional writing skills or acceptable CLEP scores may be exempted from the first composition course.
2. The Mathematics Requirement: 6 semester hours  
All students must satisfactorily complete 2 3-semester courses in mathematics within the first 30 semester hours of study. Students with substantial mathematical deficiencies may attend a non-credit remedial class before taking the mathematical requirement. The entry-level course is Finite

Math or Pre-Calculus for students intending to major in a math or science area. Qualified students may take a higher-level math course after consultation with their advisor. Students who have passed Calculus at the college level may have the mathematics requirement waived.

### 3. The Language Requirement: Variable Hours

In order to satisfy this requirement, a student may select one of the following options any time prior to graduation, preferably within the first 60 semester hours.

- a. A 3-course sequence in any one foreign language (9 semester hours).
- b. Two intensive courses in any one foreign language (10 semester hours).
- c. A placement examination which assesses mastery of a foreign language. The language requirement may be waived if test results are equivalent to the level attained at the end of the 3-course sequence. Students who place below this level will be required to take courses necessary to attain the level of the 3-course sequence. Non-traditional options to complete this requirement may be discussed with the Department of Modern Languages.

### 4. The Natural Science Requirement: 8 semester hours

The Natural Science requirement must include 4 semester hours of Biological Science and 4 semester hours of Physical Science. Students majoring in an area which requires more than 8 semester hours of Natural Science (with labs) are exempt from this distribution requirement. This requirement should be completed within the first 60 semester hours of coursework.

### 5. The Social Science Requirement: 6 semester hours

All students must take at least 3 semester hours of coursework in 2 of the following social science areas:

- Economics
- Political Science
- Sociology/Anthropology
- Psychology
- International Relations

Students must complete this requirement within the first 60 semester hours of study.

### 6. The Arts Requirement: 3 semester hours

The Arts requirement may be satisfied by any one core course selected from the following areas and completed any time prior to graduation from the University:

- Literature
- Visual Art
- Musical Art
- Theatrical Art

### 7. The Historical Analysis Requirement: 3 semester hours

This course must be taken within the first 60 semester hours of study.

### 8. The Philosophical Analysis Requirement: 3 semester hours

The course designed to fulfill this core requirement must be taken prior to graduation.

### 9. The World Prospects and Issues Requirement: 3 semester hours.

The intent of this requirement is to expose students to some aspect of the contemporary scene in a course designed to examine some vital problem or emerging prospect from some particular perspective. Just as the problems and issues which confront contemporary society change, courses offered to satisfy this requirement will change. Students must have completed 30 semester hours of study before enrolling in a World Prospects and Issues Course.

## Prerequisite Courses and Additional Requirements

Most departments require, for admission to their degree programs, certain freshman and sophomore courses in addition to the general education program. To determine the nature and extent of additional requirements which apply in each case, the applicant should consult that section of the University Catalog which deals with the program the applicant wishes to pursue.

## Transfer Credit

An undergraduate student admitted to the University will receive credit for all previous academic work appropriate to the degree desired in accordance with the Articulation Agreement with Florida public community colleges, the program standards of the academic department or program, and the limitations noted below. Although the actual awarding of transfer credit is made by the Office of Admissions, the final determination regarding applicable transfer credit accepted toward the fulfillment of degree requirements rests with the Dean of the College or School in which the student is enrolled.

## Limitations on Transfer Credit

A student transferring from a four-year college may transfer up to 90 semester hours and those transferring from two-year colleges may transfer 60 semester hours toward a bachelor's degree. In individual cases, at the discretion of the appropriate academic dean, a greater number of credits may be transferred.

Normally, the grade of "D" will be accepted for transfer, however, such coursework in the major field is subject to review and approval by the appropriate dean.

Normally, credit from non-accredited institutions will not be accepted; however, such credit, when presented, will be considered on an individual basis by the appropriate College or School.

Credit from military schools will be considered for transfer in accordance with the recommendations of the American Council on Education.

Credit from foreign institutions will be considered on an individual basis. Credit will be granted for all work which is applicable toward the degree being sought.

## Premedical Advisement

The Premedical Advisement and Evaluation Committee, a committee of the College of Arts and Sciences, advises students interested in entering the health professions and prepares recommendations for students who are applying to health-related professional schools.

Students desiring to enter the health professions are advised to contact the Premedical Advisement and Evaluation Committee at the earliest possible time, preferably before the spring semester prior to the academic year in which they will apply to professional schools. The office of the Premedical Advisement and Evaluation Committee is in the Department of Physical Sciences, OE 200; 554-2605.

## Graduate Admissions

A student seeking admission into a graduate program of the University must meet the minimum standards set forth by the Florida Board of Regents:

A bachelor's degree or equivalent from a regionally accredited university or college, a "B" or better average in all work attempted while registered as an upper division student seeking the bachelor's degree.

All applicants are required to present scores on the *Graduate Record Examination* or the *Graduate Management Admission Test* (School of Business and Organizational Sciences). Any disabled student who must take a graduate test (i.e. GRE or GMAT) should contact the special services counselor/coordinator at 554-2421 before registering for the exam.

It is possible for an applicant who fails to meet these criteria to appeal the admissions decision and be considered under the Board of Regents' 10 percent policy. This policy allows up to 10 percent of the graduate students admitted for a particular academic year to be admitted as exceptions to the above criteria.

## Readmission

A degree seeking student once enrolled in the University, but who has not enrolled in any course for one year or more, is eligible for readmission under the regulations operative at the time of readmission. Such a student should contact the Office of Admissions.

## International Admissions: Undergraduate and Graduate Admission Standards and Procedures

An international student must meet the regular admission requirements of the University and comply with the following:

**Application and Fee:** A completed admission application must be received by the University at least 3 months prior to the desired entering date, together with a nonrefundable \$15.00 (U.S. dollars) fee.



**Academic Records:** Appropriate official transcripts or certified copies of academic records and the English Translations, validated by an official public translator; and all other appropriate credentials, must be forwarded to the Office of Admissions.

**Proficiency in English:** Proficiency in English must be established if the native language is not English. The following are accepted ways to verify proficiency:

- A minimum score of 500 in the *Test of English as a Foreign Language* (TOEFL). For information write to: the TOEFL program, Box 899, Princeton, New Jersey 08540, U.S.A.
- The ALIGU Test, (*American Language Institute, Georgetown University*), Washington, D.C. 20007, U.S.A.
- ELS Language Center certification of satisfactory completion at the 109 level of proficiency. For information write to: ELS Language Centers, 3331 Ocean Park Blvd., Suite 201, Santa Monica, Calif. 90405, U.S.A.
- Successful completion of 30 semester hours of course work at an American college or university including 6 semester hours of English composition.

**Declaration and Certification of Finances:** A Declaration and Certification of Finances must be completed before the Certificate of Eligibility (Form I-20A) is issued. Upon receipt of application for admission the Declaration and Certification of Finances will be mailed to the applicant.

The University is required by immigration authorities to carefully check the financial resources of each student prior to issuing the Form I-20A. Therefore, it is important that the applying students know the costs of attending the University and have the necessary support funds for the period of enrollment.

Before completing the Declaration and Certification of Finances, review the estimate of institutional costs and living expenses. The total available to the student for the first and/or second academic years must equal the total estimates of institutional costs and living expenses. All questions in the Declaration and Certifica-

tion of Finances must be accurately answered to avoid unnecessary delay in processing.

After completing the Declaration and Certification of Finances, return the document to:  
Office of Admissions  
Florida International University  
Tamiami Trail  
Miami, Florida 33199 U.S.A.

The Declaration and Certification of Finances must be received by the University at least two months prior to the beginning of the semester for which the student expects to register. If the student is residing in the U.S.A., said document is due at least one month before the first day of classes.

**Health Insurance:** The University requires that all international students purchase health insurance in order to help pay for major medical expenses. The health insurance policy should be kept active as long as the student is enrolled at the University. Information on the most economical plans is available from the Office of International Student Services, University House, Room 340.

**Graduate Students:** For information about the *Graduate Record Examination* (GRE) and *Graduate Management Admission Test* (GMAT), write to Educational Testing Service, Princeton, New Jersey, 08540, U.S.A. Information about test center locations may also be obtained at the American Embassy in the student's home country.

**Tuition:** An international student is considered a non-resident, and, as such, will be assessed non-resident fees. As an *undergraduate (lower division)* student, \$700.00 is the average tuition cost for each semester. As an *undergraduate (upper division)* student, \$1000.00 is the average tuition cost for each semester. (Immigration regulations requires an international student to attend school at least two semesters during an academic year). The average tuition fee is based on 12 credits, which is the minimum required load for an undergraduate international student. For a *graduate* student, \$900.00 is the average tuition cost each semester. This tuition fee is based on 9 credit hours per semester, which is the minimum required load for a graduate international student.

## Annual Estimate of Cost

### International Students

(Fees are subject to change without notice)

Single Student	Undergraduate (lower division)	Undergraduate (upper division)	Graduate
Tuition	\$2,265	\$3,153	\$2,970
Books and Supplies	480	480	480
Housing and Food	5,680	5,680	5,680
Transportation	700	700	700
Miscellaneous	1,125	1,137	1,170
<b>TOTAL</b>	<b>10,250</b>	<b>11,150</b>	<b>11,000</b>

A *married* student should plan on an additional \$3,200.00 in costs to cover the living expenses of a spouse.

A couple with children should anticipate further yearly additional costs of no less than \$1,000 for the first child, \$800 for the second and \$600 for each additional child.

*Immigration Naturalization Services regulations require that an international student attend school for 2 semesters within one academic year.*

*Note:* Opportunities for financial assistance are limited for international students who are not U.S. citizens.

**Full-time enrollment:** The non-immigrant alien student on a F-1 visa is required by United States Immigration regulations to be enrolled full-time, except for summer session. He or she should make satisfactory progress toward the bachelor's or master's degree program objectives each term. Otherwise the continuation of study on a student visa may be jeopardized. Full-time enrollment for a student on an F-1 visa (student visa) is defined as enrollment in, and successful completion of, a minimum of 12 semesters hours each semester (undergraduate) and 9 semester hours each semester (graduate).

United States Department of Justice, Immigration and Naturalization Service Law and Regulations:

It is the student's responsibility to comply with all non-immigrant alien requirements as stated under the United States laws under Section 101(a) (15) (f) (i) of the Immigration and Nationality Act. The University is required to report to the Immigration Office any non-immigrant alien student who:

- Does not register at the University at the time expected.
- Does not carry a full course of studies.
- Terminates attendance.

Granting official Extension of Stay is dependent upon the student's making normal academic progress toward the bachelor's or master's requirements.

**Employment:** An F-1 visa student may not be employed off campus while attending the University unless permission has been granted by the U.S. Immigration and Naturalization Service. Normally employment will not be permitted, especially during the student's first year of enrollment. Only under very special circumstances, because of unexpected conditions or emergencies which arise after the student's arrival, will an international student be recommended for a work permit. Adequate proof must be presented to the international student ad-

visor in order to obtain the necessary authorization. On-campus employment can be authorized by the international student advisor.

*Note:* An international student will not be granted admission to the University until all academic and non-academic requirements have been met, including submission of the Declaration of Certification of Finances. *Under no circumstances should a student come to Florida International University without having received the official letter of admission and the I-20A Form.*

For further information regarding international student admissions please contact:

Office of Admissions  
Florida International University  
Primer Casa 140  
Tamiami Trail  
Miami, Florida 33199 U.S.A.  
(305) 554-2363

## School/College Relations

The School & College Relations program, located in the Office of Admissions, interacts with prospective students, and assists them with transfer needs and the admission process. It coordinates the distribution of academic program materials and information from university units to community college personnel, prospective students, and to all interested persons.

The School & College Relations program serves as a focal point for persons interested in expanding the University's constituency and coordinates special efforts designed to embrace the recruitment of Blacks, Hispanics, women and senior citizens.

## Acceleration

The academic programs of the University are planned in such a manner that a student may complete some of his or her upper division degree requirements through one or more of the mechanisms listed below. Specific information on the accelerated mechanisms utilized in each academic program is available from the department or program of the student's major.

## Lower Division CLEP and Advanced Placement

The University recognizes CLEP at the 50% level and Advanced Placement at levels 3, 4, and 5. For lower division students completing the core curriculum requirements, only the follow-

ing exams can substitute for core requirements. Other exams will be recognized for elective credit. It is strongly recommended that CLEP exams be taken prior to enrollment at FIU.

### CLEP GENERAL EXAMS

English (with composition) will fulfill only the first English Composition requirement. A second English Composition course will be required.

### CLEP SUBJECT EXAMS

#### Calculus

Modern Languages (will fulfill a maximum of the first 6 semester hours of the language requirement)

#### Micro-Economics

#### Macro-Economics

#### General Psychology

#### Introduction to Sociology

#### General Biology

#### General Chemistry

### ADVANCED PLACEMENT

#### Calculus

English (will fulfill only the first English Composition requirement)

#### Biology

#### Physics

#### Chemistry

Modern Languages (will fulfill a maximum of the first 6 semester hours of the Modern Language requirement)

## College Level Examination Program (CLEP)

The College Level Examination Program is designed to measure knowledge in certain subject matter areas of general education. There are two types of CLEP tests: the General Examination and the Subject examination.

Because CLEP credit is regarded as transfer credit, no matter how earned, the maximum transferability of credit under CLEP, both General and Subject examinations combined is 45 semester credits.

Not more than six semester hours will be transferred in each of the five areas of the General Examinations (English, humanities, mathematics, natural sciences, social sciences — history). English exam must be with/essay.

*Note:* A student who desires additional information on CLEP should contact the Office of Admissions.

## Credit For Non-College Learning

**Undergraduate** — The awarding of credit for learning acquired outside of the university or classroom experience is the prerogative of each academic department or program. Only the degree-seeking student is eligible to receive this type of credit. The significant learning must be applicable to the degree program of the student, and should be discussed and appropriately documented at the time the desired program of study is initially discussed and decided with the student's program advisor.



**Graduate** — Graduate credit, per se, will not normally be awarded for experiential learning. 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 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 person who represents that specific area of specialization. Not more than 14 semester hours of a 30 semester hour master's degree, nor 20 semester hours of a 60 semester hour master's degree, may be so earned. A student wishing to have this policy waived, wholly or in part, may petition the Dean of the academic unit

to which he or she has been admitted for special consideration and final responsibility for a decision will rest with that Dean.

### Traveling Scholar Program

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



## Office of Registration and Records

The office of Registration and Records is responsible for maintaining and updating student's records. The Tamiami Campus office is located in PC 130, the Bay Vista Campus office is in Academic 1-160.

Questions regarding registration, transcripts, grades, graduation, and registration deadlines should be directed to this office.

### Classification of Students

Students are classified by the Registrar's Office as follows:

**Freshmen**—Students who have earned less than 30 semester hours.

**Sophomores**—Students who have earned at least 30 semester hours but less than 60 semester hours.

**Juniors**—Students who have earned at least 60 semester hours but less than 90 semester hours.

**Seniors**—Students who have earned 90 or more semester hours but have not earned a baccalaureate degree.

**Post-baccalaureate**—Students who have earned a baccalaureate degree and who are enrolled in graduate level courses but not yet admitted to a graduate program.

**Graduate**—students admitted to a graduate program.

**Special Students**—To meet the needs of the Southeast Florida area the University has established the special student classification. This classification includes students enrolling prior to completing the requirements for formal admission and students not wishing to pursue a degree program. The following regulations will apply to special students:

- Such students are not required to meet the usual admission requirements and are not officially admitted as regular students. *Enrollment as a special student does not imply a right to future admission as a regular, degree-seeking student.* Credit earned will not be counted toward a degree at the University unless such student subsequently applies for regular admission and is accepted as an undergraduate or graduate student.
- Registration is permitted on a space-available basis and is determined at the time of registration. Special students may not register during the official registration week for degree-seeking students.
- No more than 15 undergraduate level and 12 graduate level semester hours earned as a special student may be counted toward a degree. The appropriate Dean must approve the acceptance of such credit.
- Special students will not be allowed to register for more than 15 undergraduate level or 12 graduate level semester hours without:

- Obtaining admission to a degree program at Florida International University.  
or
  - Obtaining special permission in writing from the department in which they are registering, indicating the specific courses in which they are allowed to enroll.  
or
  - Obtaining admission into a formal Certificate Program.
- Applicants denied admission to the University as degree-seeking student will not be permitted to enroll as special students in the same program, for a period of one year.
  - Immigration regulations prevents most foreign nationals from enrolling without being admitted into a formal degree or certificate program, depending on visa type. Therefore, foreign students will not be permitted to enroll as special students without the permission of the Admissions Office.

### College/Major Classification

- Degree-seeking upper division students admitted to an upper level program are classified according to the college and major of their degree program (and the college and major, of their second major, if appropriate).
- Lower division students will have a college designation of lower division with a major designation of their intended major (if indicated by the student). This does not imply subsequent admission to that degree program.
- When an admitted student reaches a total of 60 or more credit hours (including transfer and current enrollment) he may apply for admission into an upper division major. All degree-seeking undergraduates must be admitted into an upper division major prior to completing 75 credit hours (including transfer credit).
- Graduate students will be classified according to the college and major of their degree programs.

#### Course Loads:

	<i>Undergraduate</i>	<i>Graduate</i>
Full-time	12	9
	semester hours	semester hours

### Academic Degree Requirements

- Bachelor's Degree—The University will confer the bachelor's degree when the following conditions have been met:
  - Recommendation of the faculty of the College or School awarding the degree.
  - Certification by the Dean of the College or School concerned that all requirements of the degree being sought have been completed.
  - Successful completion of a minimum of 120 credit hours.
  - Completion of the last 30 credit hours at the University. Exceptions, (normally not to exceed 6 hours) may be made in advance by the appropriate Dean.

- Completion of the general education requirements or, in the case of students admitted as freshmen, the lower division core curriculum.
  - An earned grade point average of 2.0 or better at Florida International University.
  - The grade requirements for major, core courses or course sequences, established by the appropriate School or College.
- Master's Degree—The University will confer the master's degree when the following conditions have been met:
    - Recommendation of the faculty of the College or School awarding the degree.
    - Certification by the Dean of the College or School concerned that all requirements of the degree being sought have been completed.
    - Earned an overall 3.0 average in all courses.
    - The grade requirements for major, core courses, or course sequences, established by the appropriate School or College.
  - Two Bachelor Degrees—Two bachelor degrees may be awarded simultaneously when the following conditions have been met:
    - Requirements for two majors have been completed as certified by the appropriate academic units.
    - A minimum of 30 appropriate semester hours in addition to the requirements of one degree has been earned.
    - A graduate from an accredited four-year institution who applies for admission to work toward a second bachelor's degree must meet the requirements of the major department which shall include (but is not limited to) a minimum of 30 semester hours of course work.
  - Two Majors for Bachelor's Degree—Any undergraduate student who elects to do so, may carry two majors and work to fulfill the requirements of both concurrently.
    - Upon successful completion of the requirements of two majors, a student will be awarded only one degree unless a minimum of 30 appropriate semester hours in addition to those required for the degree, have been earned.
    - In cases where the requirements of two majors have been met and only one degree is involved, a notation denoting both majors will be entered on the transcript.
  - Minors and Certificate Programs
    - Students who have completed an approved minor as part of their baccalaureate degree program will have this notation as a part of the degree comment on their transcript.
    - Students who have completed an approved credit Certificate Program will have an appropriate notation placed on their transcript.
  - Associate of Arts
 

Students who satisfactorily complete 60 semester hours of acceptable college work with an overall of 2.0 or above GPA, fulfill the Lower Division core re-

quirements, and complete at least 20 credit hours in residence at FIU, may apply for the Associate of Arts degree. The Associate of Arts degree will not be awarded after completion of the baccalaureate degree.

## Program and Course Regulations, Academic Definitions:

**Credit** — The term "credit" as used refers to one hour of classwork or the equivalent each week for an entire academic term.

**Major** — An integral part of the bachelor's and master's degree is a major concentration of course work in an approved academic discipline or area. The exact course and credit requirements and prerequisites for each major are outlined in the departmental program areas of the Catalog.

**Electives** — A student may usually select courses from any academic area to complement his or her major area(s) of study or meet his or her interests, in order to fulfill the credit hour requirements for the bachelor's or master's degree. Prerequisite course requirements should be considered in selecting elective courses.

**Minor Program** — A Minor Program is an arrangement of courses that enables the student to develop some degree of expertise in one area of study. A minor is associated with the completion of the bachelor's degree, but is not interdisciplinary in nature.

**Certificate Program** — In the College and Schools of the University, 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. Two types of certificates are awarded by the College or Schools:

**Academic Certificate** — Awarded with the bachelor's degree, or upon completion of an approved area of concentration to a student already possessing a bachelor's degree.

**Professional Certificate** — Awarded to a student upon completion of an approved area of concentration. This certificate need not be interdisciplinary in nature or associated with a bachelor's degree.

**Certificate in Continuing Studies** — Awarded to a person who has attended a conference, seminar, or program sponsored by the Division of Continuing Education and Special Programs.

**Two Majors** — Any undergraduate student who elects to do so may carry two majors and work to fulfill the requirements of both concurrently. Upon successful completion of the requirements of two majors, a student will be awarded ONE degree unless a minimum of 30 appropriate semester hours in addition to the requirements of the first degree have been earned. In cases where the requirements of two majors have been met and one degree is involved, a notation denoting both majors will be entered on the

transcript. A *Request for Second Major* form must be filled out in the Office of Registration and Records if a student is declaring two majors.

**Two Degrees** — Two bachelor's degrees may be awarded simultaneously when the following conditions have been met:

1. Requirements for two majors have been completed as certified by the appropriate academic units.
2. A minimum of 30 appropriate semester hours in addition to the requirements of one degree has been earned.

A graduate from an accredited four-year institution who applies for admission to work towards a second bachelor's degree must meet the requirements of the major department, which shall include (but are not limited to) a minimum of 30 semester hours of course work, as well as any other University-wide graduation requirements.

**Change of Major** — A fully admitted undergraduate student may change majors by submitting a *Request for Change of Major* form. The form and directions are available in the Office of Registration and Records.

A fully admitted graduate student may change a major by obtaining and submitting the form to the Office of Admissions.

## Registration

\*The following Registration information is subject to change, please verify dates with the Office of Registration and Records PC 130, Tamiami Campus, AI 160, Bay Vista Campus.

Registration for courses is as follows:

1. Registration Week is held during the preceding semester (check the Academic Calendar for dates), and ends one week later. Currently enrolled degree-seeking students are given an appointment time based on their classification and credit hours completed. Students may not add and drop courses at this time.
2. Open Registration is held immediately following Registration Week and lasts for two weeks only. There is no appointment time and registration is on first-come first-serve basis. All students who have not yet registered are encouraged to do so at this time. Students who have already registered may add or drop courses during this period.
3. Registration Day is held two days before the beginning of the term and is for one day only. Students who have not registered should do so at this time to avoid a Late Registration Fee.

## Late Registration Fee

Any student, degree-seeking or special, who initiates registration after Registration Day is assessed a \$25.00 Late Registration Fee. A Student may initiate late registration up to the third week of the semester with all appropriate signatures and all applicable late fees.

## Dropping and Adding Courses

Official Drop/Add period begins on the first day of classes and ends on Friday the second week of classes. During this period a student may:

- add courses or register with a Late Registration fee.
- drop courses or withdraw from the University with no records kept of the courses and without a tuition fee liability. If the tuition fee has already been paid, the student must fill out a Refund Request Form with the Cashier.

## Late Drops

Courses officially dropped after Drop/Add period and through the eighth week of the term are recorded on the student's transcript with a symbol of DR (dropped). The student is financially liable for all dropped courses.

Non-attendance or non-payment of courses will not constitute a drop. Students must notify the Office of Registration and Records of dropped courses by submitting a Course Drop Form.

## Grading System

Grades	Definition	Grade Points Per Credit Hour
A	Excellent	4
B	Good	3
C	Average	2
D	Poor	1
F	Failure	0
P	Satisfactory (Pass)	N/A
IN	Incomplete	N/A
WI	Withdrawn from University	N/A
AU	Audit	N/A
DR	Dropped Course	N/A
*NR	Grade Not Reported or Invalid	N/A
EM	Examination	N/A

*Note:* All courses for which a student is officially registered at the end of the week and a half of classes and on which a grade of A, B, C, D, or F is received are calculated in the GPA.

\*NR is only a temporary symbol. It will default to an F after two terms.

## Grading Option

The College/School will make the determination of the grading option of each course. A course may be offered for letter grade, meaning that the student will receive A, B, C, D or F; Pass/Fail, meaning the student will receive a P for pass or an F for fail; optional grading option, in which case the student has a choice of taking the course for either letter grade or Pass/Fail. The grading option must be indicated at the time of registration and may not be changed after the first week and a half of classes. There are no exceptions to this deadline.

Audit grading option means that no grade is assigned but an AU will be recorded. The student must obtain the permission and signature of the instructor of the course to be audited. Once a course has been requested as an audit, the grading option may not be changed. The first week and a half of classes is the deadline to change the grading option to audit. There are no exceptions to this deadline.



## Incomplete Grade

An incomplete grade 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 within two semesters or it will automatically default to the grade that the student earned in the course. There is *no* extension to the two semester deadline. *The student must not register again for the course to make up the incomplete.*

## Repeated Courses

A student who repeats a course must file a Repeated Course Form with the Office of Registration and Records. The form must be filled out and submitted after a grade has been received for the course being repeated. All courses taken with the grades earned will be recorded on the student's transcript.\* Repeated courses will be appropriately designated (T attempted, R: last repeat) with only the last repeated course grade calculated in the G.P.A. regardless of last grade earned. A course must be repeated with the same grading option.

\*The repeated course form will not be processed if the last grade received is DR, WI, AU, NR or EM.

## 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 who 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, register and pay for the courses in the regular manner.

## Change or Correction of Grades

Once submitted, end-of-semester grades (except incompletes) are final and are subject to change *only* through a *Change of Grade Form* to correct an error in computation or transcrib-

ing, or where part of the student's work has been unintentionally overlooked. A change-of-grade form requires the instructor's statement as to the reason for the change, the instructor's signature, and the approval of the appropriate Academic Dean, and must be submitted within *one calendar year* after the date of the initial end-of-semester grade to the Office of Registration and Records.

## Final Examinations

Final course examinations will be given during the week following the last day of classes during each semester. The Summer semesters do not have final examination periods and final course examinations may be given at the discretion of the faculty member teaching the course.

## Grade Reports

At the end of each semester, the Office of Registration and Records mails each registered and paid student a copy of his or her grades. Copies of the grades are not available. If needed, a student must request a transcript.

## Dean's List

Any undergraduate student who earns a semester average of 3.5 or better on 6 or more hours of course work for which grade points are earned, is placed on the Semester Dean's List. This achievement is noted on the student's semester report of grades and permanent academic record (transcript).

## Application for Graduation

Each student who plans to graduate is required to submit to the Office of Registration and Records an *Application for Graduation* form. This form (supplied by the Office of Registration and Records), must be submitted before the end of the third week of classes of the academic semester in which graduation is expected. A student turning in the Application for Graduation after the deadline will graduate the following semester. There is no charge for applying for graduation. The Application for Graduation must be signed by the academic advisor prior to being submitted to the Registration and Records office.

## Academic Honors (Undergraduate)

To graduate with *honors* a student must have earned a cumulative GPA between 3.500-3.749 and received no more than two NC's.

To graduate with *high honors* a student must have earned a cumulative GPA between 3.750-3.999 and received no more than one NC.

To graduate with *highest honors*, a student must have earned a cumulative GPA of 4.0 and received no NC.

To graduate with the above honors, the student must have completed forty semester hours at the University since the Fall of 1975.

## Academic Warning, Probation and Dismissal

**WARNING:** A student whose cumulative GPA falls below a 2.0 (undergraduate) or 3.0 (graduate) will be placed on WARNING, indicating academic difficulty.

**PROBATION:** A student on WARNING whose cumulative GPA falls below 2.0 (undergraduate) or 3.0 (graduate) will be placed on PROBATION indicating serious academic difficulty. The College/School of the student on PROBATION may appropriately communicate conditions which must be met in order to continue to enroll.

**DISMISSAL:** A student on PROBATION whose cumulative and semester GPA's fall below a 2.0 (undergraduate) or 3.0 (graduate) will be automatically dismissed from his/her program and the University. No undergraduate student shall be dismissed if his GPA remains above the graduation requirement of 2.0 and prior to attempting a minimum of 20 semester hours of coursework. No graduate student will be dismissed if his GPA remains above the graduation requirement of 3.0 and prior to attempting a minimum of 12 hours of coursework as a graduate student. The student has ten (10) working days to appeal the dismissal decision. This appeal must be made in writing to the Dean of the College/School in which the student is enrolled. If the student's appeal is denied, the dismissal from the University is for a minimum of one year. After one year, the student may apply for readmission to the University in the same or a different program, or register as a special student. There are no exceptions to the one year waiting period.

## Withdrawal from the University

A currently registered student can only withdraw from the university during the first eight weeks of the semester. In the summer semester withdrawal deadlines will be adjusted accordingly. A Withdrawal Form must be filled out and submitted to the Office of Registration and Records.

A student who registers for a particular semester and subsequently decides not to attend, or leaves during the first eight weeks of the

semester must officially withdraw from the university. Dropping all courses registered for is equated to a withdrawal, and a Withdrawal Form must be filled out instead of a drop/add form.

The transcript record of a student who withdraws during the Drop/Add period will contain no reference to the student being registered that semester, and no tuition fee is assessed. If the tuition has already been paid, a Refund Request Form must be filled out with the Cashier's Office. If a student withdraws from the university prior to the end of the fourth week of classes a 25% refund, less a bonding fee, will be made.

The transcript record of a student who officially withdraws after Drop/Add period and before the end of the eighth week of the term will contain a W1 for each course.

The transcript record of a student who stops attending the university without officially withdrawing from the university will contain an F grade for each course.

### 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 (commonly called the Buckley Amendment). Student academic records are maintained, generally, in the Office of Registration and Records and in the academic department of the student's major. As a rule, all currently enrolled and former students have the right to review their records to determine the content and accuracy of the records. Parents of dependent students, as defined by the Internal Revenue Code, and who give evidence of the dependent status, have the same rights. Students can generally, for the cost of copying, have copies of any documents in their file. This does not apply to transcripts from another institution; students may get copies of these from that institution.

### Transcripts

The transcript is the complete student record of courses taken at FIU, plus the number of transfer credits accepted. The G.P.A. is calculated for all courses taken at the University after Fall term 1975 whether the courses are in the major program or not. Once a degree is posted, the G.P.A. recalculation starts again.

A student must request his/her transcript in writing. There is a five-day processing period. The transcript will not be released if the student has a University financial liability.

### Class Attendance

The University does not require class attendance and does not maintain penalties for non-attendance. Individual faculty may establish attendance criteria in classes where it is necessary for academic reasons. Academic units may establish their own attendance policies with the approval of the Vice President for Academic Affairs.



### Veterans Information

The Office of Veterans Affairs assists all veterans and their dependents who wish to receive V.A. educational benefits. The Office also provides personal counseling, fee deferments, tutorial assistance, and work-study jobs. The V.A. Office is located in P.C. 130 at the Tamiami Campus and at Academic I at the Bay Vista Campus.

Veterans who are planning to attend the University should contact the Office of Veterans Affairs two (2) months prior to date of entry in order to expedite the processing of paperwork required to obtain educational allowances from the Veterans Administration.

### Status Certification

The Veterans Affairs Office also verifies the school status of all past and present students for purposes of Social Security, tuition reimbursement, employment and loan deferrals.

	TRAINING STATUS	
	<i>Undergraduate</i>	<i>Graduate</i>
Full time	12 Sem. Hours	9 Sem. Hours
3/4 time	9 Sem. Hours	7 Sem. Hours
1/1 time	6 Sem. Hours	5 Sem. Hours
Less than 1/2 time	5 Sem. Hours	4 Sem. Hours

	RATE OF PAYMENT			
	<i>No Depen-</i>	<i>1 Depen-</i>	<i>2 Depen-</i>	<i>Each Addi-</i>
	<i>dent</i>	<i>dent</i>	<i>dent</i>	<i>tional Depen-</i>
				<i>dent</i>
Full time	\$342.00	\$407.00	\$464.00	\$299.00
3/4 time	\$256.00	\$305.00	\$349.00	\$21.00
1/2 time	\$172.00	\$203.00	\$231.00	\$14.00
Less than 1/2 time				Cost of Tuition

## Financial Information

### The Classification of Students for Tuition Purposes—Florida or Non-Florida

The policy relating to the classification of students for tuition purposes is defined by the Florida Board of Regents as follows:

#### Florida Student Definition

(1) For the purpose of assessing registration and tuition fees, a student shall be classified as a "Florida" or "non-Florida" student.

(a) A "Florida student" is a person who has domicile in and who shall have resided in the state of Florida for at least twelve (12) consecutive months immediately preceding the first day of classes of the academic term in which the student enrolls. In determining residency, the university may require evidence such as voter registration, driver's license, automobile registration, location of bank account, rent receipts or any other relevant materials as evidence that the applicant has maintained continuous residency. Physical presence for the entire twelve-month period need not be required so long as the conduct of the student, taken in total, manifests an intention to make Florida his or her permanent dwelling place. This means that, during the twelve-month period, the student may visit outside the state for brief periods. It does not shorten the twelve-month period. If such student is a minor, it shall mean that the parent or parents, or legal guardian of the student shall have domicile in and have resided in the state of Florida for the period stated above. "Florida student" classification shall also be construed to include students who hold an Immigration and Naturalization Form I-151, Resident Alien Registration Receipt Card, or Cuban Nationals or Vietnamese Refugees who are considered as Resident Aliens, provided such students meet the residency requirement stated above and comply with subsection (2) below. The burden of establishing facts which justify classification of a student as a resident and domiciliary entitled to "Florida student" registration rates is on the applicant for such classification.

(b) In applying this policy:

1. "Student" shall mean a person admitted to the institution, or a person allowed to register at the institution on a space-available basis.

2. "Minor" shall mean a person who has not attained the age of 18 years, and whose disabilities of minority have not been removed by reason of marriage or by a court of competent jurisdiction.

3. "Domicile" for fee paying purposes shall denote a person's true, fixed, and permanent home and place of habitation. It is the place where the applicant lives and remains and, which he expects to return when he leaves, without intent to establish domicile elsewhere.

4. "Parent" shall mean a minor's father or

mother, or if one parent has custody of a minor applicant, it is the parent having court-assigned financial responsibility for the education of the student; or if there is a court-appointed guardian or legal custodian of the minor applicant, it shall mean the guardian or legal custodian.

5. The term "dependent student," as used in this rule, is the same as a "dependent" as defined in sections 151(e)(1)(2)(3) and (4) of the Internal Revenue Code of 1954. A copy of these provisions in the Internal Revenue Code of 1954 is incorporated in this rule by reference.

6. A "non-Florida" student is a person not meeting the requirements of subsection (a) above.

(2) In all applications for admission or registration at the institution on a space-available basis a Florida applicant, or if a minor, the parent or legal guardian of the minor applicant, shall make and file with such application a written statement, under oath, that the applicant is a bona fide citizen, resident, and domiciliary of the state of Florida, entitled as such to classification as a "Florida student" under the terms and conditions prescribed for citizens, residents, and domiciliaries of the state of Florida. All claims to "Florida student" classification must be supported by evidence as stated in (1) if requested by the registering authority.

(3) A "non-Florida student" or, if a minor, his parent or guardian, after having been a resident and domiciliary of Florida for twelve (12) consecutive months, may apply for and be granted reclassification prior to the first day of classes of any subsequent term; provided, however, that those students who are non-resident aliens or who are in the United States on a non-immigration visa will not be entitled to reclassification. An application for reclassification as a "Florida student" shall comply with provisions of subsection (2) above. An applicant who has been classified as a "non-Florida student" at time of original enrollment shall furnish evidence as stated in (1) to the satisfaction of the registering authority that the applicant has maintained continuous residency in the state for the twelve months required to establish residence for tuition purposes. In the absence of such evidence, the applicant shall not be reclassified as a "Florida student." In addition, the applicant for reclassification must be accompanied by a certified copy of a declaration of intent to establish legal domicile in the state, which intent must have been filed with the Clerk of Circuit Court, as provided by Section 222.17, Florida Statutes. If the request for reclassification and the necessary documentation is not received by the Registrar prior to the last day of registration for the term in which the student intends to be reclassified, the student will not be reclassified for that term.

(4) Unless evidence to the contrary appears, it shall be presumed by the registering authority of the institution at which a student is registering that:

(a) The spouse of any person who is classified or is eligible for classification as a "Florida student" is likewise entitled to classification as a "Florida student." This provision will not apply in the case of students who are non-resident aliens or who are in the United States on a non-immigration visa.

(b) Any applicant's eligibility for classification as a "Florida student" is based on the residency of the spouse, the spouse shall make and file with the application a written statement under oath, that said person is the spouse of the applicant and a bona fide citizen, resident and domiciliary of the state of Florida, entitled as such to classification as a "Florida student."

(c) No person over the age of 18 years shall be deemed to have gained residence while attending any educational institution in this state as a full-time student, as such status is defined by the Board of Regents, in the absence of a clear demonstration that he has established domicile and residency in the state, as provided under subsection (3) above.

(d) Any "Florida student" who remains in the state, after his parent who was previously domiciled in Florida or stationed in Florida on military orders removes from this state, shall be entitled to remain classified as a "Florida student" so long as his or her attendance at a school or schools in Florida shall be deemed "continuous." However, such student claiming continuous attendance must have been enrolled at a school, college or university in Florida for a normal academic year in each calendar year, or the appropriate portion or portions thereof, from the beginning of the period for which continuous attendance is claimed. Such a student need not attend summer sessions or other such intersessions beyond the normal academic year in order to render his attendance "continuous."

(5) Appeal from a determination denying "Florida student" status to applicant therefore may be initiated after appropriate administrative remedies are exhausted, by the filing of a petition for review pursuant to Section 120.68 F.S. in the District Court of Appeal in the appellate district in which the institution maintains its headquarters or where a party resides.

(6) Any student granted status as a "Florida student," which status is based on a sworn statement which is false, shall, upon determination of such falsity, be subject to such disciplinary sanctions as may be imposed by the president of the university.

(7) Special Categories — The following categories shall be treated as Florida residents for tuition purposes if adequate documentation is provided.

(a) A member of the Armed Services of the United States who is stationed in Florida on active duty pursuant to military orders, the spouse and dependent students.

(b) A veteran of the Armed Forces of the United States of America with twenty (20) or more years of active military service, including the spouse and dependent students of such veteran's immediate family, provided that the veteran is in Florida at time of retirement or moves to Florida within one year following retirement and files a declaration of Florida domicile.

(c) Full-time elementary, secondary, and community college faculty members under current teaching contracts in the state of Florida, and their spouses and dependent students.

(d) Full-time faculty, administrative and professional and career service employees of the University System and their spouses and dependent students.

(c) A student certified by his respective state

for participation in the Academic Common Market Program of the Southern Regional Education Board who is enrolled in a program approved by the Florida Board of Regents.

(f) Florida domiciliaries living in the Panama Canal Zone who have not established domicile elsewhere, including the spouse and dependent students.

(g) Florida residents who had their residency in Florida interrupted by service in the U.S. armed forces, the Peace Corps or other similar volunteer organizations fostered by the United States government shall be deemed to have had residency in Florida during times of service in the aforementioned organization.

(8) Reciprocal Agreements. The Board of Regents may enter into agreements with appropriate agencies and institutions of higher education in other states and foreign countries providing for the reciprocal exchange of students enrolled and prospective in higher education institutions to facilitate utilization of public higher educational institutions in this state and other states or countries. Such agreements may include provisions for waiver or reduction of non-resident tuition for designed categories of students and may include contractual payments to such other state or country, subject to the availability of appropriations. Such agreements shall have as their purpose the mutual improvement of educational advantages for residents of this State and such other states or countries with whom agreements may be made.

## Financial Aid

Florida International University adheres to the philosophy that a student is entitled to a college education regardless of his/her financial condition. The Office of Financial Aid is located on the Tamiami Campus in Primera Casa Room 125; and in Academic One Room 186 at the Bay Vista Campus.

Financial Aid programs available to students includes scholarships, grants, loans, and employment. Grants, loans, and part-time employment are provided individually or a combination of all three in a "package." Awards are based on need, and individual attention is given to each applicant.

The University participates in the National Direct Student Loan Program, the College Work-Study Program, the Florida Student Assistance Grant Program, the Supplemental Education Opportunity Grant Program, and the Pell Grant Program (formerly the Basic Grant).

Forms for the Guaranteed Student Loan (GSL) and the Auxiliary Loan to Assist Students (ALAS), a type of transaction between local lenders and the applicant, are also processed through the Office of Financial Aid. There is a six month grace period before the student assumes payment of the GSL. The government pays the interest while the student is in school and during the grace period on all eligible GSLs. The interest rate on all ALAS is 14 percent. The repayment begins within 60 days of the loan's disbursement date.

In order to qualify for aid, a student must be fully admitted to the University as a degree-seeking student. A new application for aid must

be submitted each year. Forms are available in January for the following Fall Semester and academic year. To receive priority consideration, a student must apply by the deadline established by the Financial Aid Office. A student should apply for Financial Aid as soon as possible, and should not wait until admitted by the Office of Admissions.

Before a financial aid application can be evaluated, students must do the following:

1. Complete a Family Financial Statement (FFS) packet and the Student Data Form and mail both directly to the American College Testing (ACT) Program in Iowa City. They will perform a need analysis on the student's application and will return a computerized version to FIU. This analysis will then be evaluated to determine financial need.
2. Submit Financial Aid Transcripts of all previously attended post-secondary educational institutions, whether or not financial assistance was received.
3. A Financial Aid Request Form must be completed and returned to the Financial Aid Office.
4. All applicants must submit a copy of their 1981 Income Tax Report to the Financial Aid Office. Dependent students must submit their parents' 1981 Income Tax Report for the 1982-83 academic year.

In accordance with guidelines set by the Department of Education, all students receiving Federal financial aid must be making satisfactory progress toward the completion of a degree, the Financial Aid Office defines measurable academic progress for all students who received financial aid in the previous year as follows:

1. Completion of 12 credit hours in 1 semester,
2. Twenty-four credit hours in two semesters,
3. And/or 36 credit hours in three semesters, with a cumulative grade point average of 2.0 minimum.

New financial aid applicants will also be required to have a 2.0 minimum GPA in order to receive financial aid. One semester of aid may be awarded while the student makes up minimum requirements.

Failure to meet these requirements will render the student ineligible for financial assistance for the subsequent year.

Grant monies will not be available for students who have completed the necessary coursework to obtain a Bachelor's Degree.

No aid will be awarded if the student has any outstanding debts with the University unless prior arrangements for payment are made.

Students are expected to apply for the (FSAG) Florida Student Assistant Grant program if they meet the following criteria: Citizens or permanent residents of the US, who have resided in or had domicile in Florida for at least 24 consecutive months preceding the beginning of the academic year for which application is submitted.

Opportunities for financial aid are limited if a student does not meet residency requirements in accordance with Federal guidelines. (Check instructions on residency before filing for assistance).

Students who drop below full-time status or withdraw may be required to repay a portion of

their awards according to the Refund-Repayment Policy of the Financial Aid Office.

Awards may be adjusted if the income of the student changes. Applicants who fail to notify the Financial Aid Office of assistance from other sources are subject to complete withdrawal of aid.

## Cashier's Office

The Cashier's Office effects collection of all University fees, including registration fees, short-term loans, library fines, and parking fees. The distribution of financial aid awards and the billing of students for past-due accounts are responsibilities of this office.

## Fees

Fees are established by the Board of Regents as approved by the State Legislature and are subject to change without notice.

	Florida Residents	Non-Florida Residents
Lower Level Undergraduate Courses	\$25.00 per sem. hr.	\$66.00 per sem. hr.
Upper Level Undergraduate Courses	\$28.00 per sem. hr.	\$91.00 per sem. hr.
Graduate Level Courses	\$38.00 per sem. hr.	\$110.00 per sem. hr.
Graduate Thesis & Dissertation	\$41.00 per sem. hr.	\$113.00 per sem. hr.

Audit registration fees are the same as the above fees, except no assessment will be made for the out of state portion.

The dates by which these fees must be paid for each academic period may be obtained from the University Cashier's Office. If fees are not paid in full by published dates, all courses will be cancelled and any money collected will be lost. Current fee information can be obtained from the University Cashier's Office.

\*Note: Registration is not complete until fees are paid in full. Fees are subject to change without notice.

## Sundry Fees

Application fee — (non-refundable)	\$15.00
Parking fee — (non-refundable) Annual fee applicable to all persons operating or parking a motor vehicle on campus:	
Faculty/Staff	\$12.50
Student	7.50
Runway	5.00
Duplicate/Second Vehicle	1.00
Health Fee — (non-refundable) Assessed to all students except those enrolled only in off campus or external degree programs.	\$13.50
Library Fines — per book or unit per day	.25
Overdue Reserve Books — per book per library hour	.25

**Late Registration Fee** — Assessed all students who register after official registration period or fail to pay full fees by the established deadline. (See Academic Calendar for dates) \$25.00

**Late Payment Fee** — Assessed to all students whose registration has been cancelled for nonpayment of fees, who petition for reinstatement before the established deadline. (See Academic Calendar for date) this fee is in addition to the late registration fee. \$25.00

**Intern Certificate of Participation 3.76 per hr. ID Card Replacement** 1.00

\*Note: These fees are subject to change without notice. Additional fees may be added at any time.

## Checks

The University will accept personal checks for accounts due to the University. These checks must be for the exact amount due only. The University Cashier will under no circumstances cash checks above amount due or for cash. The University is required to collect a service fee for any check, or order which may be returned by the bank for any reason.

## Refunds

A full refund of fees will be made if a student withdraws completely from the University prior to the end of the drop/add period. If the University cancels a course a full refund of fees paid will be made for that course.

For students who have completed registration and have paid fees due, a refund of 25% of total fees paid less a bonding fee will be made if the student totally withdraws from the University prior to the end of the fourth week of classes.

In the following exceptional circumstances a full refund of fees paid less a bonding fee will be made upon presentation of proper documentation:

Death of a Student—Death certificate required. Involuntary call to military duty—Copy of orders required.

Refunds will be made upon receipt of a proper application through the Cashier's Office.

## Past Due Accounts

All student accounts are due and payable at the Cashier's Office, Room 120 Primera Casa on the Tamiami Campus, or Room 140 Academic I on the Bay Vista Campus, when the charges are incurred.

Delinquent accounts will be considered sufficient cause to prohibit registration, graduation, release of transcripts or release of diplomas for students.

The University is not able to grant credit or time payments for any fees. Financial aid is available to those qualifying through the office of Financial Aid. A limited number of short term loans are available to individuals who may experience problems in meeting fee payment due dates.

## Student Affairs

The Division of Student Affairs includes several areas within the University which provide direct service to students outside the classroom. The Student Affairs Division is designed to directly aid students in obtaining an education at the University and to provide a broad scope of opportunities to expand upon classroom knowledge.

Departments of the Division of Student Affairs at Tamiami are located on the second and third floors of University House, and third floor of Primera Casa, the Tower Building, and the Modular Building on the west side of the campus. At Bay Vista, Student Affairs offices are located in the Student Center Building.

The following section lists some of the services available to students through the Division. If any question is not answered below, any of the offices of Student Affairs will be of assistance.

## Student Support Services

This area serves as the centralized unit for many of the services and programs offered for University students and members of the community. The philosophy of this area is to offer an environment which is conducive to the emotional and mental development of students. To that end this area sponsors many seminars and workshops for students with topic areas ranging from self-concept development to leadership and communications skills. The offices/areas centralized within Student Support Services include: Off-Campus Housing and Consumer Services; International Student Services; Study Abroad; Student Health Care; Disabled Student Services; Student Activities; Student Government Association; Counseling; and Advising Services. For specific information students can call 554-2950 on the Tamiami Campus or 940-5813 on the Bay Vista Campus.

## Counseling Services

Counseling Services, located in UH 340 at the Tamiami Campus and Student Center 260 at the Bay Vista Campus, offer a variety of counseling, advising, and testing programs for both individuals and groups. Academic counseling is provided to assist with the choice of a major or academic field of study, and to act as liaison with academic departments. Career counseling is available to provide assistance in selection of and preparation for career-life planning, including individual exploration of interests, options, abilities, needs, and goals, as well as career opportunities. Personal counseling is also available for concerns such as personal growth and development, family problems, and social concerns. Testing is also offered in the areas of personality inventories and interest inventories. In addition, workshops and seminars are held periodically on topics of special relevance to students.

## Interdenominational Campus Ministry

Interdenominational Campus Ministry serves as a center for student groups at the University involved in a variety of activities. Professional representatives from various faiths are available for personal appointments. Often individual denominations will sponsor campus-wide programs under the auspices of this area.

The offices of Interdenominational Campus Ministry are located in U.H. 331, 554-2215 at the Tamiami Campus, and S.C. 265, 940-5813 at the Bay Vista Campus.

## International Student Services and Programs

The International Student Services Office, located in UH 340 at the Tamiami Campus and in SC 264 at the Bay Vista Campus, is organized to meet the special needs of international students, and to assist each student in achieving his or her educational objectives. The International Student advisors serve as a liaison on immigration matters, and provide assistance with academic, financial, social and personal problems besetting international students. An orientation program is held at the beginning of every semester to acquaint the incoming international student with the University, immigration regulations, and the community. As a means of orienting international students to American family life, an active Host Family Program is maintained. Also, in cooperation with the International Student Club, varied social and cultural activities are regularly scheduled. Various programs are provided to enable the total student body to participate more fully in the international dimension of the University. In addition, a University-wide Study Abroad Program and reference library have been developed including a listing of summer and international internship opportunities.

## Off-Campus Housing and Consumer Services

The Off-Campus Housing and Consumer Services Programs give students at both the Tamiami and Bay Vista Campuses a listing of off-campus apartments, townhouses, rooms and houses for rent. The rental fee is updated and offers information on rental units available in South Broward and Dade County neighborhoods, rental costs, as well as other rental arrangements.

The Housing Office offers personalized advice and counseling in choosing rental arrangements, as well as what to do in the case of difficulties; however, each student must apply for, select, and evaluate his own housing accommodations. It is suggested that students come during the week, many apartment rental offices are closed on weekends.

A roommate listing exchange service assists students searching for a roommate to share housing, as well as companionship.

The program also provides a consumer education information service. Students may obtain





individual counseling or group programs on issues concerning consumer problems, e.g., redress procedures. In addition, consumer informational materials are obtained or developed and distributed at no charge to the student, e.g., Renter's Checklist, Small Claims Court, Metropolitan Dade County bus maps, and many others.

The Tamiami office is located in U.H. 340, 554-2434 and the Bay Vista office is located in S.C. 260, 940-5813.

## On-Campus Housing

The Division of Student Affairs is currently developing policies and procedures for establishing housing for the Tamiami and Bay Vista campuses. Construction should be completed by Fall 1983 for units at the Bay Vista Campus. Units at the Tamiami Campus should be available the following year. Contact Off-Campus Housing for additional information, 554-2434 at Tamiami.

## Special Services and the Handicapped

Special arrangements have been made at the University to serve the needs of those who have physical handicaps, chronic health problems, hearing disorders, or mental or psychological disorders. Special Services, located in UH 340 at the Tamiami Campus and in Student Center 260 at the Bay Vista Campus, operates to provide information and assistance to disabled students attending or wishing to attend FIU. Services include counseling, assistance with registration and class schedules, special equipment, talking books, talking cassettes, cassette machines, electric typewriters, notetaker, and on-campus attendants; and help in overcoming architectural, academic or other obstacles which the disabled student may encounter.

## Student Government

The Student Government Association (SGA), with offices on the Tamiami Campus in University House 310 and 311, and on the Bay Vista Campus in Student Center 260, actively represents the student body within the University community. One of the functions of the SGA is to place all interested students on University-wide committees and task forces to insure student representation. Three of the most vital SGA standing committees are: the Social and Cultural Committee, which coordinates all concerts, lectures, film series and cultural and social activities involving students; the Budget Committee, which reviews and recommends to the Senate, budget requests from registered student organizations and university departments; and the Committee on Committees, which reviews and screens student applicants for university-wide committees and recommends them to SGA for approval.

Students who have concerns they wish to express should go to the SGA office on either campus.

## Student Health Care

The purpose of Student Health Services is to provide comprehensive health care to students at a level commensurate with their needs.

The Health Clinic at the Tamiami Campus located in O.E. 115 is staffed by full time registered nurses, a family nurse practitioner and a part-time physician. A full-time registered nurse staffs the Clinic on the Bay Vista Campus and the nurse practitioner is available there one day a week.

The Clinic on the Bay Vista Campus is located in Student Center 114. Hours are posted in both clinics.

The Clinics provide care for illnesses and emergencies. In addition preventive health care is emphasized. Health teaching in diet, exercise, stress management, and use of the health care system are integral parts of the program. Family planning, laboratory and physical therapy services are available.

For further information about special student insurance contact the Health Clinic on either campus, phone 554-2401.

## Student Publications

On the Tamiami Campus, the Student Publications/Communications Workroom, University House 212A, provides the base of operations for all present student publications and any other communicative instruments that students initiate. In furthering the University's philosophy of linking practical experience with theory, student communications provide the opportunity for students to gain journalistic experience outside the classroom. A registered independent campus newspaper, an international magazine, a student handbook, and a yearbook presently exist on the Tamiami campus. Student publications welcome contributions from all segments of the University community and seek staff members as well.

On the Bay Vista campus also, the opportunity exists for students to initiate any publications they wish. Contact the Student Activities Office in Student Center 110, for further information.

## Sunblazers' Cheerleaders

The Sunblazers' Cheerleaders are a select group of students who personify the spirit and enthusiasm of the quality intercollegiate athletic program offered at the University. This squad, of male and female students, is selected after try-outs which are held during the Spring and Fall Semesters each year. Membership on the Cheerleading squad is open to any student who has a 2.5 cumulative grade point average and can demonstrate the vitality and spirit of the Sunblazers' intercollegiate athletic program. The Cheerleaders participate in national cheerleading clinics which are held each summer and often travel away to athletic games. Interested students should call 554-2950 or 554-2756.

## Intercollegiate Athletics

The Department of Intercollegiate Athletics and Recreational Sports offers varsity sports for

both men and women. Men's NCAA intercollegiate athletics include basketball, baseball, golf, soccer, tennis, track and field. Women's AIAW intercollegiate athletics include basketball, cross country, golf, softball, tennis, track and field and volleyball. The department is located in the Modular Building (W-4) on the west side of the Tamiami Campus, Room 201, telephone 554-2756.

## Recreational Sports

The Recreational Sports Office is dedicated to serving the physical and leisure needs of the University community. Four areas of participation are offered: Club Sports, Intramurals, Leisure Activity Classes and Facilities available for student and faculty use.

Club Sports are structured organizations that meet on a regular basis for the purpose of enhancing activity interests. Club sports have been organized in cooperation with the surrounding community and other four-year colleges. This non-varsity program helps to promote goodwill among the colleges in the South Florida community. Clubs are sponsored in fencing, bowling, karate, judo, and men's and women's tennis.

A full program of intramural sports is offered each semester, and all interested students are encouraged to participate. Both competitive and recreational leagues are available, free from excess time demands as in intercollegiate and club sports. Intramurals include softball, soccer, tennis, racquetball and bowling.

Most students have a free noon period, allowing enough time to get involved in a leisure activity program, take a shower, and get back to classes. A variety of athletic activities will be taught by members of the athletic coaching staff. Short lectures and drills will complement periods of participation and general overall fitness. Several night classes are also offered.

All athletic facilities are open to students, faculty and staff with the exception of times reserved for intercollegiate, intramural and other recreational sports. The facilities located on the west end of the Tamiami Campus are the Tursair Building (W-9) — wrestling, weight room and mats; Tin Gym (W-7) — basketball and volleyball courts; tennis, paddleball, racquetball and handball courts; putting green and chipping area, outdoor basketball courts and recreational fields. Locker rooms for men and women are available with proof of a valid University ID.

The Recreational Sports Offices are located in the Modular Building (W-4), on the west side of the Tamiami Campus, Room 202. For further information concerning any of the recreational sports programs, dial the Rec. Sports Hotline at 554-CALL, Monday through Friday, from 11 a.m. to 3 p.m.

## University House (Tamiami Campus)

University House is the primary student center, and provides a focal point for the university community to meet and interact in a non-classroom, yet educational environment. As the hub of student life, UH houses the bookstore, cafeteria, Rathskeller, Cinema Center. Interna-

tional Conference Theater, student publications/communications offices, recreation rooms, TV lounges, Student Government Association offices, student organization offices, and meeting rooms. The Student Activities Office is located on the second floor. Some of the other offices of the Division of Student Affairs, including Student Judicial Affairs, Student Support Services, International Student Services, Off-campus Housing and Consumer Services, Interdenominational Campus Ministry, and study abroad are located on the third floor of the University House.

## Student Activities and Organizations

Student activities are designed to meet the varied needs and potentialities of the University students. Student activities programming is co-curricular, and extends the educational spectrum from the classroom into the work of student organizations, Student Government, and a myriad of events and activities throughout the year. Participation in student activities allows a student to gain the broadest possible scope of education during the time that he or she is at the University.

Organizations are continually being formed on both the Tamiami and Bay Vista Campuses. Students have the opportunity to develop groups that further social and service programs, promote and supervise student welfare, further educational goals, and coordinate and implement community/student cooperation.

Students who are interested in organizing a group or in joining one that exists should go to the Student Activities Office in University House 211 on the Tamiami Campus or in Student Center 264, on the Bay Vista Campus.

There are currently 60 registered student organizations on the Tamiami Campus, ranging from the Student Consumer Group, the Professional Commerce Association and the Student Art Association through the International Student Club, the Future Attorneys Association and the Mass Communications Club. Meetings for all student groups are posted on the glass directory boards and bulletin boards throughout the University and are announced daily on Eventline, 554-2177. The Student Activities Office in University House 211 also has a master schedule of student meetings.

Students on Bay Vista Campus have a unique opportunity to have an impact on what groups become a part of campus life. The Student Activities Office can provide information on how to become involved with student organizations or activities, as well as information about what's happening on campus.

## Consortium Student Activities

Current students may attend activities open to Consortium students at any campus of the University, Broward Community College, and Miami-Dade Community College.

*Procedure:* present student ID or current fee receipt. The three institutions arrange for block purchase of tickets to area cultural events for re-

sale to students at less-than-box-office prices. The Consortium campuses also jointly schedule cultural events.

## Student Judicial Affairs

The University exists as a free marketplace of ideas, fostering the intellectual interchange of knowledge, ideas and philosophies. Freedom of expression, including the freedom to teach and learn within an academically stimulating environment, is a right preserved for all members of the University community. In view of this, the University has developed policies and procedures regarding the rights and responsibilities of students and a code of conduct assuring that these rights can be freely exercised without interference or infringement by others. The *Rights and Responsibilities of Students* is available for the University community. The Office of Student Judicial Affairs is located in UH 340, 554-2950.

## Urban Student Services/ Student Retention Services

The Department of Urban Student Services is responsible for three programs in the Division of Student Affairs; Student Retention, Developmental Education, and Community Outreach.

**RETENTION:** The Retention Program offers free tutors in several subject areas on both campuses, personal counseling as it relates to performance in the classroom, an early-alert system for students on academic warning and probation, and assistance in the academic reinstatement process for those who have been dismissed.

**DEVELOPMENTAL EDUCATION:** The Developmental Education Program offers workshops and/or one-on-one sessions in study skills, organization and time management, and personal growth. Self-scoring and diagnostic testing is also available to assess subject areas where remedial assistance is needed *before* the student experiences academic difficulty.

**COMMUNITY OUTREACH:** The Community Outreach Program is based at an off-campus center in urban Miami. This permits all of the programmatic components listed above to accommodate easily the fluctuating time scheduling of those students and potential students who reside in the urban areas of the County. Additionally, high school students have the opportunity to participate in a special advisement program.

The offices are located on Tamiami Campus, P.C. 304, Bay Vista Campus, in S.C. 266 and T.C. 105.

## Standards of Conduct

Students are subject to Federal and State laws and local ordinances as well as regulations prescribed by the University and the Florida Board of Regents. The breach or violation of any of these laws or regulations may result in judicial or disciplinary action.

When a student is involved in an offense resulting in criminal charges prior to his admission, the circumstances of the case may be reviewed by the appropriate Student Affairs Committee to consider the student's eligibility for admission to the University as well as participation in extracurricular activities.

## Student Grievance Procedures

On academic matters, aggrieved students should first discuss their complaint with the departmental Chairperson. Problems regarding general University (non-academic) matters should be directed to the office of Assistant Vice President of Student Affairs. Students should consult with this office for all disciplinary clearances and details on University grievance procedures. The office location is PC 304, 554-2353.

## University Public Safety Department

The University Department of Public Safety is a full service Public Safety organizational unit, dedicated to the maintenance of a peaceful and safe academic environment throughout the entire University community.

The protection of persons and property is the specific responsibility of the Department of Public Safety's police division. As State of Florida police officers, members of this unit have complete law enforcement powers. This unit enforces state and local laws and University regulations. The University police division attempts to address the needs of the educational community through objective enforcement and quality Public Safety service provided around the clock.

## Auxiliary Services

The Auxiliary Services at the University are self-supporting entities that sell goods and services at a price that approximates the cost. Auxiliary Services operates and coordinates food service, bookstore, duplicating, central stores, and vending.

## Food Service

Food and beverage service at Tamiami Campus is available on the first floor of University House. Snacks and complete meals are served cafeteria style. The cafeteria includes tables in the main area, surrounded by small dining rooms and patio dining areas. Bay Vista Campus is served by a full-service cafeteria located on the second floor of the Student Center.

## Book Store

The University bookstores are located in University House on Tamiami Campus, and in the Student Center on Bay Vista Campus.

## Academic Affairs

The Office of Academic Affairs is the unit responsible for planning, organizing, and administering the instructional programs of the College of Arts and Sciences, the School of Business and Organizational Sciences, the School of Education, the School of Hospitality Management, the School of Nursing, the School of Public Affairs and Services, and the School of Technology. The Office of Academic Affairs also supervises academic unit support programs, such as Continuing Education, the FAU-FIU Joint Center for Environmental and Urban Problems, Women's Studies Center, the Elder's Institute, Faculty Scholars Program, the Library, Media Services, Sponsored Research and Training, Academic Computer Services, International Banking Center and International Affairs Center.

Areas that provide direct services to students outside the classroom, have an impact on the instructional programs and report to the Office of Academic Affairs are: Office of the Registrar (Office of Admissions and School and College Relations, Office of Registration and Records, Office of Financial Aid), and the Office of Cooperative Education and Placement.

The chief academic officer is the Vice President for Academic Affairs, who is responsible for all the academic units. He also serves as liaison to the Florida Board of Regents for academic matters. As a member of the University Executive Staff, he provides leadership in the overall planning and direction of the institution.

\*For detailed information on the FAU-FIU Joint Center for Environmental and Urban Problems, Women's Studies Center, and the Elder's Institute, please refer to Centers and Institutes, for Faculty Scholars Program refer to admission section.

## Admissions, Registration & Records, Financial Aid

The University Registrar is responsible for the Office of Admissions, the Office of Registration and Records, Veteran's Affairs, the Office of Financial Aid, and the related data entry — data control functions. These areas function as an interrelated unit responsible for the orderly and timely admission of students, evaluation of transfer credits, the provision of financial aid to students who can benefit from higher education but cannot do so without some assistance, and dissemination of information about the academic programs of the University. It is in these offices that the student academic record is created, maintained, and preserved, and transcripts of the academic record sent. Registration for classes, including the dropping or adding of courses, is a function of Registration and Records, and final grades are distributed by that office.

The office staff has the responsibility to serve the student, faculty, other administrative offices and the general public; to hold safe and preserve the confidentiality of the students' records; and to ensure the integrity of the University's policies and regulations.



## Career Placement

The Career Placement Department, UH 340 at Tamiami and SC 264 at Bay Vista, assists students with career choice selections. Additionally, on-campus interviews are scheduled with employers. In order to assist students in preparing for employment, there are seminars each semester in learning effective communication techniques for interviews with employers, resume writing, letters of introduction and application, developing interviewing techniques and skills.

The Career Placement Department maintains notebooks which list opportunities for part-time, full-time and summer employment. The Department also uses bulletin boards to post information on employment vacancies and careers. A computerized career information and guidance support system is available.

## Consortium Career Planning and Placement Services

Students and alumni of the three member institutions of the Southeast Florida Educational Consortium may request placement services at any of the nine Consortium campuses.

## Cooperative Education

Cooperative Education allows students to alternate semesters of full-time paid employment, for which academic credit is earned, with semesters of full-time study. Students work in professional-level training positions related to their major field of study. Interested students may obtain detailed information about Cooperative Education from their academic advisor or the Department of Cooperative Education/Placement UH 340 at Tamiami and SC 264 at Bay Vista Campus.

## Division of Continuing Education

Strongly committed to meeting the educational, professional and social needs of the community, the Division of Continuing Education strives to extend the resources of the University beyond the confines of classroom and laboratory. Through creative programming, innovative research and community-oriented activities, the varied units within the Division serve a widely heterogeneous population. The Division is headquartered on Bay Vista Campus, Academic One, Room 100, with satellite services and facilities on Tamiami Campus, in Primera Casa, Room 248.

Operating under the Office of Academic Affairs, the Division of Continuing Education is composed of the following units: Department of Conferences, Department of Off-Campus and Week-end Credit Courses, and The State university System External Degree Program.

## Department of Conferences

The Department of Conferences is the University unit responsible for planning, developing, and initiating non-credit conferences, seminars, symposia, workshops, and short courses. For detailed information concerning program offering call 940-5646.

## Department of Off-Campus and Weekend Credit Courses

The Department of Off-Campus and Weekend Credit Courses offers broad range of courses at locations in Dade, Broward, and Monroe counties. These courses are available to students who have been admitted to the University and are pursuing degree programs as well as to students



who only wish to enroll in a specific course or courses. Fees for off-campus credit courses are the same as for on-campus courses.

Advance registration for off-campus courses is accomplished in the Department of Off-Campus and Weekend Credit Courses, Bay Vista Campus, Tamiami Campus, or by mail on a form provided by the Department. Students may also register at the first class meeting or prior to the second class meeting.

For information on how to request a course or to find out more about educational opportunities available through the Department, call 940-5643 in Dade, and 467-1077 in Broward.

### The State University System External Degree Program

The External Degree Program was established by the Board of Regents in 1972. The program provides flexible undergraduate degree programs utilizing an educational contract with the following components:

1. **Transfer Credit:** The External Degree Program is designed for students who have completed two years (or equivalent) of college level work.
2. **Prior Learning Credit:** Learning from prior non-college experiences may be translated into college credit.

3. **Directed Individualized Learning:** Students may satisfy a portion of the degree requirements by undertaking individualized study with University faculty.
4. **Formal Coursework:** Students complete a portion of the degree work in regular on-campus courses.

The State University System External Degree Program is a statewide program. Residents of Florida are eligible for the program and take advantage of educational facilities throughout the State.

In addition to regular tuition charged for the necessary course work to complete a degree program, an External Degree student is assessed a yearly fee of \$200.

For additional information concerning the program, please call 940-5664.

### Libraries

The University Libraries are housed in the Athenaeum on the Tamiami Trail, and in temporary quarters in the Trade Center Building at the Bay Vista Campus.

The total library collection comprises 510,000 volumes. In addition to substantial holdings of federal, state, local, and international documents; maps; microforms; music scores; newspapers; institutional archives; and



curriculum materials. The Library subscribes to 4,000 scholarly journals and other serials.

The public card catalogs are divided into three sections for author, title, and subject entries. The location of the resources is given on the cards in each of the three sections of the catalogs. The bulk of the collection is housed in open stacks.

Classification of library resources is according to the Library of Congress system, except for some of the documents and special collections (e.g. U.S., Florida, and U.N. documents, archives, etc.) which are arranged by their own classification systems and have separate public catalogs.

In keeping with the University's commitment to day and night operation, the libraries are open when the University is in session and during vacation periods. For exact library hours, please consult the posted schedules. Staff members are always available at the Public Service desks to assist students and faculty in their use of the library.

## Consortium Library Privileges

Currently registered students, faculty and staff may use the libraries of any of the nine campuses of Broward and Dade Community College, and FIU.

Periodicals and materials not on open shelves are placed on reserve to restrict their use. They are nonetheless accessible. Each library has periodical lists of the other consortium campuses.

Students can apply for, and at the discretion of the lending library, obtain a pass that will give them library charge privileges at all Consortium campuses and Nova University. This involves obtaining a CLASS card at one of the FIU libraries, and presenting it to the library where privilege is desired. The lending library may charge a nominal fee of \$3.00 for issuing the ID card. Students may also borrow materials from any of the consortium campuses through inter-library loans by presenting a current valid fee receipt or student ID.

Faculty and staff may also check out materials at any campus library of the consortium by presenting a current valid staff identification.

## Media Services

The Media Services Division of the University was established to provide instructional media services to faculty, staff and students. Briefly, the services offered by Media Services are encompassed by five departments:

1. *Equipment Distribution* provides a large variety of audiovisual equipment for use by the University.
2. *Graphics* prepares all kinds of artwork, including graphs, illustrations, charts and posters, for faculty and staff.
3. *Photography* provides photographic services to faculty and staff for educational publicity purposes.
4. *The Faculty/Student Production Center* provides an audiovisual lab area and instruction in the use of audiovisual equipment for faculty and students to produce a variety of audiovisual aids on their own.

## Consortium Media Privileges

Faculty, staff, and students may use the audiovisual services on any campus of the Consortium. A-V materials and equipment may not be borrowed.

## Division of Sponsored Research and Training

The Division of Sponsored Research and Training serves the research and training needs of interested faculty by providing timely information on the availability of local, State and Federal program support. The attraction of these funds to the campus provides an opportunity to better serve the needs of the people of Florida through services not regularly funded by the Legislature.

Among the major goals of the Division of Sponsored Research and Training are the following:

to help stimulate faculty and staff interest in research and training projects

to assist the faculty and staff in obtaining funds for research and training projects, and to provide technical assistance to faculty and staff who submit proposals to the Division for the University.

## Academic Computer Services

Academic Computer Services supports the instruction and research computing needs of the students and faculty on both the Tamiami and Bay Vista campuses. The professional staff provides consultation services on computer-related problems and data analysis, computer laboratory services and facilities, computer program conversions and implementation, coordination with Computer Operations on remote job entry processing, and coordination with the Southeast Regional Data Center (SERDAC) on Univac software and systems support.

The computer laboratories on each campus contain interactive teleprinters and video terminals, keypunches, documentation racks, access to plotting devices, and microcomputers. The large scale host computer for academic computing is the SERDAC Univac 1100/81.

## University Relations, Development and Alumni Affairs

The Division fosters internal and external communications and involvement in a variety of ways and has the responsibility of informing interested publics with current information about the University and our impact in the communities we serve. Six interrelated departments provide University-wide services in the areas of public information, publications, the coordination of special events, alumni affairs and development and general University public relations on both the Tamiami and Bay Vista campuses. The Division coordinates all private fund-raising for University support and is the University liaison with the FIU Foundation, Inc.

## Department of Alumni Affairs

The FIU Alumni Association, an auxiliary of the FIU Foundation, encourages more than 21,000 alumni to join. The Alumni Association maintains liaison with the University and becomes involved in the programs and activities of mutual benefit to alumni and to the University.

The Alumni Association is governed by a Board of Directors, composed of the officers of the Association, 12 elected alumni directors representing the college and the schools, 6 elected directors at large, the immediate past president, one representative from the Student Government Association, and one representative from each chapter.

It offers social and cultural events, seminars, an annual travel program, scholarships, and keeps its membership informed about their alma mater. The Alumni Association was a major donor to the FIU Foundation for their opening night sponsorship of the American Ballet Company. The Association also gave the funds for

the first year of a Four-Year Scholarship to a member of the first freshman class in September, 1981.

Dues-paying members of the Alumni Association regularly receive mailings concerning programs such as educational seminars, social activities, and university publications. They are entitled to discount tickets to University intercollegiate sports events, theatre performances, and group discounts in an annual travel program.

Joining the FIU Alumni Association enriches the personal and professional lives of University graduates and provides them with an ongoing opportunity to serve their alma mater while serving themselves.

For further information, contact:  
OFFICE OF ALUMNI AFFAIRS  
FLORIDA INTERNATIONAL UNIVERSITY  
PRIMERA CASA 230  
MIAMI, FLORIDA 33199  
PHONE: (305) 554-3334

## Department of Development

Contributions of financial resources such as bequests, cash donations, equipment and endowments for the advancement of the University from national and local non-governmental sources are solicited through this Department. The "margin of excellence" that distinguishes a great university from an adequate university is encouraged and provided through the activities of the Foundation.

The Florida International University Foundation, Inc., is composed of business and professional leaders of the community who have dedicated themselves to furthering the University by encouraging, soliciting, receiving and administering donations for the benefit of the institution.

## Department of Special Events

Providing service to the various publics of the University through promotion of attendance at special events such as lectures, plays, concerts, athletic events, commencements, and other public functions is the goal of this Department. Special Events also schedules and coordinates high visibility events for the University including sponsorship of the annual Orange Bowl Marathon.

## Affirmative Action Office

The Office reports to the President and provides leadership and direction in the administration of the University equalization programs for women and minorities in several ways. It assists University units in implementing and monitoring affirmative action procedures; provides a channel for employee and student grievances regarding discrimination, or issues indicating a need for additional affirmative action; and promotes effective relationships between the University and community organizations. The Office also administers the State University System Scholarship Program and the

internal Minority Scholarship Program. In addition, the Office maintains a liaison relationship with State and Federal agencies dealing with EEO and Affirmative Action. The Office is located on the Tamiami Campus in PC 220.

## Centers and Institutes

### Consumer Affairs Institute

The Institute functions in a research, teaching, and service capacity. Its primary goal is to develop alternatives to the adversary/advocate system in the equitable solution of consumer affairs problems. Working on the peer level, it attempts to bring together representatives of consumers, business, government, labor and academia. The Institute is jointly sponsored by Florida International University and the University of Miami.

### Drinking Water Research Center

The only facility of its kind in the State of Florida, the Drinking Water Research Center (DWRC) was created by the Florida State Legislature in 1977. The Center is primarily devoted to developing scientific information and essential technologies that can be used to provide quality drinking water to Florida residents, residents in the United States and global neighbors. The Center receives financial support from the State of Florida and from research grants. The Center does not perform routine tests of water for individuals. Administratively the Center is a part of the University's School of Technology.

Through programs of research, education, community service, and public information, the Center provides a comprehensive approach toward solving the dilemmas confronting the world's largest and most essential natural resource — water. Although enormous quantities of water exist, the proper amount of good quality water is not to be found in the right places at all times. Without an adequate supply and quality of water, a society's physical and economic health will surely suffer.

The Center staff does not conduct academic classes. However, qualified students often have an opportunity to work as research assistants in the Center's laboratories or carry out special projects. Cooperation and interchange with other departments in the University are maintained.

### Elder's Institute

The Elder's Institutes provides non-credit continuing education programs for the adult learner on the Bay Vista Campus. The course content is primarily in the behavioral and social sciences. Instructors are University faculty and community experts. The student body is made up of motivated learners seeking knowledge and intellectual stimulation for personal growth. There are also lectures, seminars and workshops in interest areas identified by the participants through surveys and other assessment instruments. The Institute staff also provide off-cam-

pus training for other community institutions as well as serve as a resource and referral base for the social service needs of the older American.

### English Language Skills Center

The English Language Skills Center, under the College of Arts and Sciences, was established in the summer of 1981 by the University to respond to the need of multidimensional language proficiency assessment and instruction in oral, aural, and written English. In order to serve the University community, as well as the South Florida community, a variety of individual components of language assessment and instruction have been integrated into the English Language Skills Center, a centralized bureau of information, counseling, testing, placement, tutorial instruction, and noncredit English courses for native and nonnative speakers. The primary functions of the ELSC are carried out by four units, the Testing and Placement Center, the Intensive English Program, the Writing Laboratory, and the Technical Communications Program, all located in PC 237.

### Testing and Placement

The English Language Skills Center offers diagnostic testing of both written and oral proficiency in English, as a support service for academic units throughout the University. Evaluative procedures can be designed to fit the needs of individual programs or schools, to assist them in the identification of individual students' levels of proficiency in English and in the placement of students in appropriate programs of study when needed. In addition, the Testing and Placement Center serves in an advisory and evaluative capacity for agencies in the Miami community and offers certification in oral English proficiency to individuals in cooperation with English language agencies abroad.

### Intensive English Program

The Intensive English Program offers non-credit instruction in English to non-native speakers in the community and from abroad. Classes in reading, grammar, writing, and conversation are taught at five levels of proficiency, and language laboratory facilities are available in which students can increase their listening comprehension and speaking skills under the guidance of its director. Students normally take a full, four-course load, but it is also possible for fully admitted University students to take a course in a single skill when deficiencies have been identified through the testing and placement procedures of the English Language Skills Center.

### Writing Laboratory

A free tutorial service available to all students on a one-to-one or small-group basis, the Writing Laboratory offers individualized instruction in all types of writing — essay exams, compositions, research papers, and business or technical reports. Students work in the Writing Laboratory at their own pace and in the areas they need most, whether mechanics, organization, development, or style.

Individuals may be referred to the Writing

Lab by the testing and placement services of the ELSC, by the student's department, or by an individual instructor, but a referral is not necessary. In addition to individual tutorial services, the staff of the Writing Lab designs workshops and mini-seminars to aid larger groups in the development of specific skills, such as punctuation, organization, and note-taking. These workshops will be available to anyone in the University community and can be arranged for a specific group upon consultation with the Director of the Writing Laboratory.

### Technical Communications Program

The English Language Skills Center is developing a Technical Communications Program to serve as a much-needed link between the University and the local community. The Technical Communications Program will offer mini-courses, workshops, and training sessions in technical writing, communication skills, and related staff-development areas to public and private agencies in Florida and abroad.

### Other Related Activities

In conjunction with the above activities, the English Language Skills Center staff develops teaching and assessment materials, devise new instructional strategies for teaching various English language skills, and prepare professionals in all facets of English language instruction. The Center also supports research in linguistics and first- and second-language acquisition, as well as staff participation in language-related conferences, workshops, and seminars. As the ELSC develops, it expects to help meet the growing needs for English language services as they arise both within the University and outside the University community.

For further information regarding the English Language Skills Center or its programs, contact the English Language Skills Center, PC 237, Florida International University, Tamiami Campus, Miami, Florida 33199 (Telephone: 305-554-2222), or the Director of the relevant program.

### FAU-FIU Joint Center for Environmental and Urban Problems

The establishment in July 1972 of a Joint Center for Environmental and Urban Problems by Florida International University and Florida Atlantic University was based on the premise that many of South Florida's urban and environmental problems must be approached on a regional basis: that such problems know no political boundaries. The Joint Center Headquarters, which house the Office of the Director, are situated in Fort Lauderdale with branch offices on the FIU and FAU campuses. The FIU office is located on Bay Vista Campus and staffed by an assistant director and research associates.

Within the next decade, decisions must be made on such critical areas as transportation, pollution control, land use, housing, energy policy and conservation, growth management, and



the design of a regional government system capable of effective problem-solving. As a catalyst in coordinating and supporting private and public efforts to solve some of these problems, the Joint Center concentrates on both research and service responsibilities.

#### Research

Applied research grants are awarded each year by the Joint Center to faculty of both Florida Atlantic University and Florida International University to do research on environmental and urban problems of current concern in the South Florida area. Besides this supported research at the universities, "inhouse" research projects are conducted by the Joint Center staff. Examples of these supported research projects include: the study of noise pollution, the problem of heavy metal accumulation in Mid-Biscayne Bay, analysis of air and water samples in Dade and Broward counties, and consideration of the problems associated with nuclear plant siting. Research results, produced at the Joint Center and elsewhere, are made available to public and private agencies attempting to find and apply solutions to urban and environmental problems.

#### Service

As a service organization, the Center provides professional assistance, maintains inventories of needs and scientific manpower availabilities, disseminates information, and facilitates communication among concerned groups. Special effort is concentrated on providing services in the solution of urban and environmental problems which have an increasingly regional character.

Other Center activities include: The publication of a bimonthly magazine, *Florida Environmental and Urban Issues*; Sponsoring of

seminars and conferences addressing such topics as solar and nuclear energy, air and water quality, land use planning, and resource recovery which are announced through the news media as they are scheduled; facilitation of communication within/between citizens groups and public agencies, and provision of information as a basis of effective action.

## International Affairs Center

International education, training and research are the principal goals of the International Affairs Center. The University's mandate extends beyond the education of Floridians and service to the South Florida community, to the creation of mutual understanding among the Americas and throughout the world.

The University is dedicated to international education in the form of academic research, instruction, service and cooperative exchange. As the fulcrum of internationalism, the Center conducts research, develops programs and offers joint programs with all units of the University in international education, research and training.

In order to provide opportunities for students to observe the dynamics of United States participation in world activities and to the equally critical roles played by other countries in world affairs, the University encourages the offering of courses and programs with an international orientation. To that end, the University currently provides courses, certificate and degree programs in the following college and schools:

- College of Arts and Sciences*
- School of Business and Organizational Sciences*
- School of Education*
- School of Hospitality Management*
- School of Public Affairs and Services*
- School of Technology*

The Center also has programs through the School of Technology in conjunction with the Drinking Water Research Center, Fire Safety Certificate and the International Institute for Housing and Building.

Integral to the University's international curriculum is the presence of world-renowned faculty and the participation of all faculty in international activities on campus and abroad. Noteworthy efforts of the faculty and staff include cooperative programs and projects with the Bahamas, Brazil, Colombia, England, Haiti, Honduras, Kuwait, Mexico, Panama, Saudi Arabia and Venezuela.

By providing research, training, instruction and development with the College of Arts and Sciences and the professional schools of the University, the International Affairs Center concentrates on the delivery of solutions to academic and pragmatic problems and challenges facing the international community. The staff of the Center serves as planners, researchers, developers, advocates and administrators for all international dimensions of the University. Fundamental to the Center's operation is the concept that the most productive and valuable international activities are those which are multidisciplinary. Priority is given to those efforts in which two or more schools or departments par-

ticipate. The promotion of faculty and student research abroad is also a function of the Center. In this regard, the Center acts as a clearinghouse for international programs sponsored by the University and by other organizations such as the State University System, various public agencies, and other universities in the United States and abroad. Moreover, in response to the University's international mission, the Center also participates in the admission of students to the University from all over the world through the Office for International Student Services. Currently, 37 countries are represented in the student body of the University.

The endeavors of the University and its International Affairs Center demonstrate the commitment of the institution to cooperative participation in service to the world community.

The University is the present locus of a new international organization, the Interamerican University Council for Economic and Social Development. The Secretariat may be addressed in care of the University President who is serving as the first Board Chairman.

## International Banking Center

The Florida Board of Regents established the International Banking Center in July, 1978, as a "Center of Excellence" and as one of the University's highest priority programs. The International Banking Center is the principal institution for education and research in international banking in the State of Florida, with offices on the Tamiami Campus. Its staff works closely with organizations representing all facets of international banking. This includes training programs such as Seminar on International Banking (INTER-BANK), Advanced International Bank Executives Course (AIBEC) for Latin American bankers, Distinguished Lecture Series on International Banking, and Conferences on topics dealing with the problems of International Banking and Finance.

## International Institute for Housing and Building

In its early planning, the University dedicated itself to the development of academic, research and service programs which would be of direct benefit to the Southeast Florida community which it serves. In addition, the central importance of housing construction and development in Latin America, the Caribbean, and developing nations throughout the world was recognized. The International Institute for Housing and Building was established by the Department of Construction, School of Technology to provide expertise in the design, engineering architectural and management aspects of construction.

The Institute emphasizes the following activities related to housing environment.

1. To initiate and carry out research on problems related to building planning and construction, considering especially the technological, economic, financial and managerial aspects of the topic;
2. To generate funds from outside sources to finance theoretical and applied research activities;

3. To disseminate the results of research projects and encourage their implementation;
4. To provide technical services to private and official organizations with a special emphasis on service to the housing production industries of South Florida and in an international context;
5. To act as an interface between new developments in Housing Science and their application in the field of housing and planning in South Florida and to assess their relevance to the housing industry;
6. To collect documents, and disseminate information on the latest advances in building science and housing;
7. To attract researchers of international stature and reputation to the University and South Florida;
8. To develop a learning environment in the area of building sciences relevant to the needs of low and medium-income people of the world;
9. To collaborate with other research institutes, government agencies, and universities to increase the effect of its research program;
10. To organize scientific meetings, symposia conferences, seminars, and workshops at the University and elsewhere;
11. To incorporate the use of alternative energy, energy conservation, and efficient use of natural resources in the planning of large projects, and to encourage the utilization of indigenous materials and labor sources;
12. To help implement programs to alleviate the impact of various disasters on housing including the coordination of disaster preparedness activities related to housing.

An underlying concern of the Institute is to establish an interdisciplinary environment in which many disciplines within the University and the community can arrive at feasible solutions to housing and building problems.

## Management Planning and Development Center

The MPDC, located in the Office of the Dean, School of Business and Organizational Sciences, was created by the Board of Regents in 1980. It is designed to provide training, research, technical assistance and consultation.

### Training

The MPDC responds to community needs for management training and executive development. It provides programs for local, state, national, and international clients. They include the airline, banking and finance, real estate, retail, health services fields, and numerous public agencies. It has cooperating agreements with sponsoring Universities in Lima, Peru, and San Juan, Puerto Rico. International firms are developing programs through the MPDC for implementation at other Caribbean-basic sites as well as at the University.

Programs are non-credit but may earn Continuing Education Units (CEU's) and participants are awarded certificates upon program completion.





### Research

Assistance to faculty research activities is provided by grant proposal preparations, and funds for conducting research. The Bureau of Business Research within the MPDC concentrates on responding to problems encountered in the business community.

Through its Working Papers Series, the faculty of the school are enabled to publish their research findings.

### Technical Assistance and Consultation

The MPDC is a clearing house for matching a variety of faculty resources to complex and specialized needs of the community. It draws on a variety of disciplines in the School of Business and Organizational Sciences to serve the private and public sectors.

## Small Business Development Center

The Small Business Development Center (SBDC) is a program designed to provide comprehensive small business management and technical assistance to the small business community. The Center serves as a focal point for linking together resources of the Federal, state, and local governments with those resources of the University and the private sector. These resources are utilized to counsel and train small businesses in resolving organizational, financial, marketing, technical, and other problems they might encounter.

The Small Business Development Center is a basic services SBDC. It disseminates business management information, performs financial analyses and management audits, assists in market and feasibility studies, and provides business management counseling and training.

In June 1980, the SBDC started actively fulfilling its mission to the small business community of greater Miami area by providing counseling services and training programs to the public. The SBDC staff has provided 1,686 people from the community with 82 training programs since its inception for a total of 10,400 training hours. The Center has counseled over 784 individuals or businesses on a one-to-one basis concerning specific problems relating to their small business, for a total of approximately 6,200 hours of counseling time being given to the small business community.

In particular, the SBDC has developed a reputation for packaging Small Business Administration loan applications. Numerous referrals from the major banks in Miami and other government agencies have resulted from this. The forte of the Center is in the area of accounting and financial assistance to the small business. Examples of specific areas in which the Center provides counseling are taxation, budgeting, the acquisition or sale of a business, credit and collections, organizational structures, management audits, and marketing assistance.

The Center is subcontracting to Florida Memorial College for a Regional Center to be housed on their campus. This will increase the awareness level of the SBDC services to the black community and improve the Center's ca-

pability to serve the black business community. Efforts are currently underway to officially open the satellite operation at Florida Memorial College. Also, negotiations are currently underway for a satellite operation at Florida Keys Community College which would increase the geographic coverage of the FIU center. In addition, the SBDC has been assisting Miami Capital Development in the preparation of loan proposals for the Liberty City area.

The SBDC has also been actively involved with the Greater Miami and Coral Gables Chambers of Commerce through the activities of its staff members. Center staff also serves on several committees and makes public appearances in conjunction with the Chambers of Commerce.

## South Atlantic Bilingual Education Service Center

The South Atlantic Bilingual Education Service Center (SABES) was funded by a grant from Title VII, ESEA, as a Bilingual Education Service Center for the South East Region of the U.S. (Region IV). The SABES Center began operation in September 1980 and is eligible for funding for a period of two years. The Center is located on the Bay Vista Campus, AC1 383 B, Tel: 940-5640.

The purpose of the SABES Center is to provide information, training and consultant services to persons involved in Title VII and non-Title VII bilingual education programs in Region IV (Georgia, Florida, North Carolina and South Carolina). The SABES staff offers information and services in bilingual education through three units: Technical Assistance, Evaluation and Assessment, Curriculum and Instruction. In addition SABES Resource Center makes available up-to-date books and materials in bilingual education.

## State University System Center for Labor Research and Studies

The Center for Labor Research and Studies provides educational services with and without academic credit, in the areas of labor and manpower studies, labor relations for management and union groups, and collective bargaining, with an applied research program designed to support instruction and consultation in the above areas. The Center is authorized by the Board of Regents to provide programs and services throughout the State of Florida. Through the School of Technology, an external baccalaureate program and certificate program in Industrial and Labor Relations is sponsored.

## Women's Studies Center

The Women's Studies Center serves as a University resource on the specialized concerns and

academic interests of women. The Center provides a place and opportunity to foster women's progress through such activities as referrals; counseling; peer groups; access to studies and research on women's learning and culture; and assistance on issues of gender inequality. Also, the University offers an interdisciplinary Women's Studies Certificate Program, for which the Center provides support and coordinates conference and grant development.

## Florida's Statewide Course Numbering System

The course numbers appearing in the catalog are part of a statewide system of prefixes and numbers developed for use by all public post-secondary and participating private institutions in Florida. One of the major purposes of this system is to make transferring easier by identifying courses which are equivalent, no matter where they are taught in the state. All courses designated as equivalent will carry the same prefix and last three digits.

The classifying and numbering of courses was done by community college and university faculty members in each academic discipline. Their work was reviewed by faculty members in all of Florida's postsecondary institutions who made suggestions and criticisms to be incorporated into the system.

The course numbering system is, by law, descriptive and not prescriptive. It in no way limits or controls what courses may be offered or how they are taught. It does not affect course titles or descriptions at individual schools. It seeks only to describe what is being offered in postsecondary education in Florida in a manner that is intelligible and useful to students, faculty and other interested users of the system.

The course numbering system was developed so that equivalent courses could be accepted for transfer without misunderstanding. Each public institution is to accept for transfer credit any course which carries the same prefix and last three digits as a course at the receiving institution. For example, if a student has taken SOC 000 at a community college, he cannot be required to repeat SOC 000 at the school to which he transfers. Further, credit for any course or its equivalent, as judged by the appropriate faculty task force and published in the course numbering system, which can be used by a native student to satisfy degree requirements at a state university can also be used for that purpose by a transfer student regardless of where the credit was earned.

It should be noted that a receiving institution is not precluded from using *non-equivalent* courses for satisfying certain requirements.

### General Rule for Course Equivalencies

All undergraduate courses bearing the same alpha prefix and last three numbers (and alpha suffix, if present) have been agreed upon to be equivalent. For example, an introductory course in sociology is offered in over 40 post-secondary

institutions in Florida. Since these courses are considered to be equivalent, each one will carry the designator SOC 000.

**First Digit**

The first digit of the course number is assigned by the institution, generally to indicate the year it is offered — i.e., 1 indicates freshman year, 2 indicates sophomore year. In the sociology example mentioned above, one school which offers the course in the freshman year will number it SOC 1000; a school offering the same course in the sophomore year will number it SOC 2000. The variance in first numbers does not affect the equivalency. If the prefix and last three digits are the same, the courses are substantially equivalent.

**Titles**

Each institution will retain its own title for each of its courses. The sociology courses mentioned above are titled at different schools "Introductory Sociology," "General Sociology," and "Principles of Sociology." The title does not affect the equivalency. The courses all carry the same prefix and last three digits; that is what identifies them as equivalent.

**Lab Indicators**

Some courses will carry an alpha suffix indicating a lab. The alpha suffixes "L" and "C" are used as follows to indicate laboratories:

"L" means either (a) a course, the content of which is entirely laboratory or (b) the laboratory component of a lecture-lab sequence in which the lab is offered at a different time/place from the lecture.

"C" means a combined lecture-lab course in which the lab is offered in conjunction with the lecture at the same time/same place.

**Examples:**

Marine Biology OCB 013 (lecture only)  
OCB 013L (lab only)

Marine Biology OCB 013C (lecture with lab and lab combined)

Therefore, OCB 013C is equivalent to OCB 013 plus OCB 013L.

**Equivalency of Sequences**

In certain cases, sequences of courses in a given discipline are equivalent rather than the individual courses which make up these sequences. (For example, MAC 132, 133, 134). In these cases the subject matter topics may not be taught in the same sequence, course by course, in several institutions; however, upon completion of the full sequence at any of the several institutions, students have completed substantially equivalent content. These sequences are clearly identified in the Course Equivalency Profiles.

**Explanation of Prefixes and Numbers**

Prefixes and numbers in the course numbering system are not chosen at random; they are designed to describe course content in an organized fashion within a classification system developed for each subject matter area.

Generally, each of the major classifications in a discipline is represented by a three-alpha prefix. In some cases, one three-alpha prefix has been sufficient for the entire discipline. A discipline may use as many prefixes as necessary to accommodate its major classifications. The logic of the system allows it to be infinitely expandable with minimal disruption to existing numbers.

History, for example, has seven prefixes: AFH, African History; AMH, American History; ASH, Asian History; EUH, European History; HIS, History-General; LAH, Latin American History; and WOH, World History. All history courses in the state will carry one of these prefixes.

The number of prefixes is a function of the extent of the subclassifications of the given subject matter area.

When this work began there were 920 alpha prefixes in existence; with the new system there are now 370. As in most states there existed no uniformity in Florida's prefixes as indicated by the example below:

Discipline	Before	After
History	20	7
Sociology	24	3
Philosophy	23	4
Religion	17	1
Mathematics	50	10
English	39	6
Nutrition	38	4

Although it is true that a student majoring at one of the 38 participating institutions may have had only one alpha prefix for his major (e.g., HYHistory) and now he will have seven, all prefixes in the same subject matter areas will be the same throughout these institutions.

A complete inventory of taxonomic listings, equivalent and unique courses has been made available to each academic department of every institution in the state. Students, through their local advisors, should use this information in designing programs which will transfer smoothly.

**Exceptions to the Rule for Equivalencies**

The following are exceptions to the general rule for course equivalencies:

A. All graduate level courses (except those which the faculty and their reviewing colleagues have determined to be substantively equivalent with undergraduate courses) are not automatically transferable.

B. All numbers which have a second digit of 9 (Ex.: ART 2906) are "place keeper" numbers for such courses as directed independent study, thesis hours, etc. Courses with 900 numbers must be evaluated individually and are not automatically transferable.

C. All internships, practicums, clinical experiences and study abroad courses, whatever numbers they carry, are not automatically transferable.

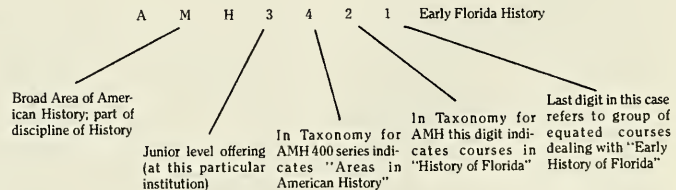
D. Performance or studio courses in Art, Dance, Theatre, and Music are not automatically transferable, but must be evaluated individually.

**Authority For Acceptance of Equivalent Courses**

The following amendment to Section 6A-10.24(7) of the Articulation Agreement was approved by the Community Colleges Council on Instructional Affairs, the Presidents Council, the Division of Community Colleges, the State University System Council of Vice Presidents for Academic Affairs the Council of Presidents and the Board of Regents. It was adopted by the State Board of Education on March 7, 1978:

"... Students who earn credit in a course determined by the appropriate faculty task force to be equivalent and which is published in the statewide course numbering system, and who later transfer to another institution within the system can transfer and use the credit in that course at the receiving institution for the same purpose as that course can be used by native students who complete the course at the receiving institution."

A more specific example is AMH 3421.



(Local titles are used for each particular course. The last three numbers are used to indicate equivalency.)

## Administration, and Staff

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*Media Center Librarian* Ellen Barnett  
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*Budget Planning Director* Sidney L. Walesh  
*Resource Analysis Director* Susan Mitchel

## ACADEMIC CALENDAR 1982-83\*

### FLORIDA INTERNATIONAL UNIVERSITY

#### FALL SEMESTER 1982

May 26	Last day for receipt of Admissions application for International Students for Fall Term
July 19-23	Official Registration Week (Degree-Seeking Students) by appointment only for Fall Term
July 26-August 6	Open Registration for Fall Term
July 30	Last Day for receipt of Applications (including appropriate credentials) to insure consideration for admission for Fall Term.
August 23	Registration Day
August 25	Classes Begin
September 3	Last day to complete Late Registration by 3:00 p.m.
	<ul style="list-style-type: none"> <li>● Drop/Add Period ends</li> <li>● Last day to drop courses or withdraw from the University without incurring a financial liability</li> <li>● Last day to pay fees without incurring a late fee.</li> <li>● Last day to pay fees to avoid cancellation of enrollment</li> </ul>
September 6	Labor Day Holiday (University closed)
September 14	Last day to apply for Fall Term graduation
September 24	Last day to complete withdrawal with a 25% refund of tuition less bonding fees.
October 22	Last day to drop a course with a DR grade, by 3:00 p.m.
	<ul style="list-style-type: none"> <li>● Last day to withdraw from the University with a WI grade.</li> <li>● Last day for reinstatement of cancelled courses due to non-payment.</li> </ul>
November 11	Veterans Day Holiday (University Closed)
November 15-19	Official Registration Week (Degree-seeking Students) by appointment only for Spring Term.
November 25-26	Thanksgiving Holiday (University Closed)

November 29-	
December 10	Open Registration for Spring Term.
December 10	Classes End
December 13-17	Official Examination Period
December 24-25	Christmas Holiday (University Closed)

\*Calendar dates are subject to changes. Appropriate offices should be contacted for verification and updated information.

#### SPRING SEMESTER 1983

October 5	Last day for receipt of Admissions application for International Students for Spring Term.
November 15-19	Official Registration Week (Degree-Seeking Students) by appointment only for Spring Term
November 29-	
December 10	Open Registration for Spring Term
December 1	Last Day for receipt of applications (including appropriate credentials) to insure consideration for admission for Spring Term.
December 31-	
January 1	New Years Holiday (University closed)
January 3	Registration Day
January 5	Classes Begin
January 14	Last day to complete Late Registration by 3:00 p.m.
	<ul style="list-style-type: none"> <li>● Drop/Add Period ends</li> <li>● Last day to drop courses or withdraw from the University without incurring a financial liability</li> <li>● Last day to pay fees without incurring a late fee.</li> <li>● Last day to pay fees to avoid cancellation of enrollment</li> </ul>
January 25	Last day to apply for Spring Term graduation
February 4	Last day to complete withdrawal with a 25% refund of tuition less bonding fees.
March 4	Last day to drop a course with a DR grade.
	<ul style="list-style-type: none"> <li>● Last day to withdraw from the University with a WI grade, by 3:00 p.m.</li> <li>● Last day for reinstatement of cancelled courses due to non-payment.</li> </ul>
April 4-8	Official Registration Week (Degree-Seeking Students) by appointment only for Complete Summer Term, Term A, and Term B.
April 11-15	Open Registration for Complete Summer Term, Term A, and Term B.
April 15	Classes End.
April 18-22	Official Examination Period

**SUMMER SEMESTER 1983**

- February 8 Last day for receipt of Admissions application for International Students for the Summer terms.  
April 4-8 Official Registration Week (Degree-Seeking Students) by appointment only, for Complete Summer Term, Term A, and Term B.
- April 5 Last day for receipt of applications (including appropriate credentials) to insure consideration for admission for the Summer terms.
- April 11-15 Open Registration for Complete Summer Term, Term A, and Term B.
- June 3 \*\*Last day to apply for graduation for Complete Summer Term, Term A, and Term B

**Complete Summer Term**

- May 9 Registration Day  
May 11 Classes Begin  
May 20 Last day to complete late registration by 3:00 p.m.
  - Drop/Add Period ends
  - Last day to drop courses or withdraw from the University without incurring a financial liability
  - Last day to pay fees without incurring a late fee.
  - Last day to pay fees to avoid cancellation of enrollment.
- May 30 Memorial Day Holiday (University closed).
- June 3 Last day to apply for graduation
  - Last day to complete withdrawal with a 25% refund of tuition less bonding fees
  - Last day to drop a course with a DR grade by 3:00 p.m.
  - Last day to withdraw from the University with a WI grade
  - Last day for reinstatement of cancelled courses due to non-payment
- July 8
- July 4 Independence Day Holiday (University closed)
- August 12 Classes end

**Summer Term A**

- May 9 Registration Day  
May 11 Classes Begin  
May 20 Last day to complete late registration by 3:00 p.m.
  - Drop/Add Period ends
  - Last day to drop courses or withdraw from the University without incurring a financial liability
  - Last day to pay fees without incurring a late fee
  - Last day to pay fees to avoid cancellation of enrollment
- June 3 Last day to apply for graduation
  - Last day to drop a course with a DR grade by 3:00 p.m.
  - Last day to withdraw from the University with a WI grade
  - Last day for reinstatement of cancelled courses due to non-payment
  - Last day to complete withdrawal with a 25% refund of tuition less bonding fee
- June 24 \*\*Classes end

**Summer Term B**

- June 3 Last day to apply for graduation
- June 27 Registration Day  
June 29 Classes Begin  
July 4 Independence Day Holiday (University closed)  
July 8 Last day to complete Late Registration by 3:00 p.m.
  - Drop/Add Period ends
  - Last day to drop courses or withdraw from the University without incurring a financial liability.
  - Last day to pay fees without incurring a late fee.
  - Last day to pay fees to avoid cancellation of enrollment.
- July 22 Last day to drop a course with a DR grade by 3:00 p.m.
  - Last day to withdraw from the University With a WI Grade
  - Last Day for reinstatement of cancelled courses due to non-payment
  - Last day to complete withdrawal with a 25% refund of tuition fees less bonding fees
- August 12 Classes end

\*Calendar dates are subject to changes. Appropriate Offices should be contacted for verification and updated information.

\*\*Grades will not be posted on transcripts and graduation will not be processed until the end of the Complete Summer Term, August 12.

# College of Arts and Sciences

## College of Arts & Sciences

The College of Arts and Sciences is a Liberal Arts College. As such, it furthers the study of fundamental intellectual disciplines and renders service to the professional schools.

The Administrative units of the College offer departmental programs of study leading to Bachelor's degrees in biological sciences, economics, English, history, international relations, mathematical sciences (mathematics, statistics, computer science), modern languages (French, Spanish), performing arts (music, theatre), philosophy/religion (philosophy or religious studies), physical sciences (chemistry, earth science, environmental studies, physics), political science, psychology, sociology/anthropology, and visual arts.

The departments of the College also offer Minor programs of study in art history, chemistry, computer science, earth science, economics, English, environmental studies, general translation studies, history, human biology, international relations, mathematics, philosophy, political science, Portuguese, psychology, sociology, statistics, theatre and visual arts.

The College has academic programs leading to Master's degrees in biology (jointly with FAU), chemistry (jointly with FAU), computer science, economics, environmental and urban systems (jointly with School of Technology), general psychology, international studies, mathematical sciences, physics (jointly with FAU), and psychology (jointly with FAU).

The College also offers collegiate programs of study leading to a Bachelor's degree in humanities and liberal studies. Students may earn Certificates, authorized by the College in American Studies, Consumer Affairs, Environmental Studies, Ethnic Studies, Latin American and Caribbean Studies, Linguistic Studies, Marine Science, Tropical Commercial Botany, Western Social and Political Thought and Women's Studies.

### Admission

A student holding an Associate degree from a community college (or having completed the equivalent course work at a four year school) will be admitted to the program of his or her choice. The College will also serve students who need to complete general education requirements or certain other requirements in order to enroll in specific discipline or professional programs.

In addition to the degree requirements for departmental programs of study, each candidate for the Bachelor's degree must satisfy the following college-wide requirements:

- a) 9 semester hours of elective credits to be earned through course work outside the major discipline; 6 semester hours of which are to be taken outside the department sponsoring the program.

- b) A grade of C or better to be obtained in all courses required for the major.

Moreover, students are encouraged to consider the possibility of taking a minor or a certificate program besides their major, in order to enhance the liberal quality of their education.

### Anthropology

Anthropology is part of the department of Sociology and Anthropology and all information should be obtained from that Department's office. See Sociology/Anthropology Major for program and course descriptions.

### Sociology/Anthropology

**Anthony Maingot, Professor and Chairperson**  
**James Mau, Dean, College of Arts and Sciences and Professor**

**Jerry Brown, Associate Professor**  
**Stephen Fjellman, Associate Professor**  
**Hugh Gladwin, Assistant Professor**  
**Randy Kandel, Associate Professor**  
**Barry Levine, Associate Professor**  
**Shearon Lowery, Assistant Professor**  
**William Osborne, Associate Professor**  
**Alex Stepick, Assistant Professor**  
**William Vickers, Associate Professor**

LOCATION: Tamiami Campus

DEGREE: Bachelor of Arts

LOWER DIVISION PREPARATION:

For Admission to the upper division student's should have 60 semester hours or the Associate of Arts degree from a community college (work should be pre-Arts and Sciences or pre-Anthropology or Sociology if such programs exist). If the student does not have an AA degree, his background must reflect an ability to handle advanced academic work.

**Required Courses:** Introduction to Cultural Anthropology, or Introduction to Physical Anthropology, or Introduction to Sociology. If these courses are not completed prior to entry to FIU, they will be required as a part of the upper division program.

**Recommended Courses:** (1) other anthropology courses, (2) ecology, economics, geography, history, political science, psychology, (3) arts, biology, English, foreign languages, mathematics, philosophy.

UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<b>Required Courses:</b>	<b>27</b>
<b>Core Courses:</b>	
ANT 3086 Anthropological Theories	12
SOC 3500 Research Methods	3
SOC 3610 Sociological Theories	3
SSI 3303 Ethical Issues in Social Science Research	3

**AREA COURSES:** either Anthropology or Sociology 15  
**Electives:** with the approval of the faculty advisor 33

ate Training; 3) Human and Social Services; 4) Community Research and Public Policy; 5) Communications and Arts; 6) Social Psychology. A student with special interests may consult faculty advisors to plan an individualized program of study.

A grade of C or better in all courses required for the major is necessary for graduation.

**Field Work Experience**—A meaningful understanding of anthropology and sociology can best be developed through the interplay of theory and research. Each student will be encouraged to work outside the formal classroom under faculty supervision.

**Minor in Sociology/Anthropology**  
**PRESCRIBED COURSES:** 15 credits in the Department of Sociology / Anthropology including the following:

2 courses chosen from among the four core courses required of departmental majors: ANT 3086 Anthropological Theories; SOC 3610 Sociological Theories; SOC 3500 Research Methods; SSI 3303 Ethical Issues in Social Science Research.

### Course Descriptions

**Definition of Prefixes**

ANT — Anthropology; DHE — Demography & Human Ecology; HUS — Human Services; LIN — Linguistics; MAF — Marriage & Family; SOC — Sociology; SSI — Social Sciences-Interdisciplinary.

**ANT 3000 The Scope of Anthropology** (3)  
An introductory survey of the major areas of anthropological inquiry, including social, cultural, physical and applied anthropology, as well as archaeology and linguistics. An examination of the anthropological perspective.

**ANT 3086 Anthropological Theories** (3)  
This course examines the process of theory building and explanation in the social sciences, and outlines the historical and philosophical foundations of anthropological thought. Theorists and schools of thought reviewed include Darwin and evolution; Boas and historical particularism; Freud and culture and personality, and Malinowski and functionalism.

**ANT 3144 Prehistory of the Americas** (3)  
Early man in the Americas is examined through archaeological records.

**ANT 3241 Myth, Ritual and Mysticism** (3)  
A survey of anthropological approaches to the study of myth, ritual, and mysticism, as religious and symbolic systems. The social and psychological functions of myth and ritual in primitive and complex societies will be compared.

**ANT 3251 Peasant Society** (3)  
Comparative study of peasant societies with emphasis on the concepts of folk community, traditional culture, and modernization. Data on peasantry in Latin America and other culture areas will be reviewed.

**ANT 3263 World Food Supply** (3)  
An examination of world food supply, including distribution patterns and problems. Comparisons between nutritional standards and human

Tracks: The Department of Sociology / Anthropology offers the following academic tracks:  
1) General Sociology / Anthropology; 2) Gradu-

and economic development programs among industrialized and Third World nations are made.

**ANT 3302 Male and Female: Sex Roles and Sexuality** (3)

Cross-cultural ethnographic data will be utilized to examine the enculturation of sex roles, attitudes and behavior; cultural definitions of maleness and femaleness; and varieties of human sexual awareness and response.

**ANT 3402 Anthropology of Contemporary Society** (3)

The application of classical anthropological methods and concepts to the analysis of contemporary American culture. Investigation of a unique cultural scene will involve the student in field work and the preparation of an ethnographic report.

**ANT 3403 Cultural Ecology** (3)

Systems of interaction between man and his environment; the role of social, cultural and psychological factors in the maintenance and disruption of ecosystems; interrelations of technological and environmental changes.

**ANT 3435 The Individual in Anthropology** (3)

Study of the individual in his socio-cultural context; the place of the individual in anthropological theory; and the influence of culture on the individual through the use of biography, autobiography, journals, diaries, novels, and narratives.

**ANT 3442 Urban Anthropology** (3)

Anthropological study of urbanization and urban life styles, with particular emphasis on rural-urban migration and its impact on kinship groups, voluntary associations, and cultural values.

**ANT 3476 Movements of Rebellion and Revitalization** (3)

Cross-cultural study of revolutionary, messianistic, and revitalization movements in tribal and peasant societies. Case materials include Negro-slave revolts, cargo cults, and peasant wars of the twentieth century (Mexico, China, Vietnam).

**ANT 3500 Origin and Dispersion of Man and Woman** (3)

A study of the biological history of man as interpreted through the theory of evolution, anatomy and the fossil record, contemporary population genetics, and the concept of race.

**ANT 3512 Social Biology** (3)

An examination of the biological bases for human adaption and socio-cultural interaction.

**ANT 4007 The Organizer** (3)

The dynamics of mass organizations, responsible for major social transformations, will be examined in comparison with those of corporate and public interest organizations. Strategies of leadership (Gandhi, Hitler, Mao, King), team building, goal setting, and negotiating will be explored through workshops.

**ANT 4224 Tribal Art and Aesthetics** (3)

This course deals with the social and cultural context and functions of art in preliterate societies as in sub-Saharan Africa, New Guinea, and North America. Topics include wood carv-

ing, bronze casting, singing, dancing, drumming, masquerading, theatrical performance, and all forms of oral literature.

**ANT 4261 Environmental Revitalization** (3)

This course develops a cultural ecological framework for analyzing the relationship between food productions, land use, energy consumption and public policy in both local and international contexts.

**ANT 4211-4360-4361-4328 Area Studies** (3)

Ethnological survey of selected indigenous cultures. Areas to be studied include: (1) North America; (2) Africa; (3) Asia or Southeastern Asia; (4) China. Topics will be announced and will vary depending on current staff.

**ANT 4273 Law and Culture** (3)

A cross-cultural examination of the practical and theoretical relationships between the legal system and other aspects of culture and society.

**ANT 4305 Explorations in Visual Anthropology** (3)

An examination of the use of film in anthropology, both as a method of ethnographic documentation and as a research technique for analyzing non-verbal modes of communication. Documentary films and cross-cultural data on paralanguage, kinesics, proxemics, and choreometrics will be reviewed and discussed.

**ANT 4314 The American South: A Regional Subculture** (3)

A course designed to provide an understanding of the Southern regional subculture. Discussion topics will include an analysis of the socio-cultural characteristics attributed to this region.

**ANT 4324 Mexico** (3)

An interdisciplinary examination of the major social, cultural, economic and political factors contributing to the transformation from the Aztec empire to colonial society to modern Mexico.

**ANT 4328 Maya Civilization** (3)

A survey of the culture and intellectual achievements of the ancient Maya civilization of Mesoamerica. Course includes: history and social-political structure, archaeology, agriculture and city planning, mathematics, hieroglyphics, astronomy, and calendars. No prerequisites.

**ANT 4329 Research in Maya Civilization** (3)

Concentration is on hieroglyphic research with the inscriptions and Maya codices (Dresden, Madrid and Paris) as resource material. Students will be instructed in research techniques, including calendric counting procedures, correction of scribal errors, reconstruction of almanacs and methodology of decipherment. Supervised group projects will apply techniques to original research and reporting of conclusions. Prerequisite: ANT 4328.

**ANT 4332 Latin America** (3)

Native cultures of Mexico, Central and South America; the lowland hunters and gatherers and the pre-Columbian Inca and Aztec Empires; the impact of the Spanish conquest.

**ANT 4340 Cultures of the Caribbean** (3)

An ethnological survey of native cultures and of the processes of culture contact and conflict in

the Caribbean and Circum-Caribbean region.

**ANT 4352 African Peoples and Cultures** (3)

This course includes a survey of the cultures and civilizations of sub-Saharan Africa. It includes discussions of history, geography, sociopolitical structures, religion, art, music, and oral literature. No prerequisite.

**ANT 4433 Psychological Anthropology** (3)

Cross-cultural studies in cognition, possession states, myth making and world view are examined. The interface of anthropology, psychology and psychiatry is reviewed.

**ANT 4451 Racial and Cultural Minorities** (3)

The study of selected ethnic and cultural groups, with particular emphasis on patterns of interethnic and intercultural relationships. Minority groups studied may include Afro-Americans, American Indians, Chicanos, Cubans, women, senior citizens or prisoners.

**ANT 4454 American Indians Today** (3)

An examination of the history of the American Indians since European contact, and their socio-cultural patterns as a contemporary American minority group.

**ANT 4460 Hallucinogens & Culture** (3)

Cross-cultural examination of the political, religious, and socio-cultural factors related to altered states of consciousness, including dreams and images. Applications to contemporary psychology are explored.

**ANT 4469 Special Topics in Medical Anthropology** (3)

Special courses dealing with advanced topics including: (1) folk medicine and ethnoscience; (2) nutritional anthropology; (3) anthropology and nursing; (4) medical anthropology and the elderly.

**ANT 4705 Applied Anthropology** (3)

The theory and practice of applied anthropology; cultural factors and planned community change; implications of case data for public policy. Emphasis will be placed on the processes of economic development and culture change in developing nations.

**ANT 4907 Directed Individual Study** (VAR)

Supervised readings and/or field research and training. May be repeated.

**ANT 4908 Directed Field Research** (VAR)

Permission of instructor required.

**ANT 4930 Topics in Anthropology** (3)

Special courses dealing with advanced topics in the major anthropological subdisciplines: (1) social and cultural anthropology, (2) applied anthropology, (3) physical anthropology, (4) linguistics, and (5) archaeology. Instruction by staff or visiting specialists. Topics to be announced. Instructor's permission required. May be repeated.

**ANT 5908 Directed Individual Study** (VAR)

Supervised readings and/or field research and training. May be repeated.

**ANT 5915 Directed Field Research** (VAR)

Permission of instructor required.



## Biological Sciences

Martin L. Tracey, *Associate Professor and Chairperson*

Abraham M. Stein, *Professor*

Chun-fan Chen, *Associate Professor*

Leon A. Cuervo, *Associate Professor*

George H. Dalrymple, *Associate Professor*

Walter M. Goldberg, *Associate Professor*

John C. Makemson, *Associate Professor*

Gerald L. Murison, *Associate Professor*

David W. Lee, *Assistant Professor*

Case K. Okubo, *Assistant Professor*

Carlo Ambrosino, *Research Scientist*

Patsy A. McLaughlin, *Research Scientist*

Josel Szepsenwol, *Research Scientist*

Anitra Thorhaug, *Research Scientist*

Jeffery Marcus, *Assistant Research Scientist*

LOCATION: Tamiami Campus only

DEGREE: Bachelor of Science

\*Students interested in teacher certification refer to the School of Education.

### LOWER DIVISION PREPARATION:

*Required Courses:* 6 semester hours of lectures and 2 semester hours of laboratories in each of the following areas: general biology, general chemistry, general physics and organic chemistry; 9 semester hours in college algebra, trigonometry and analytical geometry.

*Recommended Courses:* foreign language, and calculus.

*Remark:* 8 semester hours above the introductory level in biology may be counted toward the upper division major.

### UPPER DIVISION PROGRAM:

<i>Required Courses</i>	<i>Semester Hours</i>
1. PCB 3043 Fundamentals of Ecology	3
2. PCB 3513+L Genetics	4
3. BCH 3033+L Int. Biochemistry Biomolecules <sup>1</sup>	5
OR	
PCB 3203+L Cell Physiology	4
4. PCB 4723+L Animal Physiology	4
OR	
BOT 4504+L Plant Physiology	4
5. ZOO 3603+L Embryology	4
OR	
PCB 4254 Developmental Biology	3
OR	
BOT 4314C Plant Development	4
6. BSC 4931 Senior Seminar	4
7. Biological Sciences Electives <sup>2,3,4</sup>	10
8. Mathematics Courses chosen from: MAC 3411, MAC 3412, STA 3122, STA 3123, STA 3161	6-8 11-25
Electives	60

<sup>1</sup> BCH 3034 may be taken in place of BCH 3033

<sup>2</sup> APB 3253, BOT 3800, BOT 3823, BSC 3023, BSC 3033, BSC 3913, BSC 3949, BSC 4914, BSC 4949, BSC 6916, EUR 3013, MCB 3000 and PCB 3700 are not applicable to this requirement.

<sup>3</sup> Electives will be chosen in consultation with faculty advisor.

<sup>4</sup> One upper division course in botany (except for BOT 3800, 3823), and at least two courses at the 4000 level or above are required for graduation. A grade of C or better in all courses required for the major is necessary for graduation.

## SPECIAL PROGRAMS

### Bachelor of Science with Honors

#### Requirements:

Admission to the Honors Program:

- Permission of the Department. Application should be made after the second semester at FIU and two semesters before graduation.
- A minimal grade point average of 3.6 based upon total college records or FIU records alone, whichever is higher.

#### Graduation with Honors:

- A minimal grade point average of 3.7 based upon FIU records.
  - Completion of Honors Curriculum.
- General requirements for the Bachelor of Science degree in Biology must be met.
  - The final year of the study program and the title and description of the thesis must be recommended by the student's sponsor (advisor) and approved by the Curriculum Committee.
  - The Undergraduate Honors Thesis must be approved by the student's sponsor and presented in a seminar.

### Pre-Professional Curricula

Programs of study satisfying requirements for admission to colleges of medicine, dentistry and veterinary medicine arranged in consultation with faculty advisor. MAC 3411, CHM 3400, MCB 3023, and ZOO 3603 are recommended as fulfilling requirements of many professional schools.

### Certificate Program in Marine Sciences:

See section on certificate programs under Section of Arts and Sciences.

### Minor in Human Biology

Students may elect a minor in Human Biology by selecting four courses from the following list:

BSC 3023	(PCB 3702, PCB 3703,
APB 3253	PCB 3704, and PCB 4701
MCB 3000	are options for students
PCB 3513	who desire a more
PCB 3873	sophisticated course in
ZOO 3731	Human Physiology).
ZOO 3743	There are no prerequisites
PCB 3700	for BSC 3023, APB 3253,
	PCB 3701, ZOO 3731 and
	MCB 3000

### Master of Science in Biological Sciences

Cooperative program brochure available in Biological Science office.

## Course Descriptions

### Definition of Prefixes

APB — Applied Biology; BCH — Biochemistry; BOT — Botany; BSC — Introductory Biology; ENY — Entomology; MCB — Microbiology; OCB — Oceanography (Biological); PCB — Process Cell Biology; PLP — Plant

Pathology; ZOO — Zoology. Lectures/Laboratories. Laboratories should be taken concurrently with or subsequent to lectures. Students should register for each separately.

### APB 3253 Biological Basis of Human Sexuality (3)

The physiological development of the human organism as a sexual being will be treated, with a review of the psycho-social and psycho-sexual bases of human personality. Patterns of adult sexual behavior will be explored, with emphasis on achieving healthy human sexual attitudes.

### BCH 3033 Introductory Biochemistry-Biomolecules (4)

BCH 3033L Biochemistry Laboratory (1) Introduction to the chemistry of proteins, carbohydrates, lipids and their constituents. Principles of enzymology, bioenergetics and metabolism. Prerequisites: Organic Chemistry I and II or permission of instructor.

### BCH 3034 Introductory Biochemistry-Metabolism (4)

Metabolism of carbohydrates, lipids and nitrogenous substances; electron transport and oxidative phosphorylation. Prerequisites: Organic Chemistry I and II or permission of instructor.

### BCH 5315 Biochemistry I (4)

Chemical reactions and macromolecular properties of proteins, nucleic acids and polysaccharides. Genetic and evolutionary aspects of protein structure. Permission of instructor.

### BCH 5316 Biochemistry II (4)

Comparative biochemistry: metabolism and regulation of metabolism in microorganisms, plants and animals; mechanisms of enzyme reactions. Prerequisites: BCH 3033 or equivalent or permission of instructor.

### BOT 3353 Morphology of Tropical Plants (4)

The origin and evolution of land plants. Comparison of morphology, anatomy, reproduction and fossil records of major groups. Laboratory to include basic plant microtechnique. Prerequisite: a course in General Biology or permission of instructor.

### BOT 3663 Tropical Botany (4)

Vegetation, morphology, and physiology of plants in the tropics. Emphasis on tropical plants of economic importance. Course includes Lab. Prerequisite: one course in Botany or permission of instructor.

### BOT 3723 Taxonomy of Tropical Plants (4)

An introduction to higher plant taxonomy, including nomenclature, modern systems of angiosperm classification, and angiosperm evolution. Emphasis on identification of tropical plant families and plants of economic importance. Course includes Lab. Prerequisite: a course in Botany, or permission of instructor.

### BOT 3800 Plants and People (3)

A history of mankind's study and use of plants, and a survey of plants of economic importance.

### BOT 4314 Plant Development (4)

The development of seed plants, with particular reference to the anatomy, morphology and reproduction of tropical flowering plants of eco-

- onomic importance. Practical instruction in tissue and organ culture and propagation (seeds and soft and woody cuttings). Includes lab. Prerequisites: Plant Morphology and Plant Physiology.
- BOT 4504 Plant Physiology** (3)  
**BOT 4504L Plant Physiology Lab** (1)  
 Plant growth and metabolism in relationship to environment. Prerequisite: Organic Chemistry I.
- BOT 5665 Advanced Tropical Botany** (4)  
 A survey of subjects of current interest in tropical botany: physiological ecology, reproductive biology, architecture and demography. Includes a week of work in a tropical environment, and local field studies. Includes lab. Prerequisites: Two courses in Botany or permission of instructor.
- BSC 1010 General Biology I** (3)  
**BSC 1010L General Biology Lab** (1)  
 A survey of organismal biology; microbiology, botany and zoology.
- BSC 1011 General Biology II** (3)  
**BSC 1011L General Biology Lab** (1)  
 Biomolecules, cells, energy flow, genetics and physiology.
- BSC 3023 Human Biology** (3)  
**BSC 3023L Human Biology Lab** (1)  
 Human structure and function with emphasis on aspects that relate to human development, genetics and neurobiology. The relationship of these aspects to handicapping conditions with respect to mental retardation and behavioral disorders will be discussed. Primarily for non-science majors.
- BSC 3949 Cooperative Education in Biology** (3)  
 A student majoring in biological sciences may spend several terms fully employed in industry or government in a capacity relating to the major. Prerequisites: Permission of Co-op Education and major department.
- BSC 4104 Experimental Biology** (1-3)  
 Laboratory techniques used in biological research. The techniques covered will depend upon the instructor. May be repeated for credit with different instructors. Prerequisite: permission of instructor.
- BSC 4931 Senior Seminar** (1)  
 An exploration of various research works in biological sciences. Oral presentation by the students is required.
- BSC 4934 Topics in Biology** (1-3)  
 An intensive study of a particular topic or limited number of topics not otherwise offered in the curriculum.
- BSC 4949 Cooperative Education in Biology** (3)  
 A student majoring in biological sciences may spend several terms fully employed in industry or government in a capacity relating to the major. Prerequisites: Permission of Co-op Education and major department.
- BSC 5415 Animal Cells in Culture** (5)  
 The biology of animal cells cultured in semi-synthetic media will be studied. Topics considered will be cell nutrition and growth, cell cycle analysis, cell transformation and differentiation, heterokaryons and somatic cell genetics. Prerequisites: Biology majors or consent of instructor.
- BSC 5931 Graduate Seminar** (1)  
 Oral presentation of an assigned literature survey by senior and graduate students. Required of candidates in the Honors Program. Students may register for letter grade by oral presentation; or credit/no credit option by participation and submission of written report.
- 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. Prerequisite: Senior or graduate standing.
- BSC 6936 Topics in Biology** (1-3)  
 Same descriptions BSC 5935. Prerequisite: Graduate standing.
- MCB 3000 Introductory Microbiology** (3)  
**MCB 3000L Introductory Micro Lab** (1)  
 Basic concepts of microbes as pathogens, food spoilage and fermentative organisms. Microbial relationships to immunology, sanitation, pollution and geochemical cycling. Not applicable for majors in Biological Sciences or Medical Technology.
- MCB 3023 General Microbiology** (3)  
**MCB 3023L General Microbiology Lab** (1)  
 Introduction to the principles and techniques of microbiology, genetics, taxonomy, biochemistry and ecology of microorganisms. Prerequisites: 1 semester of Organic Chemistry; 2 courses in Biology.
- MCB 5505 Advanced Virology** (3)  
**MCB 5505L Advanced Virology Lab** (1)  
 Principles and methods of study of bacterial, plant, and animal viruses. Molecular aspects of viral development virus pathogens and carcinogens. Prerequisites: Biochemistry, Genetics, and Organic Chemistry.
- MCB 5735 Marine Microbiology** (3)  
**MCB 5735L Marine Microbiology Lab** (1)  
 Physiological-ecological study of the distribution *in situ* activity and biology of marine bacteria; public health significance of pathogens and microbial toxins conveyed to man; diseases of marine animals. Prerequisites: General Microbiology.
- OCB 4010 Biological Oceanography** (3)  
 The basic aspects of biological, geological, chemical and physical oceanographic processes as they relate to marine organisms. Prerequisites: 8 semester hours of Biology.
- OCB 4674L 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: concurrent registration in OCB 4010; ZOO 3253 or a previous course in marine biology; registration in the Marine Science certificate program and permission of instructor.
- OCB 5635 Coral Reef Ecology** (3)  
**OCB 5635L Coral Reef Ecology Lab** (1)  
 Zoogeography, ecology and zonation, morphology, and paleontology of coral reefs around the world with emphasis on Caribbean forms. Growth, physiology, productivity as well as effects of predation, competition and pollution on coral reefs are also discussed.
- ORH 441C Applied Horticultural Physiology** (4)  
 Nursery and field environments and micro-climates in relationship to plant growth. Soils and plant nutrition. Chemical regulation of plant growth. Course includes Lab. Prerequisite: BOT 4504.
- PCB 3043 Fundamentals of Ecology** (3)  
**PCB 3043L Fundamentals of Ecology Lab** (1)  
 The basic principles governing the interaction of organism and environment. Trophic structure and energetics of ecosystems; biogeochemical cycles; limits and controlling factors in organismic distribution and abundance; biological interactions; species diversity; evolution of populations and communities; the impact of man. Lecture and field trips. Prerequisites: One year of biology, basic chemistry.
- PCB 3203 Cell Physiology** (3)  
**PCB 3203L Cell Physiology Lab** (1)  
 A discussion of the physiology of cells from the biochemical and biophysical points of view. Enzyme structure and function, cellular metabolism and its regulation. Energy transductions and conservation, transfer of information: electrical and chemical signals. Cell cycle and cell division. Prerequisites: 8 semester hours of General Biology, General Physics, and Organic Chemistry.
- PCB 3510 Issues in Genetics-recDNA and IQ** (3)  
 Examination of the principles of Mendelian and molecular genetics. These basic principles will then be employed in interpreting for discussion recent developments in recDNA engineering, examination of the inheritance of quantitatively varying traits and discussion of IQ inheritance. Suitable for non-science majors.
- PCB 3513 Genetics** (3)  
**PCB 3513L Genetics Lab** (1)  
 Mendelian inheritance and introduction to molecular genetics.
- PCB 3612 Sociobiology** (3)  
 A study of the population genetics-ethology based explanations of social behavior in animals.
- PCB 3700 Foundations of Human Physiology** (3)  
**PCB 3700L Foundations of Human Physiology Lab** (1)  
 Functional survey of the organ systems of the human body. Intended primarily for non-science majors.
- PCB 3702 Intermediate Human Physiology** (3)  
**PCB 3702L Interim Human Phys Lab** (1)  
 Functions of the human body and the physicochemical mechanisms responsible for each organ's function. Prerequisite: General Biology.
- PCB 3703 Human Physiology I** (3)

- PCB 3703L Human Physiology I Lab** (1)  
Basic facts and concepts relating to the physiology of cells and nervous, muscular, and cardiovascular systems, with emphasis on regulatory mechanisms and abnormal physiology. Prerequisites: One year of Biology or Zoology; Chemistry, and Physics.
- PCB 3704 Human Physiology II** (3)  
**PCB 3704L Human Physiology II Lab** (1)  
Physiology of respiratory, gastrointestinal, excretory, endocrine and reproductive systems. Continuation of PCB 3703. Prerequisites: One year of Biology or Zoology; Chemistry, and Physics.
- PCB 3873 Biological Foundations of Behavior** (3)  
Biological bases of behavior emphasizing neural and hormonal mechanisms of integrated behavior. Lecture, conference, library or laboratory projects.
- PCB 4233 Immunology** (3)  
**PCB 4233L Immunology Lab** (1)  
Fundamentals of immunology including antibody structure, immunopathology, molecular recognition at cell surfaces and immunological aspects of cancer biology. Prerequisites: General Microbiology or permission of instructor.
- PCB 4254 Developmental Biology** (3)  
**PCB 4254L Developmental Biology Lab** (1)  
Comprehensive survey of principles of development and critical analysis of methods used to study these problems. Prerequisite: PCB 3513 and PCB 3203 or BCH 3033.
- PCB 4324 Terrestrial Ecology** (3)  
**PCB 4324L Terrestrial Ecology Lab** (1)  
A comprehensive survey of the planet's major terrestrial ecosystems and their characteristics. Emphasis on human impact and management of terrestrial biological resources. Specific treatment of zoogeography, pest control, agricultural ecology and management of wild areas. Prerequisites: One year of Biological Science and Ecology or permission of instructor.
- PCB 4524 Molecular Biology** (3)  
**PCB 4524L Molecular Biology Lab** (1)  
An advanced treatment of nucleic acid and protein biochemistry. Emphasis will be placed on synthesis of macromolecules with topics to cover materials of recent interest in molecular genetics, such as genetic engineering, gene splicing and restriction enzymes. Prerequisites: Biochemistry or Genetics.
- PCB 4673 Evolution** (3)  
**PCB 4673L Evolution Lab** (1)  
A study of the synthetic theory of evolution, its historic and experimental justification and the mechanisms of natural selection. Prerequisites: Genetics, Ecology or permission of instructor.
- PCB 4701 Human Systemic Physiology** (3)  
Selected topics in human physiology with emphasis on topics of clinical significance. Prerequisites: Introductory human physiology or a college level course in biology or chemistry.
- PCB 4723 Animal Physiology** (3)  
**PCB 4723L Animal Physiology Lab** (1)  
Advanced study of physiological mechanisms employed by animals to maintain function of the organ systems and to interact with the environment. Prerequisites: Organic Chemistry and Cell Physiology or Biochemistry.
- PCB 5195 Histochemistry/Microtechnique** (3)  
**PCB 5195L Histochem/Microtech Lab** (1)  
Chemistry and use of fixatives and dyes; histochemistry emphasizes procedures used in research and pathology labs including techniques for enzymes, protein, carbohydrate, nucleic acids and lipids. Prerequisites: Biochemistry or Cell Physiology.
- PCB 5205 Cell Physiology and Biophysics** (3)  
Fundamental biophysical properties of membranes, transport of water and solutes across biological membranes, passive and active electrical phenomena in membrane systems. Biochemistry and biophysics of contractile mechanisms. Transfer of information from cell to cell. Prerequisites: Calculus and Physical Chemistry or permission of instructor.
- PCB 5259 Topics in Developmental Biology** (3)  
Molecular and cellular mechanisms in the development of plants and animals. Prerequisites: Senior status or permission of instructor.
- PCB 5615 Molecular and Organismal Evolution** (3)  
The evolutionary relationships among nucleotides and proteins as well as the processes which yield these relationships are examined. The possible molecular events leading to speciation will then be considered. Prerequisites: Genetics and Biochemistry.
- PCB 5835 Neurophysiology** (3)  
**PCB 5835L Neurophysiology Lab** (1)  
Comparative neurophysiology; physico-chemical mechanisms of resting and action potentials; synaptic transmission; neural coding and integration; sensory-motor function and neurophysiological basis of behavior. Prerequisites: Biochemistry, Cell Physiology, Calculus.
- PCB 5936 Topics in Genetics** (3)  
Areas of genetics not covered in most introductory courses will be examined; for example cytoplasmic inheritance, immunogenetics, eukaryotic genes, and population genetics. In addition, selected areas such as chromosome structure and recombination may be examined in depth. Prerequisites: PCB 3513 and PCB 3203, BCH 3033 or BCH 3034.
- PCB 6175 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 instructor.
- PLP 4001 Plant Pathology** (4)  
The physiological interactions between plant host and pathogen, including a survey of the major disease problems of tropical plants. Introduction to the concept of integrated pest management. Includes lab. Prerequisite: BOT 4504 or permission of Instructor. A course in Microbiology recommended.
- ZOO 3253 Marine Invertebrate Zoology** (3)  
**ZOO 3253L Marine Invert Zoology Lab** (1)  
Taxonomy, anatomy, development, physiology and ecology of major invertebrate phyla, excluding insects. Emphasis on marine invertebrates. Prerequisites: One year of biology or permission of instructor.
- ZOO 3513 Ethology** (3)  
The course is designed to introduce the student to the biological basis of behavior and to the ecological and evolutionary consequences of various behaviors. Prerequisites: One semester of zoology or two semesters of general biology.
- ZOO 3603 Embryology** (3)  
**ZOO 3603L Embryology Lab** (1)  
Animal morphogenesis. Laboratory must be taken with lecture. Prerequisites: One year of general biology with laboratory or general zoology and general botany with laboratory.
- ZOO 3731 Human Anatomy** (3)  
**ZOO 3731L Human Anat Demonstration** (1)  
Survey of organ systems of the human body with major emphasis on the skeletal, muscular and peripheral nervous system. Demonstrations of the prosected human cadaver. Prerequisites: One year of general biology with laboratory or general zoology and general botany with laboratory.
- ZOO 3733 Human Gross Anatomy I** (3)  
**ZOO 3733L Human Gross Anat I Lab** (1)  
Structure and function of various tissues, organs and organ systems of the human body. Dissection of human cadaver material to reveal the relationships of the various organ systems of the body. Prerequisites: One year of general biology with laboratory or general zoology and general botany with laboratory.
- ZOO 3734 Human Gross Anatomy II** (3)  
**ZOO 3734L Human Gross Anat II Lab** (1)  
Continuation of ZOO 3733. Prerequisite: One course in physiology; one course in anatomy.
- ZOO 4424 Herpetology** (3)  
Study of the biology of reptiles and amphibians with emphasis on the natural history and ecology of local species. Prerequisites: One year of Biological Sciences and Ecology or permission of instructor.
- ZOO 3753 Histology** (3)  
**ZOO 3753L Histology Lab** (1)  
Microscopic anatomy of cells, tissues and organs. Prerequisite: General Introductory College Biology and Organic Chemistry.
- ZOO 4743 Neuroscience** (3)  
**ZOO 4743L Neuroscience Lab** (1)  
Structure and function of the human nervous system. Dissection and demonstration of the various parts of the human brain. Prerequisites: One course in physiology plus one course in Human Anatomy.
- ZOO 5265 Biology of Crustaceans** (3)  
**ZOO 5265L Biology of Crustaceans Lab** (1)  
Morphology, physiology, systematics and evolution of crustaceans.
- ZOO 5335 Systematic Zoology** (3)  
A practical and theoretical approach to evolutionary zoology. Prerequisites: 8 semester hours of biology or zoology.

# Chemistry

Arthur W. Herriott, *Professor*  
 Howard Moore, *Professor*  
 John W. Sheldon, *Professor*  
 Leonard S. Keller, *Associate Professor*  
 John H. Parker, *Associate Professor*  
 John T. Landrum, *Assistant Professor*  
 Zaida C. Martinez, *Instructor*

The Chemistry program is part of the Department of Physical Sciences. Additional information and counseling may be obtained from the Departmental Office. No D grades will be allowed in courses required for the major.

## Bachelor of Science

This program prepares the student for graduate study or a professional career as a chemist in industry, in government service, or in secondary school teaching. Students interested in secondary teacher certification should contact the School of Education at 554-2721.

## LOWER DIVISION PREPARATION:

**Required Courses:** one year of general chemistry with laboratory; algebra and trigonometry, (advanced high school courses in algebra and trigonometry are acceptable).

## LOWER OR UPPER DIVISION

### PREPARATION:

Differential and Integral Calculus I & II (MAC 3411 & 3412); Organic Chemistry I & II (CHM 3210, 3210L & 3211, 3211L); Physics with Calculus (PHY 3048, 3048L, 3049, 3049L).

### UPPER DIVISION PROGRAM:

A total of *at least* 41 units in chemistry to include the following:

	<i>Semester Hours</i>	
CHM 3120	Quantitative Analysis	3
CHM 3120L	Quantitative Analysis Lab	2
CHM 3410	Physical Chemistry I	3
CHM 3410L	Physical Chemistry Lab I	1
CHM 3411	Physical Chemistry II	3
CHM 3411L	Physical Chemistry Lab II	1
CHM 4130	Modern Analytical Chemistry	3
CHM 4130L	Modern Analytical Chemistry Lab	2
CHM 4220	Advanced Organic Chemistry	3
CHM 4320L	Research Techniques	2
CHM 4490L	Molecular Spectroscopy Lab	1
CHM 4610	Advanced Inorganic Chemistry	3
CHM 4910L, CHM 4911L	Research and Independent Study in Chem.	3
CHM 4930	Senior Seminar	1
		31

At *least* six additional units in chemistry to include either:

CHM 4490	Molecular Spectroscopy	3
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	or	
PHY 4604	Quantum Mechanics	3
One additional senior-level (4000) chemistry course		3
		6

At *least* three additional units to be chosen from the following list:

MAP 3302	Differential Equations	3
COP 3112	Introduction to Computers I	3
MAC 3413	Multivariable Calculus	3
<i>Electives:</i>		20
		60

## Bachelor of Arts

This program is designed for students preparing for careers in medicine, dentistry, environmental studies, veterinary medicine, patent law, secondary science education, or criminalistics chemistry. Students should complement the basic curriculum with suitable electives chosen in consultation with an advisor. Students interested in secondary teacher certification should contact the School of Education.

## LOWER DIVISION PREPARATION:

**Required Courses:** one year of general chemistry with laboratory; one year of general biology with laboratory; algebra with trigonometry (advanced high school courses in algebra and trigonometry are acceptable).

## LOWER OR UPPER DIVISION

### PREPARATION:

Differential and Integral Calculus I & II (MAC 3411 & 3412); Organic Chemistry I & II (CHM 3210, 3210L & 3211, 3211L); Physics (either PHY 3048, 3048L and 3049, 3049L or PHY 3050, 3050L and 3051, 3051L).

### UPPER DIVISION PROGRAM:

A total of *at least* 16 units in chemistry to include the following:

	<i>Semester Hours</i>	
CHM 3120	Quantitative Analysis	3
CHM 3120L	Quantitative Analysis Lab	2
CHM 3400	Physical Chemistry for Life Sciences	3
CHM 3400L	Physical Chemistry for Life Sciences Lab	1
CHM 4220	Advanced Organic Chemistry	3
CHM 4230	Structure Determination Lab	1
And at <i>least</i> one additional senior level (4000) course in chemistry		3
		16
<i>Electives:</i>		44
		60

## Minor in Chemistry

Requires a total of *at least* 23 units in chemistry to include:

	<i>Semester Hours</i>	
General Chemistry I & II (CHM 3045, 3045L and 3046 and 3046L)		9
Quantitative Analysis (CHM 3120, 3120L)		5
Organic Chemistry I & II (CHM 3210, 3210L and 3211, 3211L)		9
		23

## Criminalistics-Chemistry Program

Criminalistics-Chemistry Core Requirements: Same as requirements for the BA degree in Chemistry. (Degree granted by Department of Physical Sciences.)

## Chemistry Electives:

If the student chooses the BA degree in Chemistry, he/she should elect at least one of the following:

	<i>Semester Hours</i>
CHM 4130, CHM 4130L	
Modern Analytical Chemistry	5
CHM 4490, CHM 4490L	
Spectroscopy and Molecular Structure	4

## Internship:

A 3-6 credit internship in the laboratory of a participating criminal justice agency.

## Criminal Justice Coursework:

The student should elect 9 credits of criminal justice courses in consultation with an advisor in the Department of Criminal Justice, 940-5850.

## Electives:

Coursework in the behavioral and political sciences, as well as upper division coursework in the biological sciences, is recommended to total 60 semester hours.

## Master of Science in Chemistry

The Department of Physical Sciences at the University participates jointly with the Department of Chemistry at Florida Atlantic University in offering the M.S. in Chemistry. Students entering the program must have a B.S. (or equivalent) and must satisfy the requirements for admission to the FAU master's program. Students may take a substantial part of their course work at FIU and may undertake their research under the supervision of an FIU faculty member. Two Florida International University faculty members serve on each student's advisory committee. The degree is awarded by Florida Atlantic University. Students in the program must satisfy the FAU requirements for the M.S. in Chemistry.

## Cooperative Education

Students seeking the baccalaureate degree in chemistry may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Office of Academic Affairs. The student spends one or two semesters fully employed in an industrial or governmental chemistry laboratory. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

## Course Descriptions

Note: Laboratories may not be taken prior to the corresponding course. Laboratories must be taken concurrently where noted. Students must register for the laboratory separately.

### Definition of Prefixes

CHM — Chemistry; CHS — Chemistry-Specialized; ISC — Interdisciplinary Natural Sciences.

CHM 3030	Survey of General Chemistry	(3)
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**CHM 3030L Survey of General****Chemistry Lab (1)**

A basic one-semester survey course in chemistry for non-majors. Topics include atomic structure, stoichiometry, bonding, equilibrium, electrochemistry. Does not fulfill requirements for chemistry, biology or pre-med majors. Laboratory must be taken concurrently with the course. Prerequisite: One year of high school or college algebra.

**CHM 3045 General Chemistry I (4)****CHM 3045L General Chemistry Lab I (1)**

Fundamental principles of general chemistry: States of matter, atomic structure, stoichiometry, chemical bonding, acid-base reactions, gas laws. Concurrent registration in both lecture and laboratory is required. Prerequisite: Second year high school algebra or college algebra.

**CHM 3046 General Chemistry II (3)****CHM 3046L General Chemistry Lab II (1)**

Continuation of General Chemistry I (CHM 3045). Fundamental principles of chemistry: thermodynamics, solutions, kinetics, equilibrium and electrochemistry. Concurrent registration in both lecture and laboratory is required. Prerequisites: CHM 3045, 3045L.

**CHM 3120 Quantitative Analysis (3)****CHM 3120L Quantitative Analysis Lab (2)**

Fundamentals of classical quantitative analysis. Topics include theory of precipitation, acid-base, and oxidation-reduction reactions, as well as an introduction to spectrophotometric methods of analysis, ion-exchange techniques and complex formation titrations. Laboratory must be taken concurrently with the course. Prerequisites: CHM 3045, CHM 3045L, CHM 3046, CHM 3046L.

**CHM 3200 Survey of Organic Chemistry (3)****CHM 3200L Survey of Organic Chemistry Lab (1)**

A basic one-semester survey course in organic chemistry for nonmajors presenting a broad background in the reactions and structures of organic molecules. Does not fulfill requirements for chemistry, biology, or pre-med majors. Laboratory must be taken concurrently with the course. Prerequisites: CHM 3030, CHM 3030L.

**CHM 3210 Organic Chemistry I (4)****CHM 3210L Organic Chemistry Lab I (1)**

An introduction to chemical bonding and atomic structure theory as it pertains to the chemistry of carbon compounds. Correlation between structure and reactivity of organic molecules followed by a systematic look at the various reaction types using reaction mechanisms as a tool for study. Concurrent registration in both lecture and laboratory is required. Prerequisite: CHM 3046, CHM 3046L.

**CHM 3211 Organic Chemistry II (3)****CHM 3211L Organic Chemistry Lab II (1)**

Continuation of CHM 3210, 3210L — Concurrent registration in lecture and laboratory required. Prerequisites: CHM 3210, 3210L.

**CHM 3400 Physical Chemistry for the Life Sciences (3)****CHM 3400L Physical Chemistry for the Life Sciences Lab (1)**

Principles of physical chemistry with particular

application to the life sciences. Topics include thermodynamics, equilibria, electrochemistry, and reaction kinetics. Laboratory must be taken concurrently with the course. Prerequisites: MAC 3411, 3412; PHY 3048, 3048L PHY 3049, 3049L, or PHY 3050, 3050L, and 3051, 3051L.

**CHM 3410 Physical Chemistry I (3)****CHM 3410L Physical Chemistry Lab I (1)**

Principles of thermodynamics, gas laws, kinetic theory of gases chemical equilibrium. Laboratory must be taken concurrently with the course. Prerequisites: MAC 3411, 3412; PHY 3048, 3049, and CHM 3120, 3120L, 3211, and 3211L.

**CHM 3411 Physical Chemistry II (3)****CHM 3411L Physical Chemistry Lab II (1)**

A continuation of CHM 3410, 3410L. Phase equilibrium of solids, liquids and gases, solutions of electrolytes and non-electrolytes, electrochemistry, kinetics in the gas phase and in solution, colloids and macromolecules. Laboratory must be taken concurrently with the course. Prerequisites: CHM 3410, 3410L.

**CHM 3949-CHM 4949 Cooperative Education in Chemistry (3)**

One semester of full-time supervised work in an outside laboratory. Limited to students admitted to the University Co-op Program. A written report and supervisor evaluation will be required of each student.

**CHM 4090L Introduction to Scientific Glassblowing (1)**

Basic glassblowing operations with glass tubing and rod are taught. Emphasis is on making and repair of scientific glassware. No prerequisites.

**CHM 4130 Modern Analytical Chemistry (3)****CHM 4130L Modern Analytical Chemistry Lab (2)**

Instrumental methods of chemical analysis, including electroanalytical methods, gas and liquid chromatography, mass spectrometry, x-ray fluorescence, and spectrophotometric methods. Laboratory must be taken concurrently with the lecture. Prerequisites: CHM 3120, 3120L, CHM 3210, 3210L, CHM 3211, 3211L, PHY 3048, 3048L, PHY 3049, 3049L.

**CHM 4180 Special Topics in Analytical Chemistry (VAR)**

An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 4130 or permission of instructor.

**CHM 4220 Advanced Organic Chemistry (3)**

An intensive examination of the major areas of contemporary organic chemistry. Reactive intermediates, pericyclic reactions, molecular rearrangements, and modern synthetic methods are among the topics. Prerequisites: CHM 3210, CHM 3211.

**CHM 4230L Structure Determination Laboratory (1)**

The qualitative analysis of organic compounds using modern spectroscopic, chromatographic and chemical methods. (Restricted to B.A. Chemistry majors). Prerequisites: CHM 3210, 3210L, CHM 3211, 3211L.

**CHM 4300 Bio-organic Chemistry (3)**

Chemistry of naturally occurring organic compounds of biological importance. The relation-

ship between organic chemistry and the chemical reactions which constitute the living organism. Prerequisites: CHM 3210, CHM 3211.

**CHM 4310 Special Topics in Organic Chemistry (VAR)**

An intensive examination of one or more areas selected by instructor and students. Prerequisites: CHM 3211 and permission of instructor.

**CHM 4320L Research Techniques in Chemistry (2)**

Practical instruction in the more advanced manipulations and procedures of the modern chemistry laboratory. This course is designed to prepare a student for research in chemistry and is a prerequisite for independent study (CHM 4910L, 4911L, 4912 L). Prerequisites: CHM 3120, 3211, 3410, (CHM 3410, may be taken concurrently.)

**CHM 4490 Spectroscopy and Molecular Structure (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, photoelectron, 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 4490L Spectroscopy and Molecular Structure Lab (1)**

The theory of spectroscopy and the use of modern instrumentation to investigate molecular structure. Prerequisites: CHM 3210, 3210L, 3211, 3211L. Co-requisite: PHY 4604 or CHM 4490.

**CHM 4580 Special Topics in Physical Chemistry (VAR)**

An intensive examination of one or more areas selected by the instructor and students. Prerequisite: Permission of instructor.

**CHM 4610 Advanced Inorganic Chemistry (3)**

Atomic structure, periodicity, bonding and structure of inorganic compounds, solution chemistry, ligand field theory, organometallic chemistry, and specific chemistry of the elements. Prerequisites: CHM 3210, 3211. Co-requisite: CHM 3400 or CHM 3410.

**CHM 4680 Special Topics in Inorganic Chemistry (VAR)**

An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 4610 or permission of instructor.

**CHM 4910 Research and CHM 4911 Independent CHM 4912 Study in Chemistry (VAR)**

The student works directly with a professor on a research project. It is anticipated that the student presents the results of the project as a seminar (see CHM 4930). Credit is assigned on the basis of 4 hr/wk or laboratory/library work per 1 hr of credit. It is recommended that the credits required of all BS chemistry majors be taken over 2 semesters. A written report is required.

**CHM 4930 Senior Seminar** (1)  
Each student will make an oral presentation to faculty and other students enrolled in the seminar course. The subject of the seminar may be either a report of results of an independent study project or a survey of the recent literature on an assigned topic.

**CHM 5181 Special Topics in Analytical Chemistry** (VAR)  
An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 4130 or permission of instructor.

**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 instructor.

**CHM 5260 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. Prerequisite: CHM 4220 or permission of 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. Prerequisite: CHM 4220 or permission of instructor.

**CHM 5380 Special Topics in Organic Chemistry** (VAR)  
An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 4220 or permission of instructor.

**CHM 5440 Kinetics and Catalysis** (3)  
Theory of elementary reactions, activated complex theory, mechanisms of complex reactions. Prerequisites: CHM 3411, MAP 3302.

**CHM 5517 Solid State** (3)  
Crystalline form of solids, lattice dynamics, metals, insulators, semi-conductors, and dielectric materials. Prerequisite: CHM 4490 or PHY 4604.

**CHM 5581 Special Topics in Physical Chemistry** (VAR)  
An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 3411 or permission of instructor.

**CHM 5650 Physical Inorganic Chemistry** (3)  
Introduction to use of physical methods to determine structure of inorganic compounds. Prerequisite: CHM 4610 or permission of instructor.

**CHM 5681 Special Topics in Inorganic Chemistry** (VAR)  
An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 4610 or permission of instructor.

**CHS 4100L Radiochemical Techniques Lab** (2)  
Production, isolation, methods of detection, counting statistics and estimation of radioisotopes. Applications to chemical, physical and biological problems. Laboratory must be taken concurrently with the course. Prerequisites: CHM 3045, 3046, 3120, 3120L; MAC 3411, 3412.

**ISC 4041 Scientific Literature** (1)  
This course presents a perspective on the scientific literature and scientific documentation. Problems in using and searching the scientific literature will be specifically designed to meet the needs of various disciplines, e.g. chemistry, environmental science, physics, biology. Prerequisites: 16 semester hours of science.

**OCC 3002 Chemical Oceanography** (3)  
**OCC 3002L Chemical Oceanography Lab** (1)  
Chemical composition and properties of seawater including major and minor elements, dissolved gases, buffering systems. Lecture and lab should be taken concurrently. Prerequisites: one year of general chemistry with lab; quantitative analysis with lab.

GLY 3200	Mineralogy	3
GLY 3200L	Mineralogy Lab	1
GLY 3220	Optical Mineralogy	3
GLY 3220L	Optical Mineralogy Lab	1
GLY 3760	Geological Map Analysis	2
OCE 3322	Physical Oceanography	3
MET 4701	Meteorology	3
GLY 4315	Ingeous and Metamorphic Petrology	3
GLY 4315L	Ingeous and Metamorphic Petrology Lab	1
GLY 4401	Structural Geology	3
GLY 4401L	Structural Geology Lab	1
GLY 4555	Sedimentology	3
GLY 4555L	Sedimentology Lab	1
GLY 4650	Paleobiology	3
GLY 4650L	Paleobiology Lab	1
GLY 4791	Cartography and Geologic Surveying	3
GLY 4910	Independent Study	3

*Electives:* \_\_\_\_\_ **21**  
\_\_\_\_\_ **60**

## Earth Sciences

Florentin J.-M.R. Maurrasse, *Associate Professor*  
Grenville Draper, *Assistant Professor*

Earth Sciences is part of the Department of Physical Sciences. The program is designed to thoroughly prepare the student in the geological, marine sciences. Well-equipped laboratories and extensive specimen collections expose students to apparatus and techniques not normally encountered in undergraduate programs. Additional information may be obtained from the Departmental Office. No D grades will be allowed in courses required for the major.

### Bachelor of Science

This program prepares the student for graduate study or a career in the earth, marine, or environmental sciences.

### LOWER DIVISION PREPARATION:

*Required Courses:* 4 semester hours of general biology; 4 semester hours of physical geology or equivalent; 4 semester hours of historical geology; 6 semester hours of trigonometry and analytical geometry.

### LOWER OR UPPER DIVISION

#### PREPARATION:

At least 6 semester hours of differential and integral calculus; at least 8 semester hours of general chemistry (including laboratory); at least 8 semester hours of general physics with calculus (including laboratory).

#### UPPER DIVISION PROGRAM:

*Required Courses:* At least 39 semester hours of earth science are required including those marked with an asterisk:

		<i>Semester Hours</i>
AST 3100	Modern Astronomy	3
GEO 3200	Physical Geography	3
GEO 3200L	Physical Geography Lab	1

### Bachelor of Arts

This program is for the student who requires a broad background in earth sciences for a career in science education or public or private administration dealing with earth and environmental sciences.

### LOWER DIVISION:

4 semester hours of general biology; 4 semester hours of physical geology or equivalent; at least 6 semester hours of trigonometry and analytical geometry at least 8 semester hours of general chemistry.

### UPPER DIVISION PROGRAM:

At least 24 semester hours selected from the following. In the event of some of these courses being unavailable students may substitute another earth or environmental course at their advisors' discretion.

		<i>Semester hours</i>
AST 3100	Modern Astronomy	3
MET 4701	Meteorology	3
GEO 3200	Physical Geography	3
GEO 3510	Earth Resources	3
OCE 3014	Physical Oceanography	3
EVS 4164	Applied Environmental Geology	3
EVR 4211	Water Resources	3
OCB 3010	Biological Oceanography	3
GLY 4650	Paleobiology	3
GLY 3200	Mineralogy	3
GLY 3760	Geological Map Analysis	2
GLY 4401	Structural Geology	3
GLY 4791	Cartography and Geologic Surveying	3

(Note: Where a laboratory course is offered with a course student must take that laboratory).

*Electives:* \_\_\_\_\_ **36**  
\_\_\_\_\_ **60**

**Cooperative Education**

Students seeking the baccalaureate degree in Earth Sciences may also take part in the Cooperative Education Program conducted with the Department of Cooperative Education in the Office of Academic Affairs. The student spends one or two semesters fully employed in industry or a government agency. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

**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**

EAS — Earth Science, EVS — Environmental Science; GEO — Geography-Systematic; GLY — Geology; MET — Meteorology; OCE — Oceanography; OCG — Oceanography-Geological; OCP — Oceanography-Physical.

**AST 3100 Modern Astronomy** (3)  
The structure and evolution of our solar system is studied, with particular emphasis on physical concepts. Topics will include astronomical coordinate systems, celestial mechanics, the earth's motions, and a description of the solar system. Prerequisites: College algebra and geometry.

**EVS 4164 Applied Environmental Geology** (3)  
**EVS 4164L Applied Environmental Geology Lab** (1)

A survey of the geological and geographical factors critical to man's attempt to contend with natural processes. Construction problems, sewers, waste disposal, dams, ground water, and terrain evaluation in relation to the nature of the underlying substratum. Principles illustrated from South Florida and the Caribbean region in particular. Study of the geological factors involved in future development and growth of these areas, and conservation methods in relation to the geology of these areas. Prerequisites: GLY 3106, GEO 3200, and a sound background in mathematics, physics, and chemistry. Laboratory must be taken concurrently with course.

**GEO 3200 Physical Geography** (3)  
**GEO 3200L Physical Geography Lab** (1)

Survey of the physical environment relevant to studies in regional geography and earth sciences. Natural evolution of landforms, and the interacting processes responsible for these features. Environmental modifications and deteriorations caused by human interaction. Effects of these changes: socio-economic impacts and geographic problems. Case studies illustrated from South Florida and the Caribbean region.

**GEO 3510 Earth Resources** (3)  
A course for non-majors dealing with the nature, origin, and distribution of mineral resources. Geology of petroleum, coal, metals, etc., and problems of their exploitation and depletion.

**GLY 1015 Physical Geology** (3)  
**GLY 1015L Physical Geology Lab** (1)  
A basic introduction to geological materials, structures, and processes. Properties of the common minerals and rocks, evolution of surface

features and the internal constitution of the earth are all discussed. One or two field trips are expected. No prerequisites. Lecture and lab should be taken concurrently.

**GLY 1100 Historical Geology** (3)  
**GLY 1100L Historical Geology Lab** (1)  
An introduction to the geological history of the earth and the geological time scale. Evolution of animals and plants. Prerequisite: GLY 1015 or GLY 3850 or equivalent. Lecture and lab should be taken concurrently.

**GLY 3157 Elements of Caribbean Geology** (3)  
A survey of the geology of the Caribbean and neighboring regions in view of current data and modern concepts of global tectonics. The course summarizes the important points of Caribbean and Central American geology in their relation to mineral and energy resources; natural environmental disasters, especially seismic zones; agriculture; and the geologic potentials for future development and industrialization.

**GLY 3200 Mineralogy** (3)  
**GLY 3200L Mineralogy Lab** (1)  
Elementary crystallography; fundamentals of crystal chemistry and physical mineralogy. Classification of common economic and rock forming minerals; structure and classification of silicate minerals. Study of geometric and atomic crystal models and principles, and interpretation of x-ray diffraction and fluorescence techniques. Prerequisites: physical geology or equivalent and general chemistry. Laboratory must be taken concurrently with course.

**GLY 3322 Optical Mineralogy** (3)  
**GLY 3322L Optical Mineralogy Lab** (1)  
Principles and use of the polarizing petrographic microscope. Optical properties of isotropic, uniaxial and biaxial minerals; solution of optical problems by use of stereographic projections. Prerequisite: GLY 3200 or equivalent. Laboratory must be taken concurrently with course.

**GLY 3760 Geological Map Analysis** (2)  
Laboratory course dealing with analysis of geological maps and sections; theory and method of interpretation of surface outcrops on maps. Properties of simple geological structures. Recommended to be taken prior to GLY 4401 and GLY 4791. Prerequisites: trigonometry, physical geology or equivalent (e.g. MAC 3132, GLY 3850 or equivalents).

**GLY 3850 Environmental Geology** (3)  
**GLY 3850L Environmental Geology Lab** (1)  
The composition and structure of the earth, the internal and external forces acting upon it and the resulting surface features. Case studies and general principles illustrated from South Florida and the Caribbean. Two field trips expected. No prerequisites.

**GLY 3949/GLY 4949 Cooperative Education in Earth Science** (3)  
One semester of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluations will be required for each student.

**GLY 4190 Caribbean Earth Sciences Seminar** (3)  
Discussion of various topics dealing with geographic and geologic problems involving local, national, and international influence on economic life. Similar discussion will be held on oceanographic problems related to both the aquatic and sea-bed resources. Guest speakers in the earth and social sciences will present lectures pertinent to their respective fields. Prerequisite: GLY 3157, or instructor's permission.

**GLY 4240 Geochemistry** (3)  
Origin of the chemical elements of common rock-forming minerals. Atomic theory, bond theory, lattice types, the interaction of electromagnetic waves and solids. Crystal chemistry of common oxides, sulfides, and rock-forming minerals. Geochemical cycles presently operating in the earth's atmosphere, hydrosphere, and lithosphere. Case studies in the Caribbean. Prerequisites: Chemistry, physics, mathematics and a sound background in the earth sciences.

**GLY 4315 Igneous and Metamorphic Petrology** (3)  
**GLY 4315L Igneous and Metamorphic Petrology Lab** (1)  
Genesis, composition, and classification of igneous and metamorphic rocks. Includes studies of experimental solid-liquid phase equilibria and mineral stabilities of silicate systems. Prerequisite: GLY 3322. Laboratory must be taken concurrently with course.

**GLY 4401 Structural Geology** (3)  
**GLY 4401L Structural Geology Lab** (1)  
Nature and origin of rock structures and deformations, primary structures, geometry and description of folds, faults, minor structures, cleavage, jointing, lineations, polyphase deformation and structural petrology. Topics in geotectonics and global tectonics with special reference to the Caribbean. Prerequisites: physical geology or equivalent, and a sound background in mathematics. Laboratory must be taken concurrently with course.

**GLY 4450 Geophysics** (3)  
A survey of the different principles and methods of measurements of the physical properties of the earth and the moon; seismic, magnetic, electrical, thermal and gravitational. The implications of the results in terms of the earth's structure, composition, evolution and present state. Case studies illustrated from recent geophysical data from the Caribbean area and Central America. Prerequisites: GLY 3106 and OCE 3014.

**GLY 4555 Sedimentology** (3)  
**GLY 4555L Sedimentology Lab** (1)  
Sedimentary processes in the geological cycles, as illustrated in recent environments. Different groups of sedimentary rocks. Primary and secondary sedimentary structures. Physico-chemical properties and diagenetic processes. Analytical techniques applied to modern sedimentology of both loose and lithified sediments. Prerequisites: Physical Geology or equivalent; Mineralogy; Optical Mineralogy; Paleontology; and a sound background in mathematics and chemistry. Laboratory must be taken concurrently with course.

**GLY 4650 Paleobiology** (3)  
**GLY 4650L Paleobiology Lab** (1)  
 Development of life as traced through the fossil record. Survey of the main groups of animals commonly found as fossils. Theories of evolution and extinction. Study of the major microfossil groups used in biostratigraphic zonation, and as paleoecologic indicators. Prerequisites: physical and historical geology, general biology, or the instructor's permission. Laboratory must be taken concurrently with course.

**GLY 4730 Marine Geology** (3)  
**GLY 4730L Marine Geology Lab** (1)  
 Survey of the main physiographic provinces of the ocean floor. Modern theories concerning the evolution of the crust; continental drift, seafloor spreading. Distribution and thickness of deep-sea sediments, and their relationship to the morphology and evolution of the crust. Deep-sea mineral resources. Marine geology of the Caribbean from recent data. Sea-bed assessment of mineral resources in the Caribbean and neighboring region. Prerequisites: OCE 3014, GLY 4555 or instructor's permission. Laboratory must be taken concurrently with course.

**GLY 4791 Cartography and Geological Surveying** (3)  
 A three-week course to be offered in the United States or in the Caribbean islands. Instruction and practice in methods of geological mapping using topographic base maps and aerial photographs or plane table. Prerequisite: GLY 4401 or equivalent. Open to majors only.

**GLY 4792 Caribbean Mineral Resources Field Trip** (3)  
 A three-week field course in at least two Caribbean islands. cursory review of the geologic factors governing the occurrence, size, and economic value of mineral deposits. Emphasis is on bauxite, copper, and energy resources. Visit to selected regions of active exploitation and processing plants, as well as abandoned mines and potential sites of future exploitation. Prerequisite: GLY 3157 or instructor's permission.

**GLY 4816 Mineral Deposits** (3)  
**GLY 4816L Mineral Deposits Lab** (1)  
 Morphology and genetic processes involved in known occurrences of mineral deposits; structural factors governing their size, location and shape. Exploration, detection, and exploitation methods. Emphasis is placed on known and potential mineral deposits of the Caribbean and neighboring areas. Prerequisites: Physical Geology or equivalent, GLY 3322, and chemistry. Laboratory must be taken concurrently with course.

**GLY 4910, GLY 4911 Independent Study** (VAR)  
 Individual research under the supervision of a professor in the student's field of specialization or interest. Subject may deal with laboratory work, field, and/or bibliographical work. Field research in the Caribbean is encouraged. Variable credit to a maximum of 10 credits. Permission of the student's advisor is required.

**GLY 5620 Caribbean Stratigraphic Micropaleontology** (3)  
 Survey of the stratigraphy of biostratigraphic type-sections described in the Caribbean area.

Deep-sea stratigraphy from both piston-cores and deep-sea drilling samples. Emphasis is placed on planktonic foraminifera and radiolaria species used as index-species in the equatorial-tropical biozonation typified in Cretaceous and Cenozoic Caribbean sediments. Paleobiogeographic and paleoecologic considerations. Considerable time will be devoted to the study and identification of specimens under the microscope. Prerequisite: GLY 4650, or the instructor's permission.

**GLY 5793 Caribbean Shallow-Marine Environments** (3)  
 Four-week field study of multiple tropical environments as illustrated in the Caribbean. Physico-chemical processes in the nearshore arenaceous, argillaceous and calcareous environments. Coral reef morphology, ecology and distribution patterns. Dynamical processes acting on the nearshore environments, and their effects on reef growth and distribution. Reef bioerosions. Coastal evolution in response to natural processes. On-site study of some similar emerged environments in the Caribbean islands. Economic importance of tropical shallow-marine environments in world fuel resources. Course includes extensive field work both on land and underwater, and an individual field research project. Qualifications: Open to advanced undergraduate and graduate students in the earth and biological sciences or cognate fields.

**MET 4701 Meteorology** (3)  
 The earth's atmosphere and its physical properties. General circulation and thermal structure of the atmosphere on a global and local scale. Physics and dynamics of clouds. Weather analysis and forecasting including temperate and tropical areas, with emphasis on the Caribbean and neighboring areas, birthplace of major Atlantic tropical storms. Reading of weather maps, introduction to meteorologic instruments, transmission and plotting of meteorological data. Recommended preparation: AST 3100, GEO 3200, and competence in physics and calculus.

**OCE 3014 Physical Oceanography** (3)  
 A survey of the ocean as a physico-chemical environment. Properties of sea water, and the influence of sea-air interactions on the ocean structure. Water masses and oceanic circulation patterns. Diffusion and advection and their relation to oceanic properties. Heat budget and climatic control. Impact of oceanic properties on man's environment and economy. Case study of Mediterranean Sea illustrated by the Caribbean Sea. One field trip to be expected.

**OCC 6105 Advanced Marine Geology** (3)  
**OCC 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 deep-sea drilling, dredging, piston-coring, gravity magnetism, and seismicity. Special emphasis will be given to the genesis and evolution of Atlantic and Caribbean margins, and their potential for oil resources. Prerequisite: GLY 4730, or permission of instructor.

**OCC 6280 Marine Sedimentary Petrology** (3)  
**OCC 6280L Marine Sedimentary Petrology Lab** (1)  
 Analysis of the genesis, distribution pattern, physical and chemical properties of marine sedimentary facies, with emphasis on deep-sea sediments. Topics include deep-sea diagenetic and lithification processes, their geochemical relationship in time and space. Prerequisite: GLY 4555, or permission of instructor.

**OCP 5291 Coastal Processes** (3)  
**OCP 5291L Coastal Processes Lab** (1)  
 Dynamics of estuarine and nearshore circulation. Advective and diffusive processes. Natural and man-induced supply of particulate matter to the coastal region, and the longshore and offshore dispersal of this matter. Waves, tides, periodic sea level changes and their effects on coastal erosion and sedimentation. Coastal management. Prerequisites: OCE 3014 and EVS 4108 or permission of instructor.

## Economics

Jorge Salazar-Carrillo, *Professor and Chairperson*  
 René Higonet, *Professor*  
 Antonio Jorge, *Professor*  
 Raul Moncarz, *Professor*  
 Mira Wilkins, *Professor*  
 Irma G. Trado de Alonso, *Associate Professor*  
 Manuel Carvajal, *Associate Professor*  
 Panagis Liossatos, *Associate Professor*  
 D. Babatunde Thomas, *Associate Professor*  
 Robert Cruz, *Assistant Professor*  
 Rujo Lopez Fresquet, *Visiting Professor*  
 Mostafa Hassan, *Visiting Professor*  
 J. Kenneth Lipner, *Assistant Professor*  
 Jorge Zayas, *Visiting Professor*

The major in economics provides the student with an understanding of economic problems and institutions, and the analytical tools to apply this knowledge to contemporary problems. The program is designed for the student desiring a career in industry, government, international agencies or teaching; and for those planning professional or graduate study in economics, business, law, public administration, urban studies, or international relations.

LOCATION: Tamiami Campus only  
 DEGREE: Bachelor of Arts  
 LOWER DIVISION PREPARATION:  
*Required Courses:* None

*Recommended Courses:* six semester hours in principles of economics; three semester hours in social science; six to nine semester hours in humanities; six semester hours in English composition; six semester hours in college algebra and trigonometry; three semester hours in statistics.

*Remarks:* The entering student who has not taken principles of economics must enroll in ECO 3003 and ECO 3011 during his or her first two semesters at the University. Students who expect to go beyond the B.A. level in economics



are advised to begin calculus at the lower division level.

#### UPPER DIVISION PROGRAM

##### Semester Hours

#### Major Required Courses:

ECO 3101	Theory of Price	3
ECO 3203	Aggregate Economic Analysis	3
ECO 3271	Topics in Theory	3
ECO 4417	Measurement and Analysis of Economic Activity	3
ECO 4422	Introduction to Econometrics	3

Additional Economics Courses*	15
Electives	30

**60**

Students may choose to concentrate their studies in one of the following areas:

Urban and Environmental Economics; Labor Economics; International Economics, Economic Development; Monetary Theory; Latin American Economics and Quantitative Methods

\*ECO 3003, ECO 3040 and ECO 3432 cannot be included in this grouping of Electives.

**Remarks:** A grade of C or better in all courses required for the major is necessary for graduation. A student may choose a program in general economics or concentrate in one of the following areas: urban and environmental economics, labor and manpower studies, international economics and development, monetary and fiscal policy. The student should select courses in consultation with an advisor.

Minor in Economics

##### Semester Hours

#### Minor Required Courses:

ECO 3101	Theory of Price	3
or		
ECO 3203	Aggregate Economic Analysis	3

Additional Economics Courses\* 9

**15**

\*ECO 3003, ECO 3040, and ECO 3432 cannot be included in this grouping.

**Remark:** Introductory courses in calculus and statistics are strongly recommended for the student minoring in economics.

## Master of Arts in Economics

### A. Admission

To be admitted into the Master's degree program in Economics, a student must:

- hold a Bachelor's degree from an accredited university or college;
- have a B average (3.0) or better during the last two years of his/her undergraduate program and/or a combined score (verbal, quantitative, and analytic) of 1,500 or higher on the graduate record examination.\* Foreign students, whose native language is not English, must take the Test of English as a Foreign Language (the TOEFL examination) and obtain a 500 or better;
- receive approval of the departmental graduate committee;

iv) have taken as prerequisites intermediate microeconomics, intermediate macroeconomics, statistics, and calculus. 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.

\*If a student has taken the graduate record examination before the new system was introduced and scored 1000 or better on the combined verbal and quantitative sections, the student does not have to retake the examination.

### B. 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 from outside of Florida International University, subject to the approval of the graduate committee. All courses listed below carry 3 credits, except the thesis (6 credits). The specific requirements are:

1. <i>Core</i>	<i>Semester Hours</i>
ECO 5115—Advanced Microeconomic Theory	3
ECO 5206—Advanced Macroeconomic Theory	3
ECO 5423—Econometric Methods I	3

### 2. Additional Requirements

Students will be required to (a) write a thesis for 6 credits, (ECO 6971) or (b) take the advanced seminar in applied economics (ECO 5938), which involves writing a research paper. 12-15

### 3. Electives

A student must take at least four electives in economics. The additional one or two courses required to complete the Master's program may be taken in Mathematics, International Studies, the School of Business, the School of Public Affairs, or in other schools. Approval of courses outside the Economics Department must come from the graduate committee. 18-15

### Total Semester Hours

#### C. Graduation Requirements

To receive the Master's degree in Economics, the student must complete 30 hours of course work with a B average or higher; must receive at least a B in the core courses; and must receive a grade of C or higher in each course. If the student decides to write a thesis, he must receive the grade of Credit for ECO 6971. 30

## Course Descriptions

### Definition of Prefixes

ECO — Economics; ECP — Economic Problems & Policy; ECS — Economic Systems & Development.

ECO 2013 Macro Principles (3)  
Introduction to economics from the aggregate point of view. National income accounting, monetary and fiscal policy and their interaction in the economy.

ECO 2021 Micro Principles (3)  
Introduction to economics from the individual

point of view. Traditional supply and demand determination and analysis.

ECO 3003 Economics, Man and Society—  
Macro (3)  
Relationship of economics to individual action. Identification of economic and non-economic objectives and problems. Analysis of economic behavior of individuals, business firms, public agencies and interest groups.

ECO 3011 Economics, Man and Society—  
Macro (3)  
Relationship of economics to aggregate income. Identification of economic and non-economic objectives and problems. Analysis of economic behavior of individuals, business firms, public agencies, and interest groups. Public issue interpretation in the light of economic theory.

ECO 3040 Consumer Economics  
Consumer behavior; advertising and other influences affecting demand. Patterns of consumer expenditure; effects of public policy on family incomes and consumption patterns. The consumer protection movement.

ECO 3101 Theory of Price  
Operation of individual markets; market structure; theory of the firm; theory of production; demand theory; general equilibrium and welfare economics. Recommended preparation: ECO 3003.

ECO 3203 Aggregate Economic Analysis  
Analysis of the measurement, determination, and control of aggregate economic activity; the monetary system in relation to income and employment; short-term income fluctuations; long-term growth. Recommended preparation: ECO 3003.

ECO 3223 Money and Banking  
Elements of monetary theory; relationships between money, prices, production and employment; factors determining money supply; history and principles of banking, with special references to the United States.

ECO 3271 Topics in Theory  
Welfare economics; analysis of factor markets and income distribution; growth theory. Prerequisites: ECO 3101 and ECO 3203.

ECO 3303 Development of Economic Thought  
Evolution of economic theory and doctrine. Contributions to economic thought from ancient times to J. M. Keynes. Emphasis on institutional forces shaping the continuum of economic thinking.

ECO 3432 Applied Macroeconomics  
Aggregate economic performance and business conditions analysis. The nature and causes of business fluctuations. Economic expansions, and stagflation. Public policies for economic stability; fiscal policy, monetary policy and income policy. Sectoral analysis and macroeconomic forecasting. Recommended preparation: ECO 3003.

ECO 3933 Special Topics  
A course designed to give students a particular topic or a limited number of topics not otherwise offered in the curriculum.

**ECO 3949 Cooperative Education in Economics**

A student majoring in Economics may spend one or two semesters fully employed in industry or government in a capacity relating to the major.

**ECO 4224 Issues in Money and Banking**

Formulation and execution of monetary policy. Analysis of monetary policy as it has been carried out in recent years, and as it should be conducted.

**ECO 4307 Radical Political Economy (3)**

The relationship between Marxist and orthodox economists. Attention given to the New Left and other current criticisms of capitalist economies. Multinational corporate policy, concentration of economic power, income distribution, and Third World development.

**ECO 4401 Introduction to Mathematical Economics (3)**

Mathematical formulation of economic theory. Mathematical treatment of maximizing and optimizing behavior; applications to consumer and business firm theory, value, economic strategies, growth and stability. Emphasis on understanding of analytical techniques. Recommended preparation: ECO 3101 or ECO 3203, and Calculus.

**ECO 4417 Measurement and Analysis of Economic Activity (3)**

Statistics with special reference to economics, including the following topics: quantitative economics, descriptive statistics, probability and inference, and regression analysis applied to economics. Prerequisites: STA 3161.

**ECO 4422 Introduction to Econometrics (3)**

Introduction to measurement in economics; numerical evaluation of mathematical models by statistical methods; survey of classical models; discussion of the scope and method of econometric analysis. Recommended preparation: ECO 3101 or ECO 3203 and ECO 4401 and Statistics.

**ECO 4504 Economics of Government Spending and Taxation (3)**

Describes the way resources are allocated in a market economy and cases where markets fail. Analyzes government expenditure policy, principles of taxation, and the various taxes in use today. Prerequisite: ECO 3003.

**ECO 4622 Economic Development of the United States (3)**

The growth of the American economy from colonial times to the present. Special emphasis on market forces, institutional arrangements, and policies contributing to this process.

**ECO 4623 American Business History (3)**

The growth of American business from 1880 to present; integration, diversification, and foreign expansion. Business strategies and managerial structures.

**ECO 4632 European Economic History (3)**

The development of Mediterranean and Western European economies, from the earliest times to the 20th Century. Attention is centered on capital accumulation, technology, trade, in-

dustrialization, monetary factors, and the role of government in economic organization.

**ECO 4701 World Economy (3)**

A broad overview of the international economy in historical perspective. Topics: economic demography, trade flows, capital movements, diffusion of technology, the emergence of transnational institutions. The student obtains a conception of how economic interdependence has developed.

**ECO 4703 International Economics (3)**

Principles of international trade and balance of payments; significance of geographic, economic, social, and political influences; current problems in international trade and payments; tariffs and commercial policy; role of international organizations. Recommended preparation: ECO 3101.

**ECO 4713 International Monetary Relation (3)**

International money and capital markets; international financial institutions. Interpretation of balance of payments statements. Adjustments to disequilibria, through changes in prices, exchange rates, and national income. Recommended preparation: ECO 3203.

**ECO 4733 Multinational Corporation (3)**

Growth and development of multinational enterprise. Theories of direct foreign investment. Impact on the United States and other developed and less developed nations. Policy implications relating to employment, economic growth, balance of payments, taxation, and national defense. National sovereignty and the multinational corporation.

**ECO 4902 Undergraduate Tutorial (3)**

Supervised readings, individual tutorial, and preparation of reports. Requires consent of faculty supervisor and Department Chairperson.

**ECO 4934 Special Topics**

A course designed to give students a particular topic or a limited number of topics not otherwise offered in the curriculum.

**ECO 4949 Cooperative Education in Economics (3)**

A student majoring in Economics may spend one or two semesters fully employed in industry or government in a capacity relating to the major.

**ECO 5116 Advanced Microeconomic Theory (3)**

Competitive and monopolistic markets as they pertain to the theory of price, allocation of resources and comparative advantage. Development of consumer demand theory from neoclassical and modern viewpoints. Prerequisites: Intermediate Microeconomics and Calculus I; Calculus II recommended.

**ECO 5206 Advanced Macroeconomic Theory (3)**

State-of-the-art theories of sectoral expenditure and financial market equilibrium. Inflation, unemployment, macroeconomic dynamics. Prerequisites: Intermediate Macroeconomic Theory; Calculus I; Statistics. Calculus II recommended.

**ECO 5216 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 5405 Mathematical Economics (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: Advanced Microeconomics and MAS 3412 or equivalent.

**ECO 5423 Econometric Methods I (3)**

Practical and theoretical foundations of empirical economics. Knowledge in formulation, estimation, and evaluation of econometric models. Prerequisites: ECO 4417 or equivalent; Calculus I; Calculus II recommended.

**ECO 5617 Seminar in Economic History (3)**

Topics in economic history, exploration of the economic history literature on a selected theme, student presentations. Prerequisites: permission of instructor for undergraduates.

**ECO 5701 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.

**ECO 5706 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.

**ECO 5715 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.

**ECO 5734 Multinational Corporations (3)**

Economic theory and multinational corporations. Economic effects. Consequences of nationalization. Spread of the multinational form. State-owned multinational corporations. Prerequisites: Permission of instructor for undergraduates.

**ECO 5906 Advanced Individual Study (3)**

Supervised readings, individual tutorial, and preparation of report. Requires consent of faculty supervisor and Department Chairperson. Open to seniors and graduate students.

**ECO 5935 Special Topics**

A course designed to give students a particular topic or a limited number of topics not otherwise offered in the curriculum.

- ECO 5938 Advanced Seminar in Applied Economics** (3)  
Variable-topic study group in application of economic analysis to specific problems. 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 instructor.
- ECO 6115 Graduate Seminar in Economic Theory** (3)  
Variable-topic graduate study group in theoretical problems. Open only to students with graduate standing.
- ECO 6236 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 6425 Econometric Methods II** (3)  
A continuation of ECO 5424. Advanced single equation estimation, estimation of distributed lags, simultaneous equations, time series and models of qualitative choice. Prerequisites: ECO 5424 and MAS 3103 or equivalent.
- ECO 6506 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. Prerequisite: Calculus.
- ECO 6936 Special Topics**  
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** (6-9)  
Supervised readings, tutorial and preparation of report. Open only to graduate students. Requires consent of supervisor and approval of Department Chairperson.
- ECO 6971 Thesis** (10)  
Writing and completion of thesis by candidate for a Master of Arts. Prerequisite: Student must be a Master's degree candidate, have had at least 35 hours of graduate work in economics; have a thesis topic approved by the Department's Graduate Committee and permission from the instructor.
- ECP 3123 Economics of Poverty** (3)  
Poverty in the United States: its measurement and history. Theory of personal income distribution. Present and proposed policies to alleviate poverty.
- ECP 3303 Introduction to Environmental Economics** (3)  
Economic principles applied to environmental problems. Relationship of market and non-market forces to environmental quality. Development of tools for policy analysis.
- ECP 3613 Introduction to Urban Economics** (3)  
Study of the urban environment, its characteristics and trends. Location behavior of firms and households. Urban financial problems, transportation, and housing.
- ECP 4004 Seminar on Current Economic Topics** (3)  
Faculty and student discussion of contemporary economic and social issues.
- ECP 4203 Introduction to Labor Economics** (3)  
Basic introduction to supply and demand for labor. Discusses labor markets in both historical and institutional context emphasizing why certain patterns have occurred and contemporary institutions developed. Prerequisite: ECO 3003.
- ECP 4222 Theory of Labor Economics** (3)  
Neoclassical theory of labor demand and labor supply, human capital theory and critiques. Current programs of human resource development and income maintenance are discussed. Prerequisite: ECO 3101.
- ECP 4314 Land and Resource Economics** (3)  
Availability, use, and control of land and other natural resources. Resource conservation, investment, and taxation. Environmental implications. Resource markets and pricing.
- ECP 4403 Economic Policy for Industry** (3)  
Governmental activities affecting business. Government regulation of business—its historical, legal, and economic perspectives, including recent developments in the United States and abroad. Government assistance to business; proposed policies. Recommended preparation: ECO 3101.
- ECP 5205 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 5605 Urban and Regional Economics**  
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 or ECO 3203 and ECP 3303.
- ECP 6405 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 6704 Managerial Economics I** (3)  
Basic microeconomic concepts as they apply to decision making within the organization; supply and demand; market structure and market behavior in specific industries; basic aggregate economic models and forecasting.
- ECP 6705 Managerial Economics II** (3)  
Extension of topics covered in ECP 6704. Includes capital budgeting, linear programming, pricing, decision making under uncertainty, recent developments in theory of the firm. Prerequisite: ECP 6704.
- ECS 3003 Comparative Economic Systems** (3)  
Analysis of alternative economic systems of industrialized and emerging nations. Emphasis on the comparative study of the capitalist, socialist, and communist economic systems of the modern world.
- ECS 3402 The Political Economy of South America** (3)  
An introduction to the political economy of the Latin American nations. Designed as a basis course to give the student an overview of the political economy of the nations with which we share this hemisphere.
- ECS 3440 Economics of Central America** (3)  
Survey of recent economic history of Central American countries, dealing with the institutional background and the structure of current economic activities. Special attention devoted to current problems of economic growth and social transformation.
- ECS 4013 Introduction to Economic Development** (3)  
Analysis of institutional and structural factors which determine the course of economic progress in developing countries. Characteristics of less developed areas: agriculture, investment, technology, population, international trade, economic integration.
- ECS 4024 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.
- ECS 4403 The Latin American Economies** (3)  
Survey of economic status and problems of the Latin American nations, with special emphasis on the larger countries. Attention is given to the role of foreign intervention and dependence, and to different attempts at economic integration.
- ECS 4404 Economic Integration—Latin America** (3)  
Analysis of the methods, meaning and implications of economics in Latin America. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation. Prerequisite: ECO 3003, or equivalent.
- ECS 4430 The Economic Development of Cuba — Past and Present** (3)  
Survey of the Cuban economy under capitalist and Marxist ideologies. Emphasis on the transition stage and on current policies of economic and social change.
- ECS 4432 Economic Integration — Caribbean** (3)  
Analysis of the methods, meaning and implications of economic integration in the Caribbean. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation.
- ECS 4433 Economics of the Caribbean** (3)  
Survey of the economic systems of the major British, French, Dutch and Spanish areas in the Caribbean. Special attention devoted to current problems of economic growth and social transformation.

**ECS 5005 Comparative Economic Systems** (3)  
A critical evaluation of the design, goals and achievements of economic policies in capitalist and socialist economies. Prerequisites: Permission of instructor for undergraduates.

**ECS 5025 Economic Problems 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. Recommended preparation: ECO 3101 or ECO 3203.

**ECS 5405 Economics of Latin America** (3)  
Dependence, population explosion, urban migration, agricultural reform, industrialization and import substitution, common markets. Prerequisite: Permission of instructor for undergraduates.

## English

Donald Watson, *Associate Professor and Chairperson*

Harry T. Antrim, *Professor*

Richard A. Wyser, *Professor*

Butler H. Waugh, *Professor*

St. George Tucker Arnold, *Associate Professor*

Lynn M. Berk, *Associate Professor*

Charles Elkins, *Associate Professor*

James Hall, *Associate Professor*

Richard Sugg, *Associate Professor*

Maneck Daruwalla, *Assistant Professor*

Mary Jane Elkins, *Assistant Professor*

Virginia Gathercole, *Assistant Professor*

Carmela Pinto, *Assistant Professor*

Richard Schwartz, *Assistant Professor*

J.C. Washington, *Lecturer*

**LOCATION:** Tamiami Campus only.

**DEGREE:** Bachelor of Arts

**LOWER DIVISION REQUIREMENTS:**

*Required Courses:* A two-semester survey of British or American Literature. This requirement can be fulfilled at the University.

*Remark:* The prospective secondary school teacher should take the Foundations of Education courses in the lower division. (Students interested in teacher certification refer to the School of Education).

**UPPER DIVISION PROGRAM:**

*Semester Hours*

*Required Courses:* English 30

*Electives:* 30

The English Department recognizes a continuing obligation to insure that its majors write well. The Chairperson may require any English major to take the appropriate composition course. (Hours earned in ENC 3034 — Problems in Composition — will not count toward the English major.)

An English major may choose to take a general program of English studies or may select one of the Department's three areas of emphasis:

literature, language and linguistics, or creative writing. Majors should choose their English courses and electives in consultation with their advisors, especially upon entering the program.

A student in any of the emphases may apply for admission to the Honors Program. Application should be made with the Department Chairperson who will consult with the Honors Committee.

Students in the Teacher Preparation Program carry two majors — English and English Education. They must request admission to both programs. (Students interested in teacher certification, refer to the School of Education). English majors may also enroll in the Linguistics, American Studies, Ethnic Studies, and Women's Studies Certificate programs.

A grade of C or better in all courses required for the major is necessary for graduation.

(See Modern Language listings for additional Linguistics courses.)

## Course Descriptions

### Definition of Prefixes

AML — American Literature; CRW — Creative Writing; ENC — English Composition; ENG — English-general; ENL — English Literature; HUM — Humanities; LIN — Linguistics; LIT — Literature; MMC — Mass Media Communication.

**AML 3011 Survey of American Literature I** (3)  
Students will read and discuss major American works written between 1620 and 1865. Works will be considered in an historical context.

**AML 3020 Survey of American Literature II** (3)  
Students will read and discuss major American works written between 1865 and the present. Works will be examined in an historical context.

**AML 3271 Survey of Afro-American Literature** (3)  
Study of Afro-American literature from Phyllis Wheatly to James Baldwin. The first half of the course will be concentrated on writers before World War II while the second half will give students the opportunity to study authors from 1946 to present.

**AML 4300 Major American Writers** (3)  
Each section of this course will consider the works of one, two, or three major American writers. The writers studied in this course will change from semester to semester. The course may be repeated for credit.

**AML 4503 Periods in American Literature** (3)  
Individual sections will read and discuss works in the context of such historical settings as the colonial, federal, antebellum, reconstruction, or modern periods of the American past. May be repeated.

**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.

**CRW 4110 Writing Fiction** (3)  
An intermediate course in writing fiction.

**CRW 4310 Writing Poetry** (3)  
An intermediate course in writing poetry.

**ENC 1101 Elements of Writing** (3)  
The first course in composition. Students will study the basic principles of expository, persuasive, and reflective writing. They will write essays every week.

**ENC 1102 Techniques of Interpretation** (3)  
A continuation of ENC 1101, this course approaches the development of sensitivity to the writings of others and further explores the techniques of composition and library research.

**ENC 2001 Modes of Inquiry** (3)  
A research and report writing course. A final research project is required. Basic bibliographical tools, library use, and technical and scientific reporting will be the main subject matter. There will also be an emphasis on style, structure, and tone in a variety of research modes.

**ENC 3034 Problems in Composition** (3)  
A composition course designed to improve basic writing skills. Special attention will be paid to grammar, sentence construction, paragraph development, and overall organization.

**ENC 3200 Business Letters and Reports** (3)  
Intensive instruction and practice in the organization, content, and style of business letters of all kinds; special correspondence formats (bid proposals, customer relations), memoranda, feasibility reports, speeches, and group conference reports.

**ENC 3210 Basic Technical Writing** (3)  
Effective presentation of technical and semi-technical information: technical description, information gathering, general technical reports, organization and development of information, process communication.

**ENC 3211 Report and Technical Writing** (3)  
For business, professional, and scientific students needing practice in collecting, organizing, interpreting, and presenting factual material.

**ENC 3301 Expository Writing** (3)  
An advanced composition course in the techniques of exposition, argumentation, and persuasion.

**ENC 4220 Report Writing** (3)  
Instruction and practice in writing reports for practical purposes. Collecting, organizing, and interpreting facts, then writing up findings in report form and style. Includes recommendation reports, use of graphical elements, writing manuals and instructions, physical research reports, feasibility reports, progress reports, other specialized report formats.

**ENC 4241 Scientific Writing** (3)  
Develops skills necessary to write laboratory reports, scientific proposals, articles, research reports, progress reports, and seminar presentations.

**ENC 2012 Approaches to Literature** (3)  
In this course, students will study the process of analyzing the meaning and artistry of literary

texts. They will read and interpret representative poems, short stories, and plays.

**ENG 2120 Introduction to Film Literature** (3)  
This course will introduce students to the basic artistic and compositional elements of film and the analysis of the relationship between technical and aesthetic aspects of film. Prerequisite: ENC 1101.

**ENG 3138 The Movies** (3)  
Viewing and discussion of films, with attention to cinematic ways of story-telling and to the popular film as an expression of cultural values. May be retaken for credit with change of content.

**ENG 3949 Cooperative Education in English** (3)  
A student majoring in English may spend several semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

**ENG 4022 Rhetoric and Poetics** (3)  
Ancient and modern theory and practice in discussing the formal properties of elevated language.

**ENG 4033 Rhetoric and Communication: Black Rhetoric** (3)  
Black people in America have been involved in several significant movements designed primarily to meet the challenges of institutionalized racism. The course will focus on these movements, i.e., abolition, segregation, integration, and emigration, giving special emphasis to each of the movements' leading rhetors, their arguments, counter arguments, and appeals.

**ENG 4121 History of the Film** (3)  
Discussion, with examples, of the development of cinematic art, from its European and American beginnings to its place as a major world art form.

**ENG 4132 Studies in the Film** (3)  
Intensive examination of the work of a particular nation, group, or director. May also explore various film genres, e.g., documentary, horror, the Western. With change of content, may be retaken for credit.

**ENG 4906 Independent Study** (VAR)  
Individual conferences, assigned readings, and reports on independent investigations, with the consent of the instructor.

**ENG 4936 Honors Seminar** (3)  
Designed specifically for honors students and other superior, highly motivated students. Seminar topics will vary from semester to semester.

**ENG 4949 Cooperative Education in English** (3)  
A student majoring in English may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

**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 5907 Independent Study** (VAR)  
Individual conferences, assigned readings, reports on independent investigations, with the consent of the Chairperson.

**ENG 6909 Independent Study** (VAR)  
Individual conferences, assigned readings, reports on independent investigations, with the consent of the Chairperson.

**ENL 3012 Survey of British Literature I** (3)  
Students will read and discuss major British works written from the Old English period through 1750. Works will be examined within an historical context.

**ENL 3022 Survey of British Literature II** (3)  
Students will read and discuss major British works written between 1750 and the present. The works will be examined in an historical context.

**ENL 4303 Major British Writers** (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 4320 Shakespeare: Histories** (3)  
Reading and informal dramatic interpretation of representative plays.

**ENL 4321 Shakespeare: Comedies** (3)  
Reading and informal dramatic interpretation of representative plays.

**ENL 4322 Shakespeare: Tragedies** (3)  
Reading and informal dramatic interpretation of representative plays.

**ENL 4503 Periods in English Literature** (3)  
Individual sections will read and discuss works in the context of such historical settings as the medieval, Tudor, Restoration, Victorian, and other periods of the English past. May be repeated.

**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.

**LIN 2000 Introduction to Language** (3)  
The study of the nature of human language, its origins, and its relation to thinking behavior, and culture. An examination of the similarities and differences between spoken human languages, animal languages, and nonverbal communication (including sign language); of language variation between dialects and between different historical stages of a language; and of writing systems.

**LIN 3010 Introduction to General Linguistics** (3)  
Study of the sounds, vocabulary and sentence patterns of standard modern English. Other topics include meaning, social and regional dialects, language change, and style.

**LIN 4142 Historical Linguistics** (3)

The study of linguistic methodology for determining historical and genetic relationships among languages. Prerequisite: Introductory course in Linguistics or permission of instructor.

**LIN 4221 General Phonology** (3)  
The study of phonological processes in language and linguistic methodology for phonological analysis. Prerequisite: Introductory course in Linguistics or permission of instructor.

**LIN 4330 General Morphology and Syntax** (3)  
The study of linguistic methodology for determining the morphological and syntactic structures of languages. Prerequisite: Introductory course in Linguistics or permission of instructor.

**LIN 4341 Modern English Grammar** (3)  
Practical study of syntax.

**LIN 4403 Applied Linguistics** (3)  
Linguistics in the classroom. English as a second language. Stylistics. Dialects. Prerequisite: LIN 3010.

**LIN 4621 Black English** (3)  
This course is a linguistic approach to the characteristics and functions of Black English and the current social controversies surrounding it.

**LIN 4801 Semantics** (3)  
The study of the semantic structure of languages. The structures underlying the meanings of words and underlying syntactic structures. Prerequisite: Introductory course in Linguistics or permission of instructor.

**LIN 4905 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. Prerequisite: Introductory course in Linguistics or permission of instructor.

**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. Prerequisite: LIN 3010, or permission of instructor.

**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 comparative linguistics to similar processes found in language acquisition and to socio-linguistics will be studied. Prerequisite: Introductory course in Linguistics or permission of instructor.

**LIN 5222 General Phonology** (3)  
The study of phonological process 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:** Introductory course in Linguistics, or permission of instructor.

**LIN 5331 General Morphology and Syntax** (3)  
The study of linguistic methodology for determining the morphological and syntactic structures of languages. Distinct theoretical approaches to analysis will be emphasized. The student will study recent developments in linguistics that bear on language-universal and language-specific aspects of morphology and syntax. **Prerequisite:** Introductory course in Linguistics, or permission of instructor.

**LIN 5342 Advanced Syntax** (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 retaken for credit when content changes. **Prerequisite:** LIN 4341, Modern English Grammar.

**LIN 5805 Semantics** (3)  
The study of linguistic semantic language-universal and language-specific properties of the semantic structure of words in sentences will be considered. Recent debate and theoretical aspects, including those touching on the nature of word meaning, presuppositional-assertional grammar, and Speech-Act theory, will be read and discussed. **Prerequisite:** Introductory course in Linguistics, or permission of instructor.

**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. **Prerequisite:** Introductory course in Linguistics or permission of instructor.

**LIT 3930 Special Topics** (3)  
This course is designed to give students an opportunity to pursue special studies not otherwise offered.

**LIT 2010 Introduction to Fiction** (3)  
This course offers an introduction to the basic elements of prose fiction: symbolism, plot, imagery, structure, characterization, style, point of view. **Prerequisite:** ENC 1101.

**LIT 2030 Introduction to Poetry** (3)  
This course offers an introduction to the basic elements of poetry: imagery, figurative language, diction, style, tone, prosody. **Prerequisite:** ENC 1101.

**LIT 2040 Introduction to Drama Literature** (3)  
This course will introduce the student to the basic elements of drama and its various forms, modes, and techniques. Students will read 10-12 plays by representative English, American, and European authors. **Prerequisite:** ENC 1101.

**LIT 2930 Special Topics** (3)  
This course is designed to give students an opportunity to pursue special studies not otherwise offered.

**LIT 3200 Themes in Literature** (3)  
Individual sections will read and discuss works

relating to topics of current and enduring interest. Discussion of literature as it reflects the identities of men and women: their places in families in past, present, and future societies, in the natural world, and the cosmic order. May be repeated.

**LIT 3383 Women in Literature** (3)  
Students will examine the images of women created by European and American writers. The course will also explore the roles, historical and contemporary, of women writers.

**LIT 3702 Major Literary Modes** (3)  
Individual sections will read and discuss the literary expression of heroic, tragic, comic, satire, mythic, realistic or others formalized views of human existence. May be repeated.

**LIT 3930 Special Topics** (3)  
A course designed to give students an opportunity to pursue special studies not otherwise offered.

**LIT 4001 Major Literary Genres** (3)  
Individual sections will read and discuss the form and development of novels, drama, poetry, short fiction, or such special forms as biographies, folksongs and tales, or essays, among other genres. May be repeated.

**LIT 4188 Regional Literature in English** (3)  
Individual sections will discuss English writing in Ireland, Scotland, Wales, Canada, the Caribbean, India, sub-Saharan Africa, and Oceania, as well as distinctive regions in England and America. May be repeated.

**LIT 4403 Literature Among the Arts and Sciences** (3)  
Individual sections will relate the study of literature to other disciplines in the humanities, fine arts, the social and natural sciences. May be repeated.

**LIT 4930 Special Topics** (3)  
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**LIT 5363 Literary Movements** (3)  
Individual sections will study the authors, works, and audiences involved in such phenomena as Humanisms, Mannerism, Romanticism, Symbolism, the Harlem Renaissance, and others. May be repeated.

**LIT 5934 Special Topics** (3)  
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**LIT 6934 Special Topics** (3)  
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**MCM 4607 Structure and Function of Mass Media** (3)  
Will include the study of such topics as: mass communication and society, popular culture, communication and social order, classic studies in mass communication, propaganda.

## Environmental Studies

**Dr. G. Dalrymple, Director, Biological Sciences**  
**Dr. K. Hoodhoo, International Relations**  
**Dr. J. Brown, Anthropology/Sociology**  
**Dr. R. Clem, International Relations**  
**Dr. C. Draper, Physical Sciences**  
**Dr. W. Goldberg, Biological Sciences**  
**Dr. J. Gottlieb, Political Science**  
**Dr. A. Herriot, Physical Sciences**  
**Dr. J. Huchingson, Philosophy/Religion**  
**Dr. F. Jhavalva, International Relations**  
**Dr. L. Keller, Physical Sciences**  
**Dr. D. Lee, Biological Sciences**  
**Dr. J. Makemson, Biological Sciences**  
**Ms. Z. Martinez, Physical Sciences**  
**Dr. F. Maurrasse, Physical Sciences**  
**Dr. H. Moore, Physical Sciences**  
**Dr. J. Parker, Physical Sciences**  
**Dr. J. Rotton, Psychology**  
**Dr. M. Tracey, Biological Sciences**  
**Dr. W. Vickers, Anthropology/Sociology**

This is an interdisciplinary program, involving eight departments in the College of Arts and Sciences (Physical Sciences; Biological Sciences; Psychology; Political Science; Anthropology/Sociology; International Relations; Philosophy/Religion; and Economics), which prepares students to work in professions with an environmental emphasis. Students may choose either a Bachelor of Arts program or a Bachelor of Science program.

**LOCATION:** Tamiami Campus only.

**DEGREE:** Bachelor of Science

**LOWER DIVISION PREPARATION:**

**Required Courses:** Equivalent of 8 semester hours of general biology and general chemistry; 3 semester hours of algebra and trigonometry.

**Recommended Courses:** General Physics, Physical Geology, Conservation of Natural Resources, Man and Environment, Calculus.

**Lower or Upper Division Requirements:** ECO 3003 — Economics, Man and Society; COP 3110 — Introduction to Computers; STA 3122 — Introduction to Statistics. . . . . 9

**UPPER DIVISION PROGRAM:**

**Recommended Courses:**

CHM 3200	Survey of Organic Chemistry
ENC 3353	Technical Writing
POS 3044	U.S. Government and Politics

**Required Courses:**

CHM3120+L	Quantitative Analysis	5
ECP 3303	Environ. Economics	3
EVR 4211	Water Resources	3
EVR 4231	Air Resources	3
EVR 4311	Energy Resources	3
EVR 4920	Environmental Colloquium	3
	or	
EVR 4905	Independent Study	3

GLY 3850+L Environ. Geology	4
PCB 3043+L Fund. of Ecology	4
PUP 4203 Environ. Politics and Policy	3

40

*Electives*

20

60

Students are urged to develop an area of specialization of 12 to 15 credits, in consultation with an advisor. Examples are: Biology; Chemistry; Computer Science; Geology; Water, Air or Energy Resources. Minors are encouraged.

## DEGREE: Bachelor of Arts

## LOWER DIVISION REQUIREMENTS:

*Recommended Courses:* Natural History of South Florida; Conservation of Natural Resources; Man and Environment; College Algebra.

## UPPER DIVISION PREPARATION:

*Required Courses:*

ECO 3003 Economics, Man, and Society	3
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## UPPER DIVISION PROGRAM:

*Required Courses:*

ANT 3403 Cultural Ecology	3
ECP 3303 Introduction to Environmental Economics	3
EVR 3010 Energy Flow in Natural and Man-made systems	3
EVR 3011 Environmental Resources and Pollution	3
EVR 3013 Ecology of South Florida	3
EVR 4905 Independent Study or Community Project	3
EVR 4920 Environmental Colloquium	3
PUP 4203 Environmental Politics and Policies	3
REL 4440 Man and Nature	3
	30

*Area of Specialization Courses:*

The student must take at least 9 additional credits in an approved area of specialization. Minors are encouraged. .... 9

39

*Electives*

21

60

## Cooperative Education

Students seeking the baccalaureate degree in environmental studies may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Office of Academic Affairs. The student spends one or two semesters fully employed in industry or a governmental agency. For further information consult the Department of Physical Sciences, or the Department of Cooperative Education.

## Environmental Internships

Students interested in job-related academic internships should contact their advisor. Two

internships are regularly available at the Big Cypress Nature Center as Naturalist Assistants (Naples, Fla.). Details on compensation, benefits and academic credit can be obtained from Dr. J. Gottlieb (Political Science).

Course Descriptions<sup>1</sup>

## Definition of Prefixes

EVR — Environmental Studies.

## EVR 3010 Energy Flow in Natural and Man-Made Systems (3)

A course for non-science majors, emphasizing the study of energy flow and energy resources in natural ecosystems, agriculture and the global food and population crises, and land use.

## EVR 3011 Environmental Resources and Pollution (3)

A course for non-science majors, emphasizing air and water pollution, water resources, earth resources, solid waste disposal, noise pollution and weather patterns.

## EVR 3013 Ecology of South Florida (3)

A course for non-science majors, offering an introduction to the ecology of South Florida through lectures and a series of field trips into several unique ecosystems, such as the everglades, hardwood hammocks, and coastal regions. The course also deals with natural resource conservation, wildlife management, endangered species and wilderness issues.

## EVR 3931 Topics in Environmental Studies (3)

An intensive analysis of several current environmental topics. Recommended for primary and secondary school teachers.

## EVR 4021 Survey of Environmental Problems I (3)

An in-depth study of four or five environmental problems of current interest and continuing significance. The course requires competency at the college introductory level in at least three of the following: biology, chemistry, geology, physics.

## EVR 4022 Survey of Environmental Problems II (3)

A continuation of EVR 4021.

## EVR 4211 Water Resources (3)

A seminar dealing with various aspects of water use, water pollution problems, chemistry and ecology of South Florida's waters. General biology is a prerequisite. General chemistry and general ecology are recommended.

## EVR 4231 Air Resources (3)

Common air pollutants — their sources and methods of control. Different legislative and administrative approaches will be studied. Prerequisite: General Chemistry.

## EVR 4311 Energy Resources (3)

Seminar dealing with power and energy production in modern society, fundamental energy relationships of industrial and domestic processes.

## EVR 4905 Research and Independent Study (3)

The student works with a professor on a research project.

## EVR 4920 Environmental Colloquium (3)

An exploration of contemporary ideas on environmental issues. The course brings together faculty and students in a seminar format. Each week a subject will be presented by a faculty member or student and an open discussion will follow.

## EVR 5061 South Florida Ecology: Field Studies (3)

An introduction to the ecology of South Florida through a series of field trips into several unique ecosystems, such as the everglades, hardwood hammocks, and coastal regions. No science background required.

## EVR 5141 Environmental Nuclear Chemistry (3)

Nuclear reactions and the nature of radioactivity. Properties and uses of radioactive isotopes, fission, and fusion. Introduction to reactor technology. Consent of instructor required.

## 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. Prerequisite: EVS 3360 or EVR 4231.

## EVR 5311 Energy Resources and Systems Analysis (3)

Detailed analysis of energy flows in natural and man-made systems. Energy systems analysis. Energy use patterns. Conventional and alternate sources of energy.

## 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 5907 Research and Independent Study (VAR)

The student works with a professor on a research project. Variable credit.

## EVR 3949/ EVR 4949 Cooperative Education in Environmental Studies (3)

One semester of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluations will be required of each student.

<sup>1</sup>Course descriptions are also found in catalog sections of all participating departments. For assistance see an advisor.

## Master's Program in Environmental and Urban Systems

Students wishing advanced training in environmental studies may apply to enter the M.S. program in Environmental and Urban Systems, sponsored in cooperation with the School of

Technology. The following options or tracks are available in the M.S. program:

Environmental Quality  
Urban Planning Systems  
Aquatic Resources  
Air Resources  
Energy Systems

For further information and a complete description of the course offerings, see MASTER OF SCIENCE DEGREE PROGRAM listed separately in the School of Technology.

## History

Howard Kaminsky, *Professor and Chairperson*

Eric Leed, *Associate Professor*

Brian Peterson, *Associate Professor*

Howard Rock, *Associate Professor*

Mark D. Szuchman, *Associate Professor*

Joyce Peterson, *Assistant Professor*

Darden Asbury Pyron, *Assistant Professor*

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Arts (Students interested in teacher certification refer to the School of Education).

LOWER DIVISION PREPARATION:

*Required Courses:* None

UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
A. HIS 3001 — Introduction to History,	3
or	
HIS 3104 — Ideas and Methods of History	3
B. HIS 4935 — Senior Seminar in History	3
C. One course in each of the following areas:*	
1. Medieval Europe	3
2. Modern Europe	3
3. The United States	3
4. Latin America, the Caribbean, Asia, or Africa	3
*The area numbers are indicated in brackets at the end of each course description.	
D. Any four additional History courses	12
E. Electives in History and other departments to make up the prescribed total number of credit-hours required for graduation.	60
	60

A grade of "C" or better in all courses required for the major is necessary for graduation.

Minor in History

A. HIS 3001 — Introduction to History 3  
B. Any four other History courses. 12

## Course Descriptions

Definition of Prefixes

AMH — American History; EDF — Education; Foundations; EUH — European History; HIS — General; LAH — Latin American History; WOH — World History.

AMH 2160 *Democracy in America* (3)  
Historical Analysis: The institutions, social order, and mentality of the United States in the 1830s, in reality and in their classic portray-

al by Alexis de Tocqueville, *Democracy in America*.

AMH 3012 *American History, 1600-1763* (3)  
The American colonial experience from the earliest settlements at Jamestown and Plymouth to the eve of the American Revolution. Particular emphasis will be on religion, social structure, politics and slavery. [3]

AMH 3013 *American History, 1763-1877* (3)  
This course will cover the period characterized by "laissez faire" ideology. It will focus upon developments in national politics and the ways in which they reflect economic growth and changes in the social structure. [3]

AMH 3020 *American History, 1877-Present* (3)  
The history of the U.S. during the last century. [3]

AMH 3130 *The American Revolution* (3)  
An exploration of the nature of the Revolution from the beginning of the conflict in 1763 through the ratification of the Constitution in 1789. Discussion of the political and economic differences between the colonists and England, along with the meaning the war had to the different classes of Americans. [3]

AMH 3170 *Civil War and Reconstruction* (3)  
The rise and sources of militant sectionalism in the United States, the war itself, and the restoration of the nation. [3]

AMH 3251 *The Great Depression* (3)  
This course deals with the experience of the American people in the Great Depression of the 1930s. It examines causes of the depression, government response, and effectiveness of response, as well as looking at the actual daily experience of people during the depression and the changes the depression made in U.S. society. [3]

AMH 3270 *Contemporary U.S. History* (3)  
An examination of major trends, forces and personalities that have shaped the recent American past. [3]

AMH 3275 *The Kennedy Era* (3)  
The Kennedy image and the reality of the Kennedy family's impact within the context of recent American political and social history. [3]

AMH 3317 *America and the Movies* (3)  
An examination of the social and cultural history of 20th century America through its movies. [3]

AMH 3331 *American Intellectual History I* (3)  
This course will trace the origins and development of the main ideas and intellectual themes of Anglo-American history during the colonial and early national period, 1600-1815. It will stress social ideas and popular concepts, and relate them to the formation of dominant American national characteristics. [3]

AMH 3332 *American Intellectual History II* (3)  
This course will emphasize the full flowering of individualistic liberalism in 19th century American thought, and trace the implications of and reaction against this tradition down to the present. [3]

AMH 3354 *American Presidents: Washington to McKinley* (3)  
The personalities, policies and politics of American presidents in the 18th and 19th centuries. [3]

AMH 3355 *Twentieth Century American Presidents* (3)  
The personalities, policies and politics of American presidents from Theodore Roosevelt to the present. [3]

AMH 3420 *Florida History* (3)  
A history of Florida from the time of the Indian until today. The course covers political, economic, social and cultural developments; it devotes special attention to the dependent position of Florida in the national economy, and the impact of this dependence on resources and people. [3]

AMH 3428 *Miami Social History* (3)  
An examination of the history of South Florida and the ethnic groups which make up the Miami population, particularly Blacks, Jews, Cubans and White southerners. [3]

AMH 3440 *The Great American West* (3)  
The course will explore the meaning of the West for both the settlers and modern Americans. Using song, film, novels, art, etc., the course will examine the lives and values of the Indians, mountain men, farmers, ranchers, and cowboys. [3]

AMH 3500 *United States Labor History* (3)  
A history of the experience of working class people in the United States and of the trade union movement from colonial times to the present. [3]

AMH 3560 *History of Women in the United States* (3)  
The changing dimensions of women's lives from the colonial era of U.S. history to the present. The course will examine the changing economic, social and political position of women as well as the development of feminist movements and organizations. [3]

AMH 3570 *Afro-American History* (3)  
Black society in the United States and its relation to the political, economic, social and cultural history of America. [3]

AMH 4150 *The U.S. in the National Period, 1750-1830* (3)  
American history from the American Revolution through the Age of Jackson. This course will emphasize the growth of democratic politics and political parties, the spirit of nationalism, the problem of slavery, and the westward movement. [3]

AMH 4400 *Southern History* (3)  
An examination of the main themes and social forces that have shaped the southern experience and the southern intellectual tradition in a distinctive way within the larger historical reality of colonial anglo-America and the United States. The period covered is from initial exploration and settlement of Sir Walter Raleigh and John Smith to the present.

AMH 4930 *Topics in U.S. History* (3)  
Selected topics or themes in U.S. history. The



themes 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). [3]

**AMS 4938 Seminar in American Studies** (3)  
Exploration in depth of topics in American Studies.

**EDF 3521 Education in History** (3)  
An examination of the concepts of childhood, and processes of social initiation in differing historical contexts.

**EUH 2092 The Classical Tradition: Individuals and Society** (3)

An introduction to historical analysis: the evolution of Greco-Roman, Christian, and aristocratic ideas of the individual in relation to society in successive stages of Western Civilization. The primary sources are studied in their social, political, and institutional contexts.

**EUH 2405 Historical Analysis: Athens, Sparta, Peloponnesian War** (3)

The course is intended to lead the student into the subject-matter of Western history and develop the student in the habits of critical analysis of the sources and original thinking about the meanings of thought and action. The Peloponnesian War is taken as the subject of study because of the importance of Greek history and because of the extraordinary depth given to it in the classical account by Thucydides.

**EUH 3100 The Ancient Near East** (3)  
The history of ancient Mesopotamia, Egypt and Israel. The course will stress the interaction of social structure with religion in each of the three societies.

**EUH 3142 Renaissance and Reformation** (3)  
A study of the development of humanism in Italy and Protestantism in Germany, and their impact on Europe in the fourteenth, fifteenth and sixteenth centuries. [2]

**EUH 3186 King Arthur and His Knights** (3)  
A study of Arthurian romance from the 12th to the 15th centuries, as the self-image of aristocracy. The following themes will be emphasized: chivalry, adventure, erotic idealism, Christian consecration and the creation of secular individualism. [1]

**EUH 3203 Europe in the 17th Century** (3)  
An examination of the "radical century" which defined many of the values of the modern age: the work ethic, the scientific view of nature, the notion of market society, the modern state, and bourgeois ideology. The course will emphasize the Puritan Revolution in England and rise of absolute monarchy in France. [2]

**EUH 3420 Greece and Rome** (3)  
The society, politics and culture of Ancient Greece and Rome.

**EUH 3452 The French Revolution and the Enlightenment** (3)

An examination of the intellectual and social origins of the French Revolution, focusing upon the old regime in France, the ideas of Rousseau and the philosophies and traditions of social protest in the 18th century. [2]

**EUH 3460 Germany from Charlemagne to Hitler** (3)

An overview of German history with special emphasis on the development of the National Socialist movement. Political, economic, social, cultural and religious aspects of German history will be covered. [2]

**EUH 3570 Russian History** (3)

An overview of Russian History from the time of tribal Slavs until today. The course will focus especially on the changing conditions of the Russian peasantry and on the unique development of the Russian state. [2]

**EUH 3576 The Russian Revolution and the Soviet Union** (3)

This course deals with Russia since 1917 and focuses particularly on the theory and practice of communism in the Soviet Union. The impact of communism on the lives of the people, whether in politics, economics, or culture, will be examined. [2]

**EUH 3601 Medieval Culture** (3)

Selected topics in the cultural history of Europe from 500 to 1500; epic and knightly romance; Christian theology and spirituality; scholastic philosophy; Romanesque and Gothic arts; the rise of literature in the vernacular; the culture of the layman; and the contribution of women. [1]

**EUH 3611 European Cultural History** (3)

An examination of changes in the social and political structure of Europe through film, art and literature. This is an introductory course to both European social history and cultural history in the last two hundred years. [2]

**EUH 3613 Modern Europe in Film, Art and Literature, 1789-1914** (3)

An examination of European cultural history between the French Revolution and the outbreak of the First World War. This is an introductory course with a strong emphasis on film.

**EUH 3614 Contemporary Europe in Film, Art and Literature, 1914-Present** (3)

An examination of European cultural history between the outbreak of the First World War and the present. This is an introductory course with a strong emphasis on film.

**EUH 4006 Modern Europe, 1789-Present** (3)

European history from the French Revolution until today, with special attention to liberalism, nationalism, socialism, communism and fascism. The course will touch on the main points of the national histories of the various European states, from Britain to Russia. [2]

**EUH 4121 Europe in the Earlier Middle Ages** (3)

Europe from the fall of the Roman Empire in the West (ca. 500 AD) to the first Crusade (1095). The formation of feudal society, the military upper class, the imperial papacy, the monastic order, the interplay between Christian and worldly ideals. [1]

**EUH 4123 Europe in the Later Middle Ages** (3)

Europe from the twelfth through the fifteenth centuries. The formation of territorial states and an aristocratic order of status; Romanesque and Gothic arts; courtly romance and chivalry; development of subjectivity and individual self-

consciousness; heresy, inquisition, and social revolution. [1]

**EUH 4187 Topics in Medieval European History** (3)

Selected topics or themes in Medieval history. The themes will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [1]

**EUH 4200 Early Modern Europe, 1500-1650** (3)

The major events and movements which signaled the beginning of modernization in Europe: the voyages of discovery, the new representations in art, and the rise and triumph of religious dissent. [2]

**EUH 4201 Early Modern Europe, 1650-1789** (3)

European society as it developed between the English Civil War and the French Revolution. The consolidation of the "Old Regime." [2]

**EUH 4205 Modern Europe, 1789-1914** (3)

This course will examine the two major revolutions which have shaped our time: the French Revolution and the Industrial Revolution. Beginning with Rousseau, the course will explore industrializing England, and end with an analysis of European politics and culture on the eve of World War I. [2]

**EUH 4206 Modern Europe, 1914-Present** (3)

Europe from the first World War to the present. The course will explore the impact of industrialization, the World Wars, and the rise of fascism and communism. [2]

**EUH 4286 Topics in European History** (3)

An examination of selected topics or themes in early modern and modern European history. The themes will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [2]

**EUH 4520 The Classical Age: England in the 18th Century** (3)

Exploring one of the greatest eras in English history, this course will cover the growth of the British empire, crown and parliament, the industrial revolution, social problems and English culture.

**HIS 2302 Foundations of Industrial Civilization** (3)

This course in historical analysis is designed to explore the uniqueness of industrial civilization. How does industrial society differ from preindustrial societies? What sorts of changes have taken place within industrial civilization over the past two hundred years? What is the range within industrial societies of possible forms of social organizations?

**HIS 3001 Introduction to History** (3)

Approaches to the study of the Western tradition. Required of all majors and those seeking certification to teach history.

**HIS 3104 Ideas and Methods of History** (3)

An overview of the philosophy and treatment of history through the ages and of modern methods to research it. Can be substituted for HIS 3001 to fulfill major and certification requirements.

**HIS 3244 History of Communism (3)**

A survey of the history of communism from the writings of Marx through the Soviet, Chinese, and Cuban revolutions. The course will consider communism both in theory and in practice.

**HIS 3308 War and Society (3)**

An examination of the ways societies have organized themselves for external and internal wars. The course will also explore the changing conduct of war, the image of the warrior, and the ways in which military institutions have crystallized class structures.

**HIS 3473 The History of Science and Technology (3)**

This course will examine the history of western civilization in terms of the development of science and technology. It will focus upon the invention of new techniques and productive processes, and upon the way technology and science have shaped western society, particularly in regard to art and ideas.

**HIS 3930 Special Topics (3)**

An examination of specific themes or topics in 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).

**HIS 4282 Europe in the Americas: Comparative Colonial Societies (3)**

A comparative analysis of the colonial experiences of Spanish Latin America and British North America. This course will discuss economic, social, political, religious and cultural growth, focussing on influences of the mother countries.

**HIS 4908 Independent Study (VAR)**

Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor.

**HIS 4930 Special Topics (VAR)**

An examination of specific themes or topics in 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).

**HIS 4935 Senior Seminar in History (3)**

A seminar to be taken by all history majors, to provide experience in research, writing and critical analysis.

**HIS 5289 Comparative History (3)**

A study of specific topics in history that cut across regional, national and chronological lines. The theme 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).

**HIS 5908 Independent Study (VAR)**

Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor.

**HIS 5910 Advanced Research and Seminar (3)**

Small group sessions which will analyze particular subject areas in history, with the consent of the instructor.

**HIS 5930 Special Topics (VAR)**

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).

**LAH 2722 The Latin Americans (3)**

An examination of the evolution of symbols of status and power, and of the socio-economic relationships among groups within the various Latin American regions.

**LAH 3020 Introduction to Latin American History (3)**

This course is an introduction to the history of the major social, cultural and political institutions of Latin America. It covers both the colonial and national periods of leading Latin American countries. [4]

**LAH 3410 Mexico and the Caribbean (3)**

The themes that have generated the histories of several nations in and around the Caribbean since the nineteenth century. [4]

**LAH 3482 Cuba from Bourbons to Castro (3)**

The socio-economic and political setting in Cuba since the mid-nineteenth century. [4]

**LAH 4132 The Formation of Latin America (3)**

An examination of Latin America in the formative period, focusing upon the Iberian experiences, conquest, reconquest, ethnic amalgamation, and Latin American economic and social organization in the 15th and 16th centuries. [4]

**LAH 4133 Spain in America (3)**

Colonial Latin America in the 17th and 18th centuries. The course will focus upon the formation of the landed estate, urban functions, labor, Indian relations, the Church, and the Enlightenment. [4]

**LAH 4201 Latin America: The 19th Century (3)**

A review of important issues of nation-building in the more influential Latin American countries. Topics will include federalism, centralism, immigration, economic development, and imperialism. [4]

**LAH 4300 Twentieth Century Latin America (3)**

Topics in the histories of selected Latin American nations that have developed since the late 19th century, including discussion of race relations, dictatorship, modernization, capitalism, and leftist and rightist solutions. [4]

**LAH 4474 Topics in Caribbean History (3)**

Selected topics or themes in Caribbean history. The themes 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). [4]

**LAH 4511 Order And Revolt in Argentina (3)**

A survey of the social and political formation of the Argentine nation, starting with the colonial legacy and ending with the contemporary political situation. [4]

**LAH 4932 Topics in Latin American History (3)**

Selected topics or themes in Latin American

history. The themes 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). [4]

**LAH 5305 20th Century Latin American History (3)**

Advanced analytical studies of socioeconomic phenomena in Latin America: race relations, authoritarianism, modernization, migration, capitalism and the State.

**WOH 3002 History of Western Civilization (3)**

Western Civilization from the Ancient Near East until today, with special attention to the social structures and values as they developed over time. Literature, art, philosophy and other aspects of culture will be examined through readings, art slides, films and lectures in order to develop a comprehensive view.

**WOH 3244 The Contemporary World, 1945-Present (3)**

An examination of the world-wide political struggle between capitalism and communism. The course will stress domestic as well as international power-political rivalries. Special emphasis will be given to Japan, China, Cuba, France, the United States, India, and Eastern Europe.

**WOH 3280 Women's History (3)**

A survey of the position of women in the major world civilizations. The course examines the position of women from the stone age to the present, with particular attention to both women's actual function in society and the ideal definition of womanhood in different societies.

**WOH 3283 Jewish History (3)**

A survey of the major currents of Jewish history.

**WOH 3300 Third World Civilizations (3)**

The civilizations of Asia, Africa and Latin America from ancient times until today, with special attention to the social structures and values of each civilization. Literature, art, philosophy and religion will be examined through readings, art slides, films and lectures in order to develop a comprehensive view. [4]

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## Humanities

*Kenneth Henley, Associate Professor of Philosophy and Director of Humanities*

*Charles Elkins, Associate Professor of English and Associate Dean*

*Barbara Forbes, Assistant Professor of Art*  
*Ramon Mendoza, Professor of Modern Languages*

*Joyce Peterson, Assistant Professor of History*

*Richard P. Sugg, Associate Professor of English*

The Humanities program at the Bay Vista campus offers a well-structured, interdisciplinary curriculum. The goal envisioned by this program is to confront the student with those values and issues concerning man and society which extend beyond the scope of both natural

and social sciences, and which cannot be adequately described and analyzed by the methodologies of these sciences.

The Humanities focus primarily upon the nature of man and his values, as well as upon his major concerns in society and his views of the world. These concerns are now, and have been through the ages, the preferred object of thought of philosophers, poets, dramatists, fictionists and mystics. Their views, manifested primarily in written texts, have become the reservoir of mankind's most outstanding intellectual achievements. Such texts include the works of painters, musicians, and sculptors, as well as the production of mass media and popular culture which must now engage the serious student of our century's culture and its future.

The Humanities program, however, will not be merely theoretical. It seeks to develop in the student those skills and attitudes which are more specifically human. These are primarily all skills of verbal and written communication, analytical skills, and open-minded and critical attitudes towards the problems of our changing society. Also, the development of artistic sensitivity and expression, and of all forms of imaginative creativity, will be main targets of the program. Above all, the program hopes to challenge the student to become a decisive factor in raising the cultural level of our society by bringing his or her humanistic approach to bear upon its individuals, institutions, and cultural programs through the mass media. The program will be particularly useful to students who wish to pursue post-graduate degrees requiring a general educational background, such as Law School, International Relations, and all the traditional Liberal Arts programs.

A grade of C or better in all courses required for the major is necessary for graduation.

LOCATION: Bay Vista Campus only.

DEGREE: Bachelor of Arts

LOWER DIVISION PREPARATION:

**Recommended Courses:** A basic interdisciplinary survey of Western civilization, including the Ancient, Renaissance and Modern worlds; foreign language; English composition and literature.

UPPER DIVISION PROGRAM:

A. *Three* required Humanities courses:

1. HUM 3211 Introduction to Humanities: Ancient Through Medieval World
2. HUM 3230 Introduction to Humanities: Renaissance Through Modern World
3. HUM 4920 Humanities Colloquium

B. *Five* courses chosen from the contributing disciplines (English, Modern Languages, Philosophy and Religion, History, and Visual Arts). No more than two courses may be from the same discipline.

C. *Three* courses chosen from additional Humanities courses; these additional Humanities courses include:

- \*HUM 3813 and 3941 Applied Humanities
- \*HUM 3302, 3872, and 3891 Perspectives of the Humanities

\*HUM 4450 and 4491

Cultural Heritages and Cultural Changes

\*HUM 4391 and 4542

Human Concerns

HUM 4406

The Film

HUM 4496

Latin American Civilization

\*HUM 4906

Humanities Independent Study

\*(With instructor's permission, these may be repeated for credit.)  
D. *Nine* general elective courses. These courses may be outside of the Humanities and its contributing disciplines.

Language Requirement:

Students must demonstrate a reading knowledge of a language other than their native tongue equivalent to the end of the third semester of beginning language instruction. This requirement may be satisfied by completing 9 hours of language instruction or by passing a competency examination administered by the Department of Modern Languages.

## Course Descriptions

Definition of Prefixes

HUM — Humanities

HUM 3211 Introduction to the Humanities:

Ancient World Through Medieval World (3)

Explores the culture of the ancient world and medieval from an interdisciplinary perspective and studies the varying conceptions of the individual, society and nature.

HUM 3230 Introduction to the Humanities:

Renaissance Through Modern World (3)

Explores the culture of the Renaissance and modern world from an interdisciplinary perspective and studies the varying conceptions of the individual, society and nature.

HUM 3302 & 3872 & 3891 Perspectives of the Humanities (3)

Addresses topics in the Humanities through specified disciplinary approaches. (With consent of the instructor, this course may be repeated for credit.)

HUM 3813 & 3941 Applied Humanities (3)

Explores the nature, role and impact of the Humanities in society and addresses specific methodological and practical issues to be announced in advance. The requirements of this course may include projects outside the classroom. (With consent of the instructor, this course may be repeated for credit.)

HUM 3949 Cooperative Education in Humanities (3)

A student majoring in Humanities may spend one or two semesters fully employed in industry in a capacity relating to the major.

HUM 4391 & 4542 Human Concerns (3)

Examines concerns important to the human condition, including varying conceptions of human nature, the relation of the individual to

society, the quest for identity, the search for meaning through literature, art and social institutions. (With consent of the instructor, this course may be repeated for credit.)

HUM 4450 & 4491 Cultural Heritages and Cultural Changes (3)

Focuses upon various cultures and their development, including such topics as: cultural evolution and revolution, ethnicity and pluralism, and subcultures and countercultures. (With consent of the instructor, this course may be repeated for credit.)

HUM 4920 Colloquium (3)

Addresses a specific topic in depth from a variety of perspectives. Topics will be announced in advance. (With consent of the instructor, this course may be repeated for credit.)

## International Relations

Ralph S. Clem, *Associate Professor and Chairperson*

Antonio Jorge, *Professor*

Gregory B. Wolfe, *Professor and President of the University*

Ken I. Boodhoo, *Associate Professor*

Thomas A. Breslin, *Associate Professor*

Farooq Jhabvala, *Assistant Professor*

Ewart Archer, *Assistant Professor*

Charles G. MacDonald, *Assistant Professor*

LOCATION: Tamiami and Bay Vista Campuses

DEGREE: Bachelor of Arts

A grade of C or better in all courses required for the major is necessary for graduation.

LOWER DIVISION PREPARATION:

**Recommended Courses:** Economics, foreign languages, geography, history, international relations, introduction to statistics, political science, sociology.

UPPER DIVISION PROGRAM:

**Required Courses:** 4

GEA 3000	World Regional Geography
INR 3003	Foundations of International Relations
INR 3013	Development of International Relations Thought
INR 4605	Approaches to International Relations

**Breadth Requirements:** 6

At least one course in each of the following:  
Area studies (regional courses on Europe, the Caribbean, Latin America, Africa, Asia, or the Soviet Union) ..... (AS)  
Population Studies or Geography ..... (PG)  
International Law or Organization ..... (IL)  
Issues and Problems in International Relations ..... (IP)  
*Electives:* 10

Courses are designed to meet particular professional goals. The student is encouraged to consider a dual major in related

fields; to pursue courses in foreign languages and methodology; and to work toward appropriate academic certificates (i.e., Latin American and Caribbean Studies).

20

#### Minor in International Relations:

5

A student majoring in another academic discipline will earn a Minor in International Relations by successfully completing approved coursework in the Department of International Relations. This program must include:

- 1) Foundations of International Relations (INR 3003)
- 2) World Regional Geography (GEA 3000) or an approved course in Geography
- 3) A course in International Law or Organization
- 4) Two electives in International Relations

**The Dual Major and Certificates:** The Student is encouraged to pursue a dual major and/or a certification program to complement the International Relations program. This allows the student to add an important additional dimension to the major itself.

## Course Descriptions

### Definition of Prefixes

CPO — Comparative Politics; GEA — Geography-Regional (Area); HFT — Hospitality, Food, Tourism; INR — International Relations; POS — Political Science; PUP — Public Policy; SOC — Sociology.

#### CPO 3326 Population and Geography

of the Caribbean (PG)

(3)

Introduction to the physical, cultural and political geography of the Caribbean. Emphasis on population patterns, problems of population growth, and ethnicity.

#### GEA 3000 World Regional Geography

(3)

A systematic survey of the major regions and countries of the world, with regard to their physical, cultural, and political characteristics. Emphasis upon climate, natural resources, economic development, and population patterns.

#### GEA 3172 Geography of the Developing

World (PG)

(3)

Examines the geographical factors shaping the differences between more and less-developed countries, and prospects for narrowing these in the future. Stress is laid on the need to utilize efficiently the physical environment and the human barriers to such utilization.

#### GEA 3400 Population and Geography of

Latin America (PG)

(3)

Introduction to the physical, cultural, and political geography of Latin America. Emphasis on population patterns and problems of population growth, systems of land use and tenure, economic development, natural resources, and agriculture.

#### GEA 3554 Population and Geography

of the Soviet Union (PG)

(3)

An analysis of the U.S.S.R. in terms of its resources; economic development; and aspects of

population change such as migration, urbanization, and nationality groups.

#### GEA 3600 Population and Geography of Africa (PG)

(3)

Introduction to the physical, cultural, and political geography of Africa. Emphasis on the evolution of independent states, and economic development.

#### GEA 3630 Population and Geography of the Middle East (PG)

(3)

Introduction to the physical, cultural, and political geography of the Middle East. Emphasis on population patterns, natural resources, and economic development.

#### GEA 3710 Population and Geography of China (PG)

(3)

Introduction to the physical, social and cultural geography of China. Emphasis on population patterns, problems of population growth, regionalism.

#### GEO 3471 Political Geography (PG)

(3)

Emphasis is given to man's organization of space, particularly as it pertains to the nation-state. Factors instrumental to determining the viability of states are included stressing unifying-repelling forces.

#### GEO 5415 Topics in Social Geography (PG, IP)

(3)

Topics discussed include geographic aspects of population and ethnicity, with emphasis on sources and analysis of data and pertinent concepts. Prerequisite: GEA 3000 or permission of instructor.

#### HFT 3700 Tourism and International Affairs (IP)

(3)

An introduction to basic elements of international tourism; an inquiry into the transnational influence of tourism as affected by its institutional organization, by the leisure traveler, and by the host national; and a review of opportunities for policy-making by the group, the State, and international and global agencies.

#### HFT 4700 Alternate Tourism Scenarios and Strategies (IP)

(3)

A course for the student familiar with tourism in the context of international affairs; tourism as migratory aspect; tourism as international medium; tourism and the export of technology; tourism and national dependency; the marketing of globalism through tourism; others. The course includes strategies laboratory.

#### INR 2001 Introduction to International Relations

(3)

Introduction to the interactions among international actors: states, international organizations, and transnational groups. Concepts such as power and national interest will be introduced.

#### INR 3003 Foundations in International Relations

(3)

An examination of international political, economic, and social systems. Emphasis is placed on basic approaches to the study of international relations.

#### INR 3004 Patterns of International Relations (IP)

(3)

The course deals with the development and practice of key concepts of international relations as seen in the historical perspective of the 19th and 20th centuries. The course is structured so as to emphasize the continuity and coexistence of the several concepts during the 20th century, and to provide an outline of modern diplomatic history.

#### INR 3013 Development of International Relations Thought

(3)

The nature and characteristics of international relations from antiquity to the end of the First World War. Examination of the religio-philosophical, socio-economic and political ideas and systems associated with them. Study of select historical occurrences and patterns of social change and their interaction with the dynamics of international relations. Prerequisite: INR 3003.

#### INR 3031 The Future of the International System (IP)

(3)

Explores probable and improbable international futures through the use of simulations, gaming, and speculative literature. Focuses upon alternatives to present international arrangements.

#### INR 3043 Population and Society (IP)

(3)

Introduction to basic demographic concepts: fertility, mortality, migration, urbanization. Discussion of economic development, modernization and population change. Examination of sources of data and background information including censuses and vital statistics, and their utilization.

#### INR 3081 Issues and Problems in

International Relations (IP)

(3)

Examines selected world and regional issues and problems. Topics vary according to the instructor.

#### INR 3214 International Relations of

Europe (AS)

(3)

An examination of the international, social, economic, and political life of contemporary Europe. Emphasis given to international organizations and the trend toward economic and political integration.

#### INR 3224 International Relations of

East Asia (AS)

(3)

A survey of the patterns of international relations in the post-colonial periods in east and southeast Asia. Political, military and economic aspects examined.

#### INR 3226 International Relations of

South Asia (AS)

(3)

A study of South Asia as a regional international system with special emphasis on the period 1945 to the present. Interaction between the regional and world systems. Role of the super-powers.

#### INR 3232 International Relations of China (AS)

(3)

An examination of the development of China's international relations in the 20th century. Special attention to the development of institutional mechanisms for diplomacy and to problems of integrating domestic and foreign policies.

**INR 3245 International Relations of Latin America (AS) (3)**

An examination of international, social, economic, and political life of Latin America. Emphasis given to the role of international organizations; regionalism; and the trend toward economic integration.

**INR 3246 International Relations of the Caribbean (AS) (3)**

An examination of the international social, economic, and political life of the Caribbean. Includes English, Spanish, and French speaking regions.

**INR 3274 International Relations of the Middle East (AS) (3)**

An examination of the international social, economic, and political life of the Middle East. The role of oil in the region will receive special attention.

**INR 3403 International Law (IL) (3)**

Introduction to the legal concepts, framework and institutions which play a role in international relations theory and practice.

**INR 3404 Principles of Public International Law (IL) (3)**

A study of public international law principles in selected areas such as treaties; state succession; law of the sea; air and space law; law of international economic institutions; international conflict resolution procedures.

**INR 3502 International Organizations (IL, IP) (3)**

The study of international political, economic, and social organizations and their impact upon the relations between nations. Emphasis on the constitution, voting, membership, security and operation of such organizations, and the settling of international disputes through these bodies.

**INR 3949 Cooperative Education in Social Sciences (3)**

A student majoring in one of the Social Sciences (Economics, International Relations, Political Sciences, Sociology, or Psychology) may spend several semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

**INR 4024 Ethnicity and Nationality: World Patterns and Problems (IP) (3)**

A systematic survey of multi-national states and their current political and socioeconomic situations. The concept of ethnicity and its correlates. Conceptual bases of ethnic integration, assimilation, and stratification. The macro and micro-scales; country, region, city, neighborhood. The consequences of modernization and economic development.

**INR 4033 International Communication (IP) (3)**

The course will explore language as the medium of national and international communication; the multiple and often conflicting roles of language as unifier and isolator of political and social entities.

**INR 4044 World Population Problems (IP) (3)**

Analysis of problems of population growth, eco-

nomie development, and food supply. The impact of population growth upon the world political system. The Green Revolution and its implications. Environmental consequences of population growth. Prerequisite: INR 3043.

**INR 4054 World Resources and World Order (IP) (3)**

An examination of the impact of the quantity and distribution of the world's resources upon the relations between nations. The availability of mineral resources and food, in particular, will receive attention; and an assessment will be made of the international economic and political implications deriving therefrom.

**INR 4247 Caribbean Regional Relations (AS) (3)**

An examination of the forces and institutions which contribute to or inhibit cooperation and integration in the Caribbean. Prerequisites: INR 3246, CPO 3323, ECS 4432, or ECS 4433.

**INR 4261 Science, Technology and International Relations (IP) (3)**

A study of the importance and relevance of science and technology to our understanding of international relations. Emphasis will be placed on national scientific policies of major countries, their implication on the international community and the major national and international agencies, organizations, treaties, and programs.

**INR 4283 International Relations, Development, and the Third World (AS, IP) (3)**

An examination of the impact of the theory and practice of development and the relations between nations, with particular emphasis on the Third World. Attention given to the role of international political and economic organizations in the development process.

**INR 4404 International Protection of Human Rights (IL, IP) (3)**

Development of the concern of the international community with the rights of individuals and groups and the institutional mechanisms which have been set up for their protection.

**INR 4408 Topics in International Law (IL, IP) (3)**

An intensive examination of selected topics in international law and relations among nations. Topics will vary according to the interests of the instructor and the students.

**INR 4417 International Relations and International Law (IL, IP) (3)**

World order and international relations. Current trends in the theory and practice of international law. Progressive development of international law through international institutions, in such matters as intervention, use of force, human rights, and the law of the sea.

**INR 4605 Approaches to International Relations (3)**

Analysis and conceptualization of the forces and conditions which influence relations among nations. Emphasis is on the provision of an analytical basis for the study of international relations. Prerequisite: INR 3003 or permission of instructor.

**INR 4905 Independent Study (VAR)**

**INR 4931 Topics in International Relations (3)**  
Varies according to the instructor.

**INR 4949 Cooperative Education in Social Sciences (3)**

A student majoring in one of the Social Sciences (Economics, International Relations, Political Science, Sociology, or Psychology) may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

**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 5906 Independent Study (VAR)**

**INR 5935 Topics in International Relations (3)**  
Varies according to the instructor.

**INR 6605 Contemporary International System (3)**

Study of International Relations theory supplemented with a consideration of legal institutional and developmental issues. Prerequisite for MIB students: INR 6603 (World Politics).

**POS 4692 Law and the Process of Change (IL, IP) (3)**

An exploration of the role of law and legal institutions in the process of modernization, with particular emphasis on developing countries.

**PUP 3206 International Law and the Environment (IL, IP) (3)**

Introduction to the growing body of international laws on environmental issues, with special emphasis on important cases. Recent attempts to coordinate and regulate activities affecting the global environment, with particular attention to the UN. Environmental Agency.

## International Studies Master of Arts in International Studies

*Director:* Farrokh Jhabvala (International Relations)

*Interdepartmental Advisory Committee:*

Ralph Clem (International Relations)

Howard Kaminsky (History)

Anthony Maingot (Sociology/

Anthropology)

Jorge Salazar-Carillo (Economics)

John Stack (Political Science)

*Location:* Tamiami Campus.

The Master's program in International Studies is an interdisciplinary program designed to

prepare individuals for careers in government, the private sector or international agencies. The program focuses on the broad issue of socio-economic development and provides the student with a sound basis in the politics, economics and sociology of development as also its international aspects. The interdisciplinary character of the program ensures that the subject matter is treated as a whole. In addition, with the permission of the Interdepartmental Advisory Committee students may take their electives in related fields such as business, education or public administration.

Substantial scholarships and assistantships are available.

#### Degree Requirements

The Master of Arts in International Studies requires a minimum of 36 semester hours of coursework at the graduate level. Students may also have to satisfy prerequisites at the undergraduate level for some courses in the program. Such courses will not be counted toward the 36-hour minimum requirement. (A maximum of 6 semester hours of graduate coursework may be transferred from other institutions of higher education subject to the approval of the Interdepartmental Advisory Committee).

<b>Core Courses:</b> 18 semester hours	
INR 5283	Int'l Rel & Development
SOC 5306	Sociology of Int'l Development
ESC 5025	Economic Development
CPO 5034	Politics of Development
POS 5703	Research Methodology
INR 6008	Colloquium in Int'l Studies

#### Electives: 12 semester hours

A minimum of 4 graduate-level courses chosen from the depts. of Economics, Political Science, Sociology/Anthropology, Int'l Relations and History. Elective courses may also be taken in fields other than those mentioned here with the approval of Interdepartmental Advisory Committee.

#### Thesis: 6 semester hours

The thesis requirement will normally be undertaken after completion of a major portion of the coursework. The thesis must demonstrate an ability to organize existing knowledge, synthesizing the available information from more than one discipline, and focusing that knowledge as to illuminate a problem, policy, or theory in International Studies. To be presented to an Ad Hoc Thesis Committee named by the Interdepartmental Advisory Committee.

#### Language Requirement:

Prior to graduation, all students must demonstrate competency in the use of a modern foreign language. Language courses cannot count for credit in the program.

## Liberal Studies

John F. Stack, Jr., *Director of Liberal Studies and Associate Professor of Political Science*

The purpose of the Liberal Studies Program is to expose the student to the broadest possible

range of courses offered in the College, while at the same time granting the opportunity to pursue an individualized program of studies under the Liberal Studies guidelines. These guidelines include six categories of courses: (1) Foundations of Liberal Studies, two courses to be taken by Liberal Studies students as early in their work as possible; (2) Interdisciplinary Colloquia, two courses, involving faculty from several departments of the College, and dealing with topics which cut across disciplinary lines; (3) Scientific Analysis, two courses which expose the student to the scientific method and its application to problems in biology, physics, chemistry, earth science, and environmental science; (4) Humanistic Analysis, two courses which deal with the analysis of literary and historical texts or works of art and music; (5) Social Analysis, two courses which expose the student to the basic theories and methods of social scientists in the fields of political science, economics, social psychology, sociology, anthropology, and social-science-oriented history; (6) Artistic Creation, one course in studio art or music, creative writing, or theater, which allows the student to experiment with her or his own creativity and to experience the work of the artist.

Students are free to choose any combination of courses within these guidelines. Under the advisement of the Director of Liberal Studies, the student will be encouraged to pursue an individualized and focused program.

A grade of "C" or better in all courses required for the major is necessary for graduation.

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Arts

LOWER DIVISION PREPARATION:

*Required Courses:* none.

*Recommended Courses:* Arts and Sciences concentration recommended.

UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<i>Required Courses:</i> 11 courses	33

Courses offered by any of the units of the College of Arts and Sciences, chosen in accordance with academic guidelines of the Program of Liberal Studies, to meet requirements in the four following areas:

Scientific Analysis	6
Humanistic Analysis	6
Social Analysis	6
Artistic Creation	3
Interdisciplinary Colloquia offered by the Liberal Studies Program	6
Foundations of Liberal Studies	6

*Electives:* The remaining hours will be taken as electives.

Limitations: If the student wishes to obtain a second major concurrently, no more than 3 courses taken to meet the requirements of the other major may be counted towards the requirements of Liberal Studies. If she/he wishes to obtain a minor concurrently, no more than 2 courses taken to meet the requirements of the minor may be counted towards the requirements of Liberal Studies. Additionally, no student is

allowed to take more than 6 courses in one discipline.

## Course Descriptions

### Definition of Prefixes

IDS—Interdisciplinary Studies

**IDS 3930 Foundations of Liberal Studies (3)**  
This will be a broad synthesis of knowledge and methods in the Arts and Sciences, taught from the perspective of different disciplines. Specific topics will be announced in advance.

**IDS 3949 Cooperative Education in Liberal Studies (3)**  
A student majoring in Liberal Studies may spend several semesters fully employed in industry in a capacity relating to the major.

**IDS 4905 Independent Study (VAR)**  
Cross-disciplinary topics for individual study and research to be chosen by External Degree students in consultation with their faculty advisors.

**IDS 4920 Liberal Studies Colloquia (3)**  
Individual sections will study, from an interdisciplinary perspective, issues selected and presented jointly by college faculty. Specific topics will be announced in advance.

**IDS 4949 Cooperative Education in Liberal Studies (3)**  
A student majoring in Liberal Studies may spend one or two semesters fully employed in industry in a capacity relating to the major.

## Mathematical Sciences

*Toby S. Berk, Associate Professor and Chairperson*

*Robert C. Fisher, Professor*  
 *Malcolm H. Gotterer, Professor*  
 *Samuel S. Shapiro, Professor*  
 *David Barton, Associate Professor*  
 *Jack Belzer, Distinguished Lecturer*  
 *John C. Comfort, Associate Professor*  
 *Gauri L. Ghai, Associate Professor*  
 *Arie Kaufman, Associate Professor*  
 *William T. Kraynek, Associate Professor*  
 *Frederick Oliveira-Pinto, Visiting Associate Professor*

*Richard L. Rubin, Associate Professor*  
 *Anthony C. Shershin, Associate Professor*  
 *James F. Sliker, Associate Professor*  
 *Willie E. Williams, Associate Professor*  
 *Carlos W. Brain, Assistant Professor*  
 *Ina Parks Howell, Assistant Professor*  
 *Paulette Johnson, Assistant Professor*  
 *Wesley Mackey, Assistant Professor*  
 *Jainendra K. Navlalkha, Assistant Professor*  
 *David Ritter, Assistant Professor*  
 *Dev Roy, Assistant Professor*  
 *Ruyji Yamaguchi, Assistant Professor*  
 *Domitila Fox, Instructor*  
 *Susan G. Gorman, Instructor*  
 *Carol D. Henley, Instructor*

Orlando Sauleda, *Instructor*  
 Stephanie Siegel, *Instructor*  
 Matrid H. Whidden, *Instructor*

## Mathematics

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

*Required Courses:* Calculus including multi-variable calculus; introductory course in computer programming; linear algebra; differential equations.

*Remarks:* If an entering mathematics major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted at a non-major elective. The equivalent courses are: MAC 3411 — MAC 3412 — MAC 3413 (Calculus); COP 3112 (Fortran) MAS 3103 (Linear Algebra); and MAP 3302 (Differential Equations).

UPPER DIVISION PROGRAM:

*Required Courses:*

MAA 3200	Introduction to Analysis
MAA 4211	Advanced Calculus
MAS 4301	Algebraic Structures
STA 3321	Mathematical Statistics I

In addition, *three* courses from each of the following lists.

### LIST (1)

MAD 4203	Introduction to Combinatorics
MAA 4402	Complex Variables
MTG 3212	Geometry
MAS 5215	Number Theory
MAA 4212	Topics in Advanced Calculus
MAS 4302	Topics in Algebraic Structures
MTG 4302	Topology

### LIST (2)

MAP 4401	Advanced Differential Equations
MAD 3305	Graph Theory
MAP 3103	Mathematical Modeling
STA 3322	Mathematical Statistics II
MAD 3401	Numerical Analysis

*Electives:* The balance of the 60 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

### Minor in Mathematics

*Required Courses:* MAC 3411-2-3 Calculus I-II-III (or equivalent).

Four courses from those approved for the Mathematics Major program. MAP 3302 and MAS 3103 may be included among these four courses. A grade of "C" or better in each of these courses is necessary for the minor.

*Remarks:* No mathematical sciences courses can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a mathematical sciences course is required for a major in one area and a minor in another, the student should see his/her advisor for an appropriate substitution for the requirement of the minor.

A grade of "C" or better in all courses required for the major is necessary for graduation.

## Statistics

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

*Required Courses:* Calculus including multi-variable calculus and an introductory course in computer programming.

*Remarks:* If an entering statistics major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted as a non-major elective. The equivalent courses are: MAC 3411 — MAC 3412 — MAC 3413 (Calculus); and COP 3112. (Fortran).

UPPER DIVISION PROGRAM:

*Required Courses:*

MAS 3103	Linear Algebra
STA 3321	Intro to Mathematical Statistics I
STA 3322	Intro to Mathematical Statistics II
STA 3163	Statistical Methods I
STA 3164	Statistical Methods II

*Five* additional approved Mathematical Sciences courses, with at least *three* in statistics

*Electives:* The balance of the 60 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

*Remarks:* Statistics courses are listed under mathematical sciences. The student must consult his or her advisor at the University to determine which courses, in addition to the required courses listed above, satisfy the requirements for a statistics major.

Minor in Statistics

*Required Courses:*

STA 3321	Introduction to Mathematical Statistics I
STA 3322	Introduction to Mathematical Statistics II
STA 3163	Statistical Methods I
STA 3164	Statistical Methods II

A grade of "C" or better in each of these courses is necessary for the minor.

*Remarks:* No mathematical sciences courses can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a mathematical science course is required for a major in the one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.

A grade of "C" or better in all courses required for the major is necessary for graduation.

## Computer Science

LOCATION: Tamiami and Bay Vista Campus

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

As part of the 60 semester hours of lower division coursework necessary to enter this upper division major, note the following recommendations and / or course requirement.

*Required Courses:*

Computer Programming in COBOL  
 Computer Programming in some other high level language

Calculus through infinite series

The equivalent courses at FIU are:  
 COP 3122 COBOL and Data Processing  
 COP 3112 Introduction to Computers  
 MAC 3411-2 Calculus I & II

UPPER DIVISION PROGRAM:

*Required Courses:*

ENC 3343	Technical Writing
STA 3033	Introduction to Probability and Statistics for CS
or	
STA 3321-2	Mathematical Statistics I & II
COP 3402	Assembly Language Programming
MAD 3104	Discrete Mathematics
MAD 3512	Introduction to Theory of Algorithms
COP 3522	Programming Methodology
COP 3530	Data Structures
CDA 4101	Structured Computer Organization
COP 4610	Operating Systems Principles

Plus one course from *each* of the following two lists.

### LIST (1)

MAD 3305	Graph Theory
MAD 3401	Numerical Analysis
MHF 4302	Mathematical Logic
COT 5320	Theory of Computation
MAD 4203	Introduction to Combinatorics

### LIST (2)

CDA 3040	Computer Hardware Fundamentals
CDA 4163	Data Communications
CDA 4171	Mini-computer Architecture and Applications
CAP 5721	Computer Graphics
COP 5540	Data Base and File Organization
COP 5640	Compiler Construction

*Electives:* The balance of the 60 semester hours required for graduation may be chosen from any courses in the university approved by the student's advisor.

*Remarks:* The student must consult his advisor concerning those mathematical sciences courses which may be used to satisfy the requirements for a computer science major.

Minor in Computer Science

*Required Courses:*

COP 3112	Introduction to Computers
COP 3402	Assembly Language Programming

COP 3522	Programming Methodology
COP 3122	Data Processing and COBOL

A grade of "C" or better in each of these courses is necessary for the minor.

Plus, one other course in computer science at the 3000 or 4000 level, acceptable for the major program.

**Remarks:** No mathematical sciences course can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a mathematical science course is required for a major in one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.

A grade of "C" or better in all courses required for the major is necessary for graduation.

## Mathematical Sciences

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science  
LOWER DIVISION PREPARATION:

**Required Courses:** Calculus including multi-variable calculus; introductory course in computer programming; linear algebra; differential equations.

**Remarks:** If an entering major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted as a non-major elective. The equivalent courses are MAC 3411, MAC 3412, MAC 3413 (calculus); COP 3112 (Fortran); MAS 3103 (linear algebra); and MAP 3302 (differential equations).

UPPER DIVISION PREPARATION:

**Required Courses:**

COP 3402	Assembly Language Programming
COP 3522	Programming Methodology
MAD 3104	Discrete Mathematics
MAD 3401	Numerical Analysis
MAD 3512	Introduction to the Theory of Algorithms
MAP 4401	Advanced Differential Equations
STA 3163-4	Statistical Methods I & II

In addition, *two* courses from the following list:

MAA 4402	Complex Variables
COP 3530	Data Structures
MAD 3305	Graph Theory
MAP 3103	Mathematical Modeling
STA 5446	Probability Theory

**Electives:** The balance of the 60 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

Minor in Mathematical Sciences

**Required Courses:** MAC 3411-2-3. Calculus I-II-III (or equivalent).

Four courses from those approved for the Mathematical Sciences Major program. MAP 3302 and MAS 3103 may be included among these four courses. A grade of "C" or better is necessary for the minor.

**Remarks:** No mathematical sciences courses can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a mathematical science course is required for a major in one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.

A grade of "C" or better in all courses required for the major is necessary for graduation.

## Mathematical Sciences

LOCATION: Tamiami Campus Only

DEGREE: Master of Sciences in Mathematical Sciences

**Admission to the Program:**

A Bachelor's degree or equivalent from an accredited university or college.

A "B" average or better in all work attempted while registered as an upper division student for the Bachelor's degree.

Graduate Record Examination (verbal or quantitative portions) taken within the past 5 years.

Three letters of recommendation from persons in position to judge the applicant's potential success in graduate study.

Approval of the graduate committee.

**Prerequisites:**

COP 3112	Introduction to Programming (FORTRAN); Calculus I & II and Multivariable Calculus;
MAC 3411-2-3	

STA 3163-4	Statistical Methods I & II
MAP 3302	Differential Equations;
MAS 3103	Linear Algebra;
STA 3321-2	Mathematical Statistics I & II

**Required Courses:** Semester Hours

MAP 5117	Mathematical and Statistical Modeling	(3)
COP 5506	Fundamentals of Computer Science	(6)
STA 5206	Design of Experiments	(3)
STA 5606	Mathematical Techniques of Operations Research	(3)
MAP 6127	Simulation and Modeling	(3)

**Electives** (9)

Research Project (3)

**Remarks:** Students who have taken the undergraduate courses COP 3522 and COP 3530 may not take COP 5506 and must substitute another graduate course. In addition to these five

courses, an additional *three* approved courses at the graduate level must be chosen. *One* graduate course may be taken outside the department with the approval of the graduate committee. It is recommended that a data base course be taken either within the department, COP 5540, or from the School of Business, MAN 6837. For the final course, the student will be required to apply the techniques developed in his/her program of studies to the solution of a practical problem. The coursework must be completed with a "B" average or higher and a grade of "C" or higher in each course. A grade of credit (CR) is required for the research project.

## Computer Science

LOCATION: Tamiami Campus Only

DEGREE: Master of Science in Computer Science

**Admission to the Program:**

A Bachelor's Degree in Computer Science or equivalent degree from an accredited university or college, or a Bachelor's degree from an accredited university or college and completion of courses COP 5506, Fundamentals of Computer Science I and COP 5608, Fundamentals of Computer Science II, with at least a "B" in each, and

A "B" average or better in all coursework attempted while registered as an upper division student for the Bachelor's degree, and

Acceptable courses in Calculus and Statistics, and

Graduate Record Examination (GRE) of 650 quantitative and 500 verbal taken within the last 5 years, and

Three letters of recommendation from persons in a position to judge the applicant's potential success in graduate study, and

Approval of the Graduate Committee.

**Graduate Program of Studies:**

CIS 6397	Seminar in Contemporary Computer Science
COP 6515	Structured Programming
COP 6614	Advanced Operating Systems
COT 6315	Analysis of Algorithms
STA 6807	Queuing and Statistical Models
CIS 6971	Thesis
In addition, students must choose <i>three</i> courses from the following list, subject to the approval of the Graduate Committee.	
CAP 5721	Computer Graphics
CDA 6166	Distributed Processing
CIS 6327	Statistical Computer Performance Evaluation
COP 5540	Data Base and File Organization
COP 5640	Compiler Construction
COP 6555	Survey of Programming Languages
COT 5320	Theory of Computation
COT 6127	Theory of Formal Languages
CRM 6121	Computer Management
MAD 5405	Numerical Methods
MAP 6127	Simulation and Modeling



After completion of all other required courses, students must conduct a research thesis. The topic must first be approved by the faculty member who will supervise the research, then by the Graduate Committee. The thesis will be accepted only after being read and approved by a Reading Committee. An oral defense is required before the Reading Committee.

**Remarks:** The program requires a "B" average or higher and a grade of "C" or higher in each course. A maximum of two courses may be transferred into the program from outside of Florida International University, subject to the approval of the Graduate Committee.

## Course Descriptions

### Definition of Prefixes

CAP — Computer Applications; CDA — Computer Design/Architecture; CIS — Computer Information Systems; COC — Computer Concepts; COP — Computer Programming; COT — Computing Theory; HGA — Applied Health; MAA — Mathematics, Analysis; MAC — Mathematics, Calculus and Pre-Calculus; MAD — Mathematics, Discrete; MAE — Mathematics Education; MAP — Mathematics, Applied; MAS — Mathematics, Algebraic Structures; MAT — Mathematics, General; MGF — Mathematics, General and Finite; MHF — Mathematics, History & Foundations; MTG — Mathematics, Topology and Geometry; STA — Statistics.

**CAP 5721 Computer Graphics (3)**  
The principles and techniques of interactive computer graphics. Characteristics of graphical output and input devices; representation and manipulation of graphical data; graphical language; raster graphics; applications. Prerequisites: MAC 3412 and either COP 5608 or both COP 3530 and CDA 4101.

**CDA 3040/ETE 3650 Computer Hardware Fundamentals (3)**  
This course concentrates on two major areas. The first considers computer number systems, logic gates and Boolean algebra. The second treats the arithmetic element, computer memories, input-output, and computer organization. Emphasis is placed on the latter topics. Prerequisite: MAD 3512.

**CDA 4101 Structured Computer Organization (3)**  
This course investigates the analysis of the levels of organization of computer systems, including the conventional, microprogramming and operating systems levels. A number of major computer systems are analyzed. Prerequisite: COP 3402, or equivalent.

**CDA 4163 Data Communications (3)**  
Study of communications-based systems, common carrier facilities, tariffs, and related equipment. Analysis and design of communications networks utilizing various techniques. Uses of communications for data collection, remote computing, message switching. Prerequisite: CDA 4101.

**CDA 4171 Minicomputer Architecture and Applications (3)**  
An introduction to minicomputers, in which

students will have direct access to a general purpose minicomputer system. Study of the architecture of a particular minicomputer (including hands-on experience) followed by a comparison study of other minicomputer systems. Selected minicomputer applications in business, industry and science. Prerequisite: CDA 4101.

**CDA 6166 Distributed Processing (3)**  
Study of distributed systems of user and equipment using data communications facilities. Analysis of system architecture, hardware, and software for system design. System integrity and performance issues and techniques are examined. Prerequisites: COP 6614 and CDA 4163.

**CIS 3905 Independent Study (VAR)**  
Individual conferences, assigned readings, and reports on independent investigations.

**CIS 3932 Special Topics (VAR)**  
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**CIS 4905 Independent Study (VAR)**  
Individual conferences, assigned readings, and reports on independent investigations.

**CIS 4932 Special Topics (VAR)**  
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**CIS 5908 Independent Study (VAR)**  
Individual conferences, assigned readings, and reports on independent investigations.

**CIS 5934 Special Topics (VAR)**  
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**CIS 6327 Statistical Computer Performance Evaluation (3)**  
An introduction of the tools for quantitative, statistical and rational design, analysis, and optimization of complex computer systems. Prerequisites: STA 6807 and COP 6614.

**CIS 6937 Seminar in Contemporary Computer Science (3)**  
Research Seminar in Contemporary Computer Science. Topics will vary from term to term. Prerequisite: Permission of instructor.

**CIS 6971 Thesis (10)**  
Prerequisite: Completion of all other requirements for the M.S. degree in Computer Science.

**COC 3300 Introduction to Computers and Computer Applications (3)**  
A survey of computers and their applications: hardware, software, computer systems operation, advanced computer systems, acquiring and using computer power, systems analysis, computer impact on society. Not acceptable for credit to mathematical science majors (mathematics, computer science, statistics).

**COC 3400 Computers and Society (3)**  
A course for the citizen who is interested in the effects of computers upon our society. The major focus will be upon social, political and ethical considerations: what computers are and how they work; applications, such as data banks,

government uses, simulation; considerations such as privacy and the police state, the cashless society, computers and business, computers and the quality of life, systems analysis and the planned society. The course is oriented toward the non-scientist and requires no background in mathematics, computer science, or social science. As part of the course, students will learn to write and run a simple computer program.

**COP 3112 Introduction to Computers (3)**  
A course in the fundamentals of digital computer programming. The concept of an algorithm; flow charting; programming; testing and debugging. Numerical and non-numerical techniques. The syntax and semantics of FORTRAN IV.

**COP 3122 Data Processing and COBOL (3)**  
A second course in programming, oriented toward data processing applications. Various techniques for organizing and processing files; sequential random-access, indexed and inverted files. File sorting and maintenance. Program documentation. Instruction in the COBOL programming language. Applications of computers and data processing in business. Prerequisites: COP 3112, COP 3172.

**COP 3172 Basic Programming for Business (3)**  
Introduction to the BASIC computer language with emphasis on business data processing applications. Using the interactive and batch facilities of the machine, concepts on file organization and techniques for processing are examined. Prerequisites: None. Not acceptable for credit to computer science majors.

**COP 3402 Assembly Language Programming (3)**  
Principles and techniques of digital computers, with emphasis on machine language and assembly language programming. Internal representation of numeric and non-numeric information; registers, indexing and computer structure; arithmetic, logical and input-output instructions; fixed and floating arithmetic. Prerequisite: COP 3112 or equivalent.

**COP 3522 Programming Methodology (3)**  
Major features of PASCAL; structuring of programs, documentation, debugging and testing, recursion, top-down design, BNF, linked lists, stacks and queues. Corequisite: COP 3402.

**COP 3530 Data Structures (3)**  
Basic concepts of data organization; introduction to PL/I; advanced debugging and testing; garbage collection; n-ary trees and graphs, internal and external sorting. Prerequisites: MAD 3512 and COP 3522.

**COP 4610 Operating Systems Principles (3)**  
A study of the basic principles of modern multi-programming and time-sharing systems. Interrupts and data channels, multiprocessor system, memory management, virtual memory, segmentation, process communication, deadlock and interlock handling. Prerequisites COP 3530 and CDA 4101.

**COP 5506 Fundamentals of Computer Science I (6)**  
This accelerated and intensive course is for be-

ginning graduate students without a Bachelor's of Science in Computer Science. It covers the design of programs and associated data structures. Prerequisites: Admissions into a graduate program. COP 3112, MAC 3412 and STA 3033 or equivalent.

**COP 5608 Fundamentals of Computer Science II** (6)

This is a continuation of COP 5506 covering computer organization and operating systems. Prerequisites: Admissions into a graduate program. COP 3402 and either COP 5506 or both COP 3522 and COP 3530.

**COP 5540 Data Base and File Organization** (3)  
This course deals with the need for formal data organization; system requirements; effects of storage; devices; file attributes; file organization; search strategies; privacy and security. Prerequisites: COP 3530 and CDA 4101; or COP 5608.

**COP 5640 Compiler Construction** (3)  
Basic techniques of compilation; self-compilers; syntax encoding and recognition; code generation and optimization. Prerequisites: COP 3522, MAD 3512, and COP 3530.

**COP 6515 Structured Programming** (3)  
Study of systematic techniques of program control and development, including proof of program correctness and use of advanced programming techniques. Prerequisites: COP 3522 and COP 3530; or COP 5506.

**COP 6555 Survey of Programming Languages** (3)

This course consists of a comparative study of programming languages including LISP (or SNOBOL-4), PASCAL, APL, PL/I (or ALGOL-60) and ALGOL-68. Emphasis is given to different data structures available, prominent features of the language and their applications. Some criteria to compare different languages are discussed and a few languages are compared as examples. Prerequisites: COP 3522 and COP 3530 or COP 5506.

**COP 6614 Advanced Operating Systems** (3)  
Topics in operating system design: concurrent, scheduling, security and protection, virtualizable architectures and monitors. The UNIX operating system will be used as the basis for a major programming project. Prerequisites: COP 4610 or COP 5608; and STA 6807.

**COT 5320 Theory of Computation** (3)  
An introduction to abstract machine theory, combinatorial systems and computable functions. Prerequisite: MAD 3512.

**COT 6127 Theory of Formal Languages** (3)  
Elements of language theory are introduced by way of describing regular, context-free, context-sensitive and generalized languages. Their properties and some of the existing parsing techniques are discussed. Prerequisite: COP 3530 or COP 5506.

**COT 6315 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. Prere-

quisite: COP 3530 or COP 5506.

**CRM 6121 Computer Management** (3)  
This course deals with the effective evaluation and administration of the computer function within an organization. No prerequisites.

**MAA 3200 Introduction to Analysis** (3)  
Topics include: naive set theory, functions, cardinality, sequences of real numbers and limits. Emphasis on formal proofs. Prerequisite: MAC 3413.

**MAA 4211 Advanced Calculus** (3)  
An intense study of the foundations of calculus. Topics may include: the real number system, continuity, differentiation, Riemann Stieltjes integration, and series of functions. Note: The student must complete MAA 3200 before attempting this course. Prerequisites: MAC 3413, MAS 3103 and MAA 3200.

**MAA 4212 Topics in Advanced Calculus** (3)  
A sequel to MAA 4211. Topics may include: theory of integration; analysis in several variables; and Fourier series. Prerequisite: MAA 4211.

**MAA 4402 Complex Variables** (3)  
An introduction to complex variables, beginning with the algebra and geometry of the complex number system. Topics include: complex functions; analytic functions; Cauchy's theorem and its consequences; Taylor and Laurent series; residue calculus; evaluation of real integrals and summation of series; conformal mapping. Prerequisites: MAC 3413, and MAP 3302 or MAA 4211.

**MAC 3132 Pre-calculus Mathematics** (3)  
Topics to be covered include: functions, exponential and logarithmic functions, trigonometry and the basics of analytic geometry. Prerequisites: Two years of high school algebra.

**MAC 3233 Calculus For Business** (3)  
A one semester introduction to the basic notions of calculus. Specific topics include: Differential Calculus using polynomial, exponential and logarithmic functions, and its application to optimization; integral calculus with area and probability applications. Prerequisite: MAC 3132 or working knowledge of algebra.

**MAC 3411-MAC 3412 Calculus I & II** (3-5)  
An introduction to basic concepts, computations, and applications in calculus. The first course deals with basic concepts, techniques and applications of the derivative and an introduction to the integral. The second course deals with integration techniques and applications of the integral, an introduction to multivariable calculus, infinite series, and Taylor series. Prerequisite: Trigonometry or MAC 3132.

**MAC 3413 Multivariable Calculus** (3)  
This course deals with the differential and integral calculus of real valued multivariable functions. The topics include: directional and partial derivatives, gradients, and their applications; differential calculus of vector valued functions; multiple, iterated, line, and surface integrals. Prerequisite: MAC 3412 (or equivalent).

**MAD 3104 Discrete Mathematics** (3)  
Sets, functions, relations, permutations and combinations, propositional logic, matrix algebra, graphs and trees. Prerequisites: COP 3112 and MAC 3411.

**MAD 3305 Graph Theory** (3)  
An introduction to the study of graphs. Topics include the following: paths and circuits, connectedness, trees, shortest paths, networks, planar graphs, the coloring of graphs and directed graphs. Applications of graphs to computer science will be discussed. Prerequisites: COP 3112 and either MAS 3103 or MAD 3104.

**MAD 3401 Numerical Analysis** (3)  
Basic ideas and techniques of numerical analysis. Topics include: finite differences, interpolation, solution of equations, numerical integration and differentiation, applications, introduction to applied linear algebra. This course will make extensive laboratory use of the computer facility. Prerequisites: COP 3112 and MAC 3412 and either MAS 3103 or MAD 3104.

**MAD 3512 Theory of Algorithms** (3)  
Boolean algebra, switching circuits, finite state machines, formal languages and models of computation. Prerequisite: MAD 3104.

**MAD 4203 Introduction to Combinatorics** (3)  
A survey of the basic techniques of combinatorial mathematics. Topics will include the Pigeonhole Principle, Binomial Coefficients, Inclusion-Exclusion, Recurrence Relations, and Generating Functions. Prerequisites: MAC 3413 or both MAC 3412 and MAD 3104.

**MAD 5405 Numerical Methods** (3)  
Advanced ideas and techniques of numerical analysis for digital computation. Topics include: linear and nonlinear systems, ordinary differential equations, continuous system modeling techniques and languages. Prerequisites: MAD 3401, MAS 3103 and MAP 3302.

**MAE 4810-MAE 4811 Foundations of Mathematics I & II** (3-3)  
An integrated course designed for teachers of elementary and early junior high students. Emphasis will be placed on inductive and rudimentary deductive approaches to number systems, algebra, geometry, probability, statistics, and mathematical systems. The relationship between these fields and their applications will be stressed. Intuitive aspects of synthetic, analytic and transformation geometry will serve to relate geometry, algebra and mathematical systems. Prerequisite: None.

**MAP 3103 Mathematical Modeling and Applications** (3)  
A course to provide an understanding of the use of mathematical models in the description of the real world. Basic principles in the philosophy of formal model building as well as specific models will be considered. Prerequisites: MAS 3103 and either MAC 3413 or MAP 3302.

**MAP 3104 Topics in Mathematical Modeling** (3)  
A sequel to MAP 3103. In-depth study of techniques listed for MAP 3103. Prerequisite: MAP 3103.

**MAP 3302 Differential Equations (3)**

An introduction to differential equations and their applications, based upon a knowledge of the calculus. Topics to include: initial value problems of the first order, numerical solutions, systems of differential equations, linear differential equations, Laplace transforms, series solutions. Prerequisite: MAC 3412.

**MAP 4401 Advanced Differential Equations (3)**

A second course in differential equations. Topics may include: Bessel functions and other special functions arising from classical differential equations, Sturm-Liouville problems, partial differential equations, transform techniques. Prerequisites: MAP 3302 and MAC 3413.

**MAP 5117 Mathematical and Statistical Modeling (3)**

Study of ecological probability and various statistical models. Prerequisites: MAC 3413, COP 3402, MAS 3103; and STA 3322 or STA 3164 or STA 3033.

**MAP 6127 Simulation and Modeling (3)**

Two areas are covered in this course: advanced queueing models and simulation techniques. The relationships between these two areas, applications, and simulation languages will be among the topics covered. Prerequisites: COP 3530; and MAP 5117 or STA 6807.

**MAS 3103 Linear Algebra (3)**

An introduction to the topics in linear algebra most often used in applications. Topics include: matrices and their applications; simultaneous linear equations and elementary operations; linear dependence; vector spaces; rank and inverses; inner products and "best" approximations; numerical solutions of simultaneous linear equations; eigenvalues and eigenvectors; iterative methods for calculating eigenvalues; and systems of linear equations. Prerequisite: MAC 3412.

**MAS 4301 Algebraic Structures (3)**

An introduction to abstract mathematical structures of modern algebra. Fundamental concepts of groups, rings, and fields will be studied. Note: the student must complete MAA 3200 before attempting this course. Prerequisites: MAS 3103 and MAA 3200.

**MAS 4302 Topics in Algebraic Structures (3)**

A sequel to Algebraic Structures. Topics may include: a continuation of the study of groups, rings and/or fields; polynomial domains; Euclidean domains; and Galois theory. Prerequisite: MAS 4301.

**MAS 5215 Number Theory (3)**

Topics to be discussed are selected from the following: congruences, Diophantine equations, distribution of primes, primitive roots, quadratic reciprocity and classical theorems of number theory.

**MAT 3905 Independent Study (VAR)**

Individual conferences, assigned readings, and reports on independent investigations.

**MAT 3930 Special Topics (VAR)**

A course designed to give groups of students an

opportunity to pursue special studies not otherwise offered.

**MAT 3949 Cooperative Education in Mathematical Sciences (VAR)**

One semester of full-time supervised work in an outside organization taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student.

**MAT 4905 Independent Study (VAR)**

Individual conferences, assigned readings, and reports on independent investigations.

**MAT 4930 Special Topics (VAR)**

A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**MAT 4943 Mathematical Sciences Internship (VAR)**

A special program to encourage students to get guided on-the-job experience in computer sciences, statistics, or mathematics in an industrial enterprise, governmental agency or other organization. Requirements: minimum grade of B or higher in all courses in the major area, and approval by Departmental Internship Committee. Application is required at least one term in advance of registration for this course.

**MAT 4949 Cooperative Education in Mathematical Sciences (VAR)**

One semester of full-time supervised work in an outside organization taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student.

**MAT 5907 Independent Study (VAR)**

Individual conferences, assigned reading, and reports on independent investigations.

**MCF 1202 Finite Mathematics (3)**

Study of concepts and applications involving finite mathematical processes such as sets, combinatorial techniques, formal logic, discrete probability, linear systems, matrices, linear programming. Prerequisite: Working knowledge of high school algebra.

**MGF 3113 The Significance of Mathematics (3)**

A course for non-science majors, directed toward students with little or no assumed background in mathematics. The objective is to convince the student that mathematics is fun, interesting and useful. Topics may include: logical reasoning, unsolved problems of arithmetic, probability and statistics, geometry, topology, computers, and History of Mathematics.

**MHF 4302 Mathematical Logic (3)**

A study of formal logical systems and their applications to the foundations of mathematics. Topics to be selected from the following: definition of mathematical proofs; set theory; analysis formalized with the predicate calculus; theorems of Godel and Church; recursive function theory; and idealized computers. Prerequisite: MAA 3200 or MAD 3512.

**MTG 3212 Geometry (3)**

A study of the basic structure of Euclidean geometry together with topics from advanced Euclidean geometry and non-Euclidean geometry. Prerequisite: High School geometry.

**MTG 4302 Topology (3)**

An introductory course in topology requiring a prerequisite knowledge of the calculus. Topics to be discussed will be selected from the following: topological spaces, metric spaces, continuity, completeness, compactness, separation axioms, products spaces, subspaces, convergence, and homotopy theory. Prerequisites: MAC 3413, MAS 3103 and MAA 3200.

**STA 3013 Statistics for Social Services (3)**

This is an elementary course in statistics, covering graphical and numerical condensation of data as well as the most basic parametric and non-parametric methods. Emphasis is placed on the interpretation of statistical results, rather than on ways to analyze experimental data.

**STA 3033 Introduction to Probability and Statistics for CS (3)**

Basic probability laws, probability distributions, basic sampling theory, point and interval estimation, tests of hypothesis, regression and correlation. Mini-tab will be used in the course. Prerequisite: MAC 3412.

**STA 3122-STA 3123 Introduction to Statistics I & II (3-3)**

A course in descriptive and inferential statistics. Topics include: empirical and theoretical probability distributions; point and interval estimation; hypothesis testing; analysis of variance, regression, correlation, and basic nonparametric tests.

**STA 3132 Business Statistics (3)**

Starting with an introduction to probability, the course provides an introduction to statistical techniques used in management science. It includes descriptive statistics, probability distributions, estimation and testing of hypothesis.

**STA 3163-STA 3164 Statistical Methods I & II (3-3)**

This course presents tools for the analysis of data. Specific topics include: use of normal distribution, tests of means, variance and proportions; the analysis of variance and covariance (including contrasts and components of variance models), regression, correlation, sequential analysis and non-parametric analysis. Prerequisite: College algebra or first course in statistics.

**STA 3182 Statistical Models (3)**

This is a specialized course in the use of statistical models to represent physical and social phenomena. The emphasis is on providing tools which will allow a researcher or analyst to gain some insight into phenomena being studied. An introductory knowledge of probability theory and random variables is assumed. Specific topics include: introduction to discrete and continuous probability distributions, transformation of variables, approximation of data by empirical distributions, central limit theorem, propagation of moments, Monte Carlo simulation, probability plotting, testing distributional assumptions. Prerequisites: MAC 3413, and first course in statistics.

**STA 3321-STA 3322 Introduction to Mathematical Statistics I & II (3-3)**

This course presents an introduction to the mathematics underlying the concepts of statistical analysis. It is based on a solid grounding in probability theory, and requires a knowledge of single and multivariable calculus. Specific topics include the following: basic probability concepts, random variables, probability densities, expectations, moment generating functions, sampling distributions, decision theory, estimation, hypothesis testing (parametric and non-parametric), regression, analysis of variance, and design of experiments. Prerequisite: MAC 3413.

**STA 3905 Independent Study (VAR)**

Individual conferences, assigned readings, and reports on independent investigations.

**STA 3930 Special Topics (VAR)**

A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

**STA 4173-HCA 4711 Statistical Applications in Health Care (3)**

A course in descriptive and inferential statistics for the Health Services. Topics include probability distributions, point and interval estimation, hypothesis testing, regression and correlation and contingency table analysis. Prerequisite: STA 3013 or equivalent college mathematics course.

**STA 4502 Practical Nonparametric Statistics (3)**

This course deals primarily with tests of hypotheses for situations where standard parametric procedures (t-test, F-test, etc.) cannot be applied. Topics include binomial, multinomial and Poisson tests, permutation test, sign test, Mann-Whitney U test, Wilcoxon signed rank test, rank correlation, contingency chi-square, Kruskal-Wallis one-way ANOVA by ranks, Friedman test and other non-parametric tests. Prerequisite: First course in statistics.

**STA 4603-STA 4604 Mathematical Techniques of Operations Research I & II (3-3)**

An introduction to those topics in mathematics associated with studies in operations research. Topics include the following: Linear programming and related topics, dynamic programming, queuing theory, computer simulation, network analysis, inventory theory, decision theory, integer programming. Prerequisites: MAS 3103 and either STA 3033 or STA 3322.

**STA 4664 Statistical Quality Control (3)**

This course presents the simple but powerful statistical techniques employed by industry to improve product quality and to reduce the cost of scrap. The course includes the use and construction of control charts (Means, percentages, number defectives, ranges) and acceptance sampling plans (single and double). Standard sampling techniques such as MIL STD plans will be reviewed.

**STA 4905 Independent Study (VAR)**

Individual conferences, assigned readings, and reports on independent investigations.

**STA 5126/PSY 5206 Design of Experiments in Psychological Research (3)**

The following topics will be included as they relate to psychological research: A review of analysis of variance in randomized and blocked designs, pairwise and multiple comparison tests, and analysis of variance in factorial, nested, and split-plot experiments and analysis of covariance. Computer software packages will be used for some analyses. Prerequisites: STA 3122 and STA 3123 or equivalent.

**STA 5166/HCA 5713 Statistical Methods for Health Services (3)**

This course presents tools for the analysis of data that arise in the health professions. Specific topics include: probability concepts, poisson distribution, nonparametric techniques, sample size determination, analysis of variance and advanced regression techniques. Students will be taught the use of a computerized statistical analysis package. Prerequisite: HCA 4711 or introductory upper division college statistics course.

**STA 5206 Design of Experiments (3)**

This is an applied course dealing with the design and analysis of experiments employed in scientific and industrial research. A knowledge of the basic fundamentals of hypothesis testing and analysis of variance is assumed. Topics include: multiple comparison tests, completely randomized design, randomized blocks, Latin Square and related designs, nested and factorial experiments. Prerequisite: STA 3322 or STA 3164.

**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-STA 5237 Regression Analysis I & II (3-3)**

A comprehensive review of the role of linear models in statistics. Extensive use is made of matrix notation, and a prior course in linear algebra is imperative. The fundamental theorems underlying regression analysis and the analysis of variance will be covered. Such topics as the Gauss-Markov Theorem, generalized least squares, and estimation and testing of hypotheses will be covered. Prerequisites: MAS 3103 and either STA 3322, or STA 3033.

**STA 5446-STA 5447 Probability Theory I & 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 3413.

**STA 5606 Mathematical Techniques of Operations Research (3)**

This course surveys the mathematical methods used in operations research. Topics will be chosen from linear programming, dynamic pro-

gramming, integer programming, network analysis, classical optimization techniques, and applications such as inventory theory. Prerequisite: MAP 5117. Corequisite: COP 3530.

**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 3322.

**STA 5707/PSY 5246 Multivariate Analysis in Applied Psychological Research (3)**

Review of linear algebra. Topics include multiple regression, one and two sample multivariate analysis, profile analysis, multivariate analysis of variance, principal component & factor analysis. Computer software packages will be used for some analyses. Prerequisites: STA 3122 and STA 3123 or equivalent. Linear algebra and STA 5126 recommended.

**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, queuing 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 (VAR)**

Individual conferences, assigned reading, and reports on independent investigation.

**STA 6807 Queuing and Statistical Models (3)**

Review of probability concepts, basic probability distributions, Poisson process, queuing models, statistical models. Prerequisites: Permission of Instructor, MAC 3412 and either STA 3033 or STA 3321.

## Modern Languages

**John B. Jensen, Associate Professor and Chairperson**

**James O. Crosby, Professor**

**Yvonne Guers-Villate, Professor**

**Ramón Mendoza, Professor (Bay Vista Campus)**

**Florence Yudin, Professor**

**R. Reinaldo Sánchez, Associate Professor**

**Maida Watson Espener, Associate Professor**

**Marcelle Welch, Assistant Professor and Associate Dean**

**Pierrette LeMéhauté, Visiting Assistant Professor**

**Andrée Stayman, Instructor**

**David Jenda, Instructor**

**Ana Roca, Visiting Instructor**

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Arts

LOWER DIVISION PREPARATION:

*Required Courses:* Eighteen semester hours of elementary and intermediate foreign language or equivalent proficiency. If these courses are not completed prior to entry to the University, they will be required as part of the upper division program as non-major electives.

UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<i>Required Courses:</i> *	30
Foreign language	
<i>Electives:</i> *	30
	60

\*Students in the Teacher Preparation Program carry two majors: Modern Language and Modern Language Education. They must request admission to *both* programs. (Students interested in teacher certification refer to the School of Education.)

**REQUIREMENTS FOR ALL MODERN LANGUAGE MAJORS:** All majors must have a designated faculty advisor, and all are required to take 30 semester hours in the department of Modern Languages, with a grade of "C" or better.

**REQUIREMENTS FOR SPANISH MAJORS:** To undertake a major in Spanish a student must demonstrate minimum proficiency in the language. This may be done by a written examination administered by the Department, or by completing SPN 3310 (Non-native speakers of Spanish) or SPN 3305 (Native speakers). SPN 3421 must be part of the 30 credit hours of upper division work taken (unless the student is exempted by examination), and credit hours must be distributed according to one of the following plans:

	A	B	C	
SPN 3421*	3	3	3	Sem. hours
Literature courses	9	9	6	Sem. hours
Linguistics courses	9	6	9	Sem. hours
Culture courses	—	3	—	Sem. hours
Departmental electives	9	9	9	Sem. hours

\*Unless exempted by examination, in which case the student has 3 additional hours of electives.

Introduction to General Linguistics (LIN 3010 or equivalent) must be taken before other linguistics offerings; otherwise, there is no prescribed sequence of courses for the major.

**REQUIREMENTS FOR FRENCH MAJORS:** The requirements for a major in French are: 3 or 4 literature courses; 1 civilization course; 1 linguistics course. The remaining credits should be taken in language courses, such as FRE 3420, FRE 3421, FRE 3780, FRT 3800, FRT 3810 — unless the student can demonstrate proficiency in these areas. A student is also generally expected to take an introductory course to literature such as FRW 3820 before registering for upper level literature courses.

**REQUIREMENTS FOR OTHER LANGUAGE MAJORS:** A major in a language other than Spanish or French may take only 21 credits in the major target language, but completion of at least two semesters of a second foreign lan-

guage is recommended. There is no fixed sequence of courses required, and a student may enroll in any course offered for majors, provided he or she meets the course prerequisites.

#### Minor in Portuguese

A student majoring in another discipline may earn an academic minor in Portuguese by taking 12 semester hours of course work in the language at the level of POR 3420 or above, and 6 additional hours in Portuguese or in approved courses in a related discipline, such as linguistics, or the civilization of Portuguese-speaking peoples.

#### Minor in General Translation Studies

In order to obtain an academic minor in General Translation Studies a student takes 12 semester hours in translation courses (FOT, FRT, or SPT prefix), with grades of B or better, and 9 additional hours in courses of immediate relevance to the program, to be approved by the advisor. Normally these will be selected from among offerings in Political Science, Economics, International Relations, Sociology, Anthropology, Computer Science or Modern Languages.

## Basic Language Instruction

LOCATION: Tamiami and Bay Vista Campuses

The Department of Modern Languages offers five-semester sequences of instruction in beginning and intermediate French, German, Italian, Portuguese, and Spanish, and beginning instruction in Arabic, Chinese, Hebrew, Japanese, Russian, and other languages. Accelerated versions of the basic language courses are offered to enable students to finish the sequence more rapidly.

The courses in basic language instruction are designed primarily for persons wishing to acquire basic conversational ability in a foreign language; but they provide training in all four language skills: listening, speaking, reading, and writing. Students are advised to consult the Departmental course listing for specific sections.

## Course Descriptions

### Definition of Prefixes

ARA — Arabic Language; CHI — Chinese Language; FOL — Foreign Languages; FOT — Foreign Languages in Translation; FOW — Foreign Languages, Comparative Literature; FRE — French Language; FRT — French Literature in Translation; FRW — French Literature (Writings); GER — German Language; GET — German Literature in Translation; HEB — Hebrew; HUM — Humanities; ITA — Italian Language; ITT — Italian Literature in Translation; JAP — Japanese Language; LIN — Linguistics; POR — Portuguese Language; POW — Portuguese Literature (Writings); PRT — Portuguese in Translation; RUS — Russian Language; SPN — Spanish Language; SPT — Spanish Literature in Translation; SPW — Spanish Literature (Writings).

FOREIGN LANGUAGE: GENERAL

### FOL 3000 Elementary Foreign Language (VAR)

Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. For languages not often taught. This course is not part of a series. No prerequisites.

### FOL 3732 Romance Linguistics (3)

The common and distinctive romance features. Survey of linguistic geography and internal / external influences.

### FOL 3905 Independent Study (3)

Project, field experience, readings, or apprenticeship.

### FOL 3930 Special Topics (3)

Readings and discussion of literary / linguistic topics to be determined by students and teacher.

### FOL 3949 Cooperative Education in Modern Languages (3)

A student majoring in one of the Humanities (English, History, Modern Languages, Visual Arts or Performing Arts) may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

### FOL 3955 Foreign Study (9)

Intermediate level. One semester full-time credit in foreign residence and study. Individual cases will be evaluated for approval.

### FOL 4013 Language Skills for Professional Personnel (VAR)

The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

### FOL 4905 Independent Study (VAR)

Project, field experience, readings, or research.

### FOL 4930 Special Topics (3)

Independent readings, research, or project.

### FOL 4935 Senior Seminar (3)

Topics and approach to be determined by students and instructor.

### FOL 4949 Cooperative Education in Modern Languages (3)

A student majoring in one of the Humanities (English, History, Modern Languages, Visual Arts or Performing Arts) may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

### FOL 4958 Foreign Study: Advanced Language/Literature (9)

Full-semester credit for foreign residence and study / work. (Approval of Department required).

### FOL 5735 Romance Linguistics (3)

The common and distinctive romance features. Survey of linguistic geography and internal / external influences.

### FOL 5906 Independent Study (VAR)

Project, field experience, readings, or research.

### FOT 3110 Literature in Translation (3)

Masterpieces of world literature in English.

Comparative use of the original text. Discussion and interpretation.

**FOT 3800 Translation/Interpretation Skills** (3)

Emphasis on basic principles and practice application.

**FOT 3810 Creative Writing/Translation** (3)

Training through non-structured writing. Examination of various approaches to the problems and objectives of creative translation.

**FOT 4130 European Literature in Translation** (3)

For students proficient in more than one foreign language. Content and focus to be determined by student and teacher.

**FOT 4801 Professional Translation/Interpretation** (3)

Techniques and resources for professional translation and interpretation. Prerequisite: FOT 3800.

**FOT 5131 Literature in Translation** (3)

Masterpieces of world literature. Open to students who are proficient in more than one language.

**FOT 5802 Translation/Interpretation Arts** (3)

Techniques of professional translation and interpretation. Prerequisite: FOT 4801.

**FOW 3520 Prose and Society** (3)

The dynamics of participation and alienation between prose writers and their environment.

**FOW 3540 Bicultural Writings** (3)

Experiment in linguistic pluralism. Content and focus to be determined by the international community.

**FOW 3580 Intellectual History** (3)

The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.

**FOW 3582 Literature of Reform** (3)

The consciousness of change in verbal art.

**FOW 3584 Literature of Repression** (3)

The consciousness of constraints, their adoption and/or rejection in verbal art.

**FOW 4390 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 4590 Creative Modes** (3)

Discussion of a single mode or a plurality of epoch styles such as classical / baroque, realism / surrealism. The peculiar / common features of expressive media.

**FOW 4790 The Literary Generation** (3)

The real and apparent shared ideals of an artistic generation, its influence and range.

**FOW 4810 Problems in Reading and Interpretation** (3)

The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

**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 esthetic.

**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.)

**FRENCH**

**FRE 1135 Basic Accelerated French I** (5)

Course designed specifically for beginning university students with no previous language study. Emphasis on oral French and on acquiring basic language skills.

**FRE 1136 Basic Accelerated French II** (5)

Emphasis on oral French and on acquiring basic language skills. This course completes the lower-division language requirement.

**FRE 3000 Elementary French** (VAR)

Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

**FRE 3120 French 1** (3)

Provides training in the acquisition and application of basic language skills.

**FRE 3121 French 2** (3)

Provides training in the acquisition and application of basic language skills.

**FRE 3200 French 3** (3)

Provides training in the acquisition and application of basic language skills.

**FRE 3201 French 4** (3)

Provides training in the acquisition and application of basic language skills.

**FRE 3270 Foreign Study** (9)

Intermediate level. One semester full-time credit for foreign residence and study. Individual cases will be evaluated for approval.

**FRE 3300 French 5** (3)

Provides training in the acquisition and application of basic language skills.

**FRE 3415 Communication Arts** (3)

Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.

**FRE 3420 Review Grammar/Writing I** (3)

Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

**FRE 3421 Review Grammar/Writing II** (3)

Examination of grammatical theory; discussion of the modern essay. Practice in the detection and correction of errors in usage. The course will focus on current international events as content for informal talks and composition.

**FRE 3500 Civilization I** (3)

Open to any student who understands the target language. The development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.

**FRE 3700 Introduction to General Linguistics** (3)

Examination and synthesis of the concepts and perspectives of major contributions to language theory.

**FRE 3705 Applied Linguistics** (3)

Examination of available linguistic materials for self-instruction. Problem solving in syntax and phonetics, through the application of modern/traditional methods.

**FRE 3780 Phonetics** (3)

The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity.

**FRE 3820 Dialectology** (3)

Definition and analysis. Problem-solving in dialect classification.

**FRE 3840 History of the Language** (3)

The internal and external history of language development. Examination of model texts from key periods of evolution.

**FRE 4013 Language Skills for Professional Personnel** (VAR)

The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

**FRE 4470 Foreign Study: Advanced Language/Literature** (9)

Full-semester credit for foreign residence and study/work. (Approval of Department required.)

**FRE 4501 Civilization II** (3)

Open to any student who understands the target language. The making of a modern culture. The ideological, political and economic background of contemporary culture.

**FRE 4562 Studies in Bilingualism** (3)

Readings and analysis of bilingual programs and binational goals.

**FRE 4791 Contrastive Phonology** (3)

Contrasts in the sound systems of English and French.

**FRE 4800 Contrastive Morphology** (3)

Contrasts in the morphology and syntax of English and French.

**FRE 4935 Senior Seminar** (3)

Topic and approach to be determined by students and instructor.

**FRE 5060 Language for Reading Knowledge** (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** (3)  
Emphasis on translation of materials from the student's field of specialization. Prerequisite: FRE 5060, or the equivalent.
- FRE 5416 Communication Arts** (3)  
Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.
- FRE 5565 Studies in Bilingualism** (3)  
Readings and analysis of bilingual programs and binational goals.
- FRE 5730 Special Topics in Linguistics** (3)  
Content to be determined by students and instructor. (Approval of Department required.)
- FRE 5908 Independent Study** (VAR)  
Project, field experience, readings, or research.
- FRT 3110 Literature in Translation** (3)  
Masterpieces of French literature in English. Comparative use of the original text. Discussion and interpretation.
- FRT 3800 Translation/Interpretation Skills** (3)  
Emphasis on basic principles and practice application.
- FRT 3810 Creative Writing/Translation** (3)  
Training through non-structured writing. Examination of various approaches to the problems and objectives of creative translation and interpretation.
- FRT 4801 Professional Translation/ Interpretation** (3)  
Techniques and resources for professional translation/interpretation. Prerequisite: FRT 3810.
- FRT 5118 Literature in Translation** (3)  
Masterpieces of world literature. Open to students who are proficient in more than one language.
- FRT 5802 Translation/Interpretation Arts** (3)  
Techniques of professional translation and interpretation. Prerequisite: FRT 4801.
- FRW 3520 Prose and Society** (3)  
The dynamics of participation and alienation between prose writers and their environment.
- FRW 3580 Intellectual History** (3)  
The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.
- FRW 3582 Literature of Reform** (3)  
The consciousness of change in verbal art.
- FRW 3584 Literature of Repression** (3)  
The consciousness of constraints, their adoption and/or rejection in verbal art.
- FRW 3820 Stylistics/Explication de Texte** (3)  
Close reading and analysis of prose and poetry. Introduction to the methods of literary criticism. Selected readings in international sources.
- FRW 3905 Independent Study** (3)  
Project, field experience, readings, or apprenticeship.
- FRW 3930 Special Topics** (3)  
Readings and discussion of literary/linguistic topics to be determined by students and instructor.
- FRW 4152 European Literature in Translation** (3)  
For students proficient in more than one foreign language. Content and focus to be determined by students and instructor. (Conducted in French.)
- FRW 4390 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).
- FRW 4590 Creative Modes** (3)  
Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realism/surrealism. The peculiar/common features of expressive media.
- FRW 4790 The Literary Generation** (3)  
The real and apparent shared ideals of an artistic generation, its influence and range.
- FRW 4810 Problems in Reading and Interpretation** (3)  
The identification and appreciation of techniques for sensitive reading and discussion of literary texts.
- FRW 4905 Independent Study** (VAR)  
Project, field experience, readings, or research.
- FRW 4930 Special Topics** (3)  
Independent readings, research, or project.
- FRW 5150 Comparative Studies** (3)  
Cross-over and distinctiveness in a multi-language problem, period, or aesthetic.
- 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).
- FRW 5934 Special Topics in Language/Literature** (3)  
Content and objectives to be determined by student and instructor.
- FRW 5938 Graduate Seminar** (3)  
Topic and approach to be determined by students and instructor. (Approval of the Department required.)
- GERMAN**
- GER 3000 Elementary German** (VAR)  
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.
- GER 3200 German 1** (3)  
Provides training in the acquisition and application of basic language skills.
- GER 3201 German 2** (3)  
Provides training in the acquisition and application of basic language skills.
- GER 3230 German 3** (3)  
Provides training in the acquisition and application of basic language skills.
- GER 3201 German 4** (3)  
Provides training in the acquisition and application of basic language skills.
- GER 3230 German 5** (3)  
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.
- GER 3420 Review Grammar/Writing I** (3)  
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.
- GER 4905 Independent Study** (VAR)  
Project, field experience, readings, or research.
- GER 4930 Special Topics** (3)  
Independent readings, research, or project.
- 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. Prerequisite: GER 5060, or the equivalent.
- GET 3100 Literature in Translation** (3)  
Masterpieces in German literature in English. Comparative use of the original text. Discussion and interpretation.
- HEBREW**
- HEB 3000 Elementary Hebrew** (VAR)  
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.
- HEB 3110 Hebrew 1** (3)  
Provides training in the acquisition and application of basic language skills.
- HEB 3111 Hebrew 2** (3)  
Provides training in the acquisition and application of basic language skills.
- HEB 3112 Hebrew 3** (3)  
Provides training in the acquisition and application of basic language skills.
- HEB 3201 Hebrew 4** (3)  
Provides training in the acquisition and application of basic language skills.
- HEB 3230 Hebrew 5** (3)  
Provides training in the acquisition and application of basic language skills.
- ITALIAN**
- ITA 3000 Elementary Italian** (VAR)  
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.
- ITA 3120 Italian 1** (3)  
Provides training in the acquisition and application of basic language skills.

- ITA 3121 Italian 2** (3)  
Provides training in the acquisition and application of basic language skills.
- ITA 3200 Italian 3** (3)  
Provides training in the acquisition and application of basic language skills.
- ITA 3201 Italian 4** (3)  
Provides training in the acquisition and application of basic language skills.
- ITA 3230 Italian 5** (3)  
Provides training in the acquisition and application of basic language skills.
- ITA 3420 Review Grammar/Writing I** (3)  
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.
- ITA 4905 Independent Study** (VAR)  
Project, field experience, readings, or research.
- ITA 4930 Special Topics** (3)  
Independent readings, research, or project.
- ITT 3110 Literature in Translation** (3)  
Masterpieces of Italian literature in English. Comparative use of the original text. Discussion and interpretation.
- LINGUISTICS**
- LIN 3010 Introduction to General Linguistics** (3)  
Examination and synthesis of the concepts and perspectives of major contributions to language theory. (Conducted in English.)
- LIN 3200 Phonetics** (3)  
The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity. Prerequisite: LIN 3010 or equivalent.
- LIN 3610 Dialectology** (3)  
Definition and analysis. Problem-solving in dialect classification. Prerequisite: LIN 3010 or equivalent.
- LIN 4226 Contrastive Phonology** (3)  
For students proficient in more than one foreign language. Choice of languages to be determined by students and instructor. Prerequisite: LIN 3010 or equivalent.
- LIN 4333 Contrastive Morphology** (3)  
For students proficient in more than one foreign language. Content and emphasis to be determined by students and instructor. Prerequisite: LIN 3010 or equivalent.
- LIN 4400 Applied Linguistics** (3)  
Examination of available linguistic materials for self-instruction. Problem-solving in syntax and phonetics, through the application of modern/traditional methods. (Conducted in English.) Prerequisite: LIN 3010 or equivalent.
- LIN 4418 Problems in Language Learning** (3)  
Primarily designed for prospective teachers, but open to all interested students. The course will aim to devise approaches to difficulties commonly experienced in syntax, usage, reading and comprehension. Prerequisite: LIN 3010 or equivalent.
- LIN 4620 Studies in Bilingualism** (3)  
Readings and analysis of bilingual programs and binational goals. Prerequisite: LIN 3010 or equivalent.
- LIN 5625 Studies in Bilingualism** (3)  
Readings and analysis of bilingual programs and binational goals. Prerequisite: LIN 3010 or equivalent.
- LIN 5934 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.)
- PORTUGUESE**
- POR 1135 Basic Accelerated Portuguese I** (5)  
Course designed specifically for beginning university students with no previous language study. Emphasis on oral Portuguese and on acquiring basic language skills.
- POR 1136 Basic Accelerated Portuguese II** (5)  
Emphasis on oral Portuguese and on acquiring basic language skills. This course completes the lower-division language requirement.
- POR 3000 Elementary Portuguese** (VAR)  
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.
- POR 3120 Portuguese 1** (3)  
Provides training in the acquisition and application of basic language skills.
- POR 3121 Portuguese 2** (3)  
Provides training in the acquisition and application of basic language skills.
- POR 3200 Portuguese 3** (3)  
Provides training in the acquisition and application of basic language skills.
- POR 3130 Accelerated Portuguese I** (5)  
Provides accelerated training in the acquisition and application of basic language skills. Equivalent to Portuguese 1 (POR 3120) and half of Portuguese 2 (POR 3121).
- POR 3131 Accelerated Portuguese II** (5)  
Provides accelerated training in the acquisition and application of basic language skills. Equivalent to half of Portuguese 2 (POR 3121) and all of Portuguese 3 (POR 3122).
- POR 3201 Portuguese 4** (3)  
Provides training in the acquisition and application of basic language skills.
- POR 3300 Portuguese 5** (3)  
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.
- POR 3420 Review Grammar/Writing I** (3)  
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.
- POR 3421 Review Grammar/Writing II** (3)  
Examination of grammatical theory; discussion of the modern essay. Practice in the detection and correction of errors in usage. The course will focus on current international events as content for informal talks and compositions.
- POR 3500 Luso-Brazilian Culture** (3)  
Open to any student who understands Portuguese. The development of Portuguese-speaking civilizations, with emphasis on either Portugal or Brazil: history, art, music, daily life, impact on other cultures.
- POR 3930 Special Topics in Language/Linguistics** (3)  
Readings, research, and discussion of topics in Portuguese language or linguistics to be determined by students and instructor.
- POR 4470 Foreign Study: Advanced Language/Literature** (VAR)  
Up to a full semester credit for foreign residence and study/work. (Approval of Department required.)
- POW 4905 Independent Study** (VAR)  
Project, field experience, readings, or research.
- POW 4930 Special Topics** (3)  
Independent readings, research, or project.
- PRT 3401 Literature in Translation** (3)  
Masterpieces of Portuguese literature in English. Comparative use of the original text. Discussion and interpretation.
- SPANISH**
- SPN 1135 Basic Accelerated Spanish I** (5)  
Course designed specifically for beginning university students with no previous language study. Emphasis on oral Spanish and on acquiring basic language skills.
- SNP 1136 Basic Accelerated Spanish II** (5)  
Emphasis on oral Spanish and on acquiring basic language skills. This course completes the lower-division language requirement.
- SPN 3000 Elementary Spanish** (VAR)  
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.
- SPN 3120 Spanish 1** (3)  
Provides training in the acquisition and application of basic language skills.
- SPN 3121 Spanish 2** (3)  
Provides training in the acquisition and application of basic language skills.
- SPN 3130 Accelerated Spanish I** (5)  
Provides accelerated training in the acquisition and application of basic language skills. Equivalent to Spanish 1 (SPN 3120) and half of Spanish 2 (3121).
- SPN 3131 Accelerated Spanish II** (5)  
Provides accelerated training in the acquisition and application of basic language skills. Equivalent to half of Spanish 2 (SPN 3121) and all of Spanish 3 (SPN 3122).
- SPN 3230 Accelerated Spanish III** (5)  
Provides accelerated training in the acquisition and application of basic language skills. Emphasis on vocabulary building, oral comprehension, and speaking fluency. Equivalent to Spanish 4 (SPN 3201) and Spanish 5 (SPN 3300).



- SPN 3200 Spanish 3** (3)  
Provides training in the acquisition and application of basic language skills.
- SPN 3201 Spanish 4** (3)  
Provides training in the acquisition and application of basic language skills.
- SPN 3300 Spanish 5** (3)  
Provides training in the acquisition and application of basic language skills.
- SPN 3301 Advanced Conversation** (3)  
Improvement of oral proficiency and listening comprehension skills, correction of accent, vocabulary building. Use of small group conversation, pronunciation tapes, and varied outside readings.
- SPN 3305 Spanish for Native Speakers** (3)  
Improvement of spelling, grammar, vocabulary, and composition skills. For native speakers of Spanish with limited training in writing.
- SPN 3310 Review Grammar/Writing I** (3)  
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.
- SPN 3270 Foreign Study** (9)  
Intermediate level. One semester full-time credit for foreign residence and study. Individual cases will be evaluated for approval.
- SPN 3415 Communication Arts** (3)  
Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.
- SPN 3421 Review Grammar/Writing II** (3)  
Examination of grammatical theory; discussion of the modern essay. Practice in the detection and correction of errors in usage. The course will focus on current international events as content for informal talks and composition.
- SPN 3500 Culture** (3)  
Open to any student who understands the target language. The development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.
- SPN 3705 Applied Linguistics** (3)  
Examination of available linguistic materials for self-instruction. Problem-solving in syntax and phonetics, through the application of modern / traditional methods. (Conducted in Spanish.) Prerequisite: LIN 3010 or equivalent.
- SPN 3733 Introduction to General Linguistics** (3)  
Examination and synthesis of the concepts and perspectives of major contributions to language theory. (Conducted in Spanish.) Equivalent to LIN 3010.
- SPN 3780 Phonetics** (3)  
The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity. Prerequisite: LIN 3010 or equivalent.
- SPN 3820 Dialectology** (3)  
Definition and analysis. Problem-solving in dialect classification. Prerequisite: LIN 3010 or equivalent.
- SPN 3840 History of the Language** (3)  
The internal and external history of language development. Examination of model texts from key periods of evolution. Prerequisite: LIN 3010 or equivalent.
- SPN 3905 Independent Study** (3)  
Project, field experience, readings, or apprenticeship.
- SPN 4013 Language Skills for Professional Personnel** (VAR)  
The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).
- SPN 4470 Foreign Study: Advanced Language/Literature** (9)  
Full semester credit for foreign residence and study / work. (Approval of the Department required.)
- SPN 4501 Culture** (3)  
Open to any student who understands the target language. The making of a modern culture. The ideological, political and economic background of contemporary culture.
- SPN 4562 Studies in Bilingualism** (3)  
Readings and analysis of bilingual programs and binational goals. Prerequisite: LIN 3010 or equivalent.
- SPN 4790 Contrastive Phonology** (3)  
Contrasts in the sound systems of English and Spanish. Prerequisite: LIN 3010 or equivalent.
- SPN 4800 Contrastive Morphology** (3)  
Contrasts in the morphology and syntax of English and Spanish. Prerequisite: LIN 3010 or equivalent.
- SPN 4822 Hispanic-American Sociolinguistics** (3)  
Language and society in Latin America. Sociolinguistic theory followed by consideration of specific language problems in Spanish- and Portuguese-speaking areas of the Americas. Prerequisite: LIN 3010 or equivalent.
- SPN 4828 Dialectology of the Spanish Caribbean** (3)  
Study of varieties of Spanish used in the Caribbean area, including Cuban and Miami-Cuban Spanish. The course will take historical and contemporary perspectives and will involve research among informants in South Florida.
- SPN 4905 Independent Study** (VAR)  
Project, field experience, readings, or research.
- SPN 4936 Senior Seminar** (3)  
Topic and approach to be determined by students and instructor.
- 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. Prerequisite: SPN 5060, or the equivalent.
- SPN 5416 Communication Arts** (3)  
Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.
- SPN 5565 Studies in Bilingualism** (3)  
Readings and analysis of bilingual programs and binational goals.
- SPN 5908 Independent Study** (VAR)  
Project, field experience, readings, or research.
- SPN 5930 Special Topics in Linguistics** (3)  
Content to be determined by students and instructor. (Approval of the Department required.)
- SPT 3110 Literature in Translation** (3)  
Masterpieces of Hispanic literature in English. Comparative use of the original text. Discussion and interpretation.
- SPT 3800 Introduction to Translation and Interpretation Skills** (3)  
Basic written translation into and out of English.
- SPT 3812 Introduction to Oral Translation** (3)  
Basic public-speaking techniques for sight translation. Beginning exercises in sight translation into and out of English and Spanish.
- SPT 4801 Translation Practica** (3)  
Translation of media, literary and scientific texts.
- SPT 4802 Practica in Oral Translation and Terminology** (3)  
Sight translation into and out of English. Introduction to the study of terminology. Prerequisite: SPT 3812 or permission of instructor.
- SPT 5118 Literature in Translation** (3)  
Masterpieces of world literature. Open to students who are proficient in more than one language.
- SPW 3520 Prose and Society** (3)  
The dynamics of participation and alienation between prose writers and their environment.
- SPW 3580 Intellectual History** (3)  
The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.
- SPW 3582 Literature of Reform** (3)  
The consciousness of change in verbal art.
- SPW 3584 Literature of Repression** (3)  
The consciousness of constraints, their adoption and/or rejection in verbal art.
- SPW 3820 Introduction to Literature** (3)  
Close reading and analysis of prose and poetry. Introduction to the methods of literary criticism. Selected readings in international sources.
- SPW 3930 Special Topics** (3)  
Readings and discussion of literary/linguistic topics to be determined by students and instructor.

**SPW 4152 European Literature in Translation** (3)

For students proficient in more than one foreign language. Content and focus to be determined by students and instructor. (Conducted in Spanish.)

**SPW 4390 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 4590 Creative Modes** (3)

Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realism/surrealism. The peculiar/common features of expressive media.

**SPW 4790 The Literary Generation** (3)

The real and apparent shared ideals of an artistic generation, its influence and range.

**SPW 4810 Problems in Reading and Interpretation** (3)

The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

**SPW 4930 Special Topics** (3)

Independent readings, research, or project.

**SPW 5155 Comparative Studies** (3)

Cross-over and distinctiveness in a multi-language problem, period, or aesthetic.

**SPW 5391 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 5934 Special Topics in Language/Literature** (3)

Content and objectives to be determined by students and instructor.

**SPW 5936 Graduate Seminar** (3)

Topic and approach to be determined by students and instructor. (Approval of the Department required.)

sity, the Faculty of Music gives three basic preliminary examinations in order to assist the student to eliminate any deficiencies:

- 1) Music History — consisting of all periods of history
- 2) Music Theory — consisting of melodic and harmonic dictation and written harmonization
- 3) Performance Skills — consisting of performing one or more solo works for the faculty during the first week of classes.

The preliminary examinations give the faculty an idea of a student's level of proficiency at entrance into the University, as well as give a frame of reference for the progress that should be made during the first semester. Students whose level of achievement is not sufficiently advanced for accepted junior level placement will be advised how those deficiencies may be overcome.

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Music

Four Year Plan

<i>First Year</i>	
	1st Semester
Theory	3
Sightsinging	1
Applied	2
Organization	1
Class Piano	1
Electives	9
	17
	2nd Semester
Theory	3
Sightsinging	1
Applied	2
Organization	1
Class Piano	1
Electives	9
	17
	2nd Semester
Theory	3
Sightsinging	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16
	2nd Semester
Theory	3
Sightsinging	1
Class Piano	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16
	2nd Semester
Theory	3
Sightsinging	1
Class Piano	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16
	2nd Semester
Theory	3
Sightsinging	1
Class Piano	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16
	2nd Semester
Theory	3
Sightsinging	1
Class Piano	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16

<i>Second Year</i>	
	1st Semester
Theory	3
Sightsinging	1
Class Piano	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16
	2nd Semester
Theory	3
Sightsinging	1
Class Piano	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16
	2nd Semester
Theory	3
Sightsinging	1
Class Piano	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16
	2nd Semester
Theory	3
Sightsinging	1
Class Piano	1
Applied	2
Organization	1
Keyboard Harmony	1
Electives	7
	16

16

<i>2nd Semester</i>	
Orchestration	3
Conducting (V or I)	1
Applied	2
Organization	1
Music History	3
Electives	6
	16
	1st Semester
Form/Analysis	3
Applied	2
Organization	3
Music History	7
Electives	6
	16
	2nd Semester
Theory elective	3
Applied	2
Organization	1
Research/Recital	1
History elective	3
Electives	6
	16

A grade of C or better in all courses required for the major is necessary for graduation.

**APPLIED MUSIC**

<i>Semester Hours</i>	
<i>Required Courses:</i>	45
Theory: MUT 4311, MUT 3416, MUT 3611, MUE 3140	
History: MUH 3211, MUH 3212, MUH 3372	
Organizations (4 semesters)	
Conducting	
Applied (4 semesters)	
Recital and Research and Directed Study	
<i>Electives:</i>	15
	60

**CONDUCTING**

<i>Required Courses:</i>	45
Theory	
History	
Organizations (4 semesters)	
Conducting	
Applied (4 semesters)	
*The student is required to conduct a performing organization (approximately two numbers — not a complete program) during his or her senior year.	
<i>Electives:</i>	15
	60

<i>Semester Hours</i>	
<i>Required Courses:</i>	45
Theory	
Composition	
History	
Organizations (4 semesters)	
Conducting	
Applied (5 hours composition lessons)	
Recital and Research and Directed Study*	
*The student must perform an original composition with analysis, or lecture on a theoretical subject for the student body.	
<i>Electives:</i>	15
	60

	15
	60

# Performing Arts

## Music

Philip H. Fink, *Professor and Chairperson (Music)*

Therald Todd, *Associate Professor (Theatre-Program Director)*

John Augenblick, *Visiting Assistant Professor (Music)*

Lee Brooke, *Part Time Dance Instructor*

Philip Church, *Assistant Professor (Music)*

Judy Grossbard, *Part Time Instructor (Theatre)*

Marie Leeds, *Assistant Professor (Music)*

Paul Mazer, *Associate Professor (Theatre)*

Yoshihiro Obata, *Associate Professor (Music)*

Joseph Rohm, *Associate Professor (Music)*

Violet Vagraniam, *Associate Professor (Music)*

Music students at FIU come from a wide variety of academic backgrounds from both Florida and other states. Because of this diver-

**MUSICOLOGY**

<i>Required Courses:</i>	45
Theory	
History	
Organizations (4 semesters)	
Conducting	
Applied (4 semesters)	
Research*	
*The student must lecture for the student body, as part of the research requirement.	
<i>Electives:</i>	15
	60

Directed Study based on specialized areas of music history under advisor's supervision-minimum

Foreign Language (reading proficiency) 2 semesters

Other electives to be determined in consultation with an advisor

**COMMERCIAL MUSIC/JAZZ**

Semester Hours

<i>Required Courses:</i>	45
Theory (Solfege, Orchestration, Counterpoint, Form and Analysis)	
History	
Organization (3 semesters)	
Applied (3 semesters; ½ hr. lessons)	
Business of Music (MUM 4301)	
Internship / Jazz Core	
<i>Electives:</i>	15
	60

**APPLIED MUSIC WITH CERTIFICATION**

<i>Required Music Courses</i>	45
Theory	
History	
Organizations	
Conducting	
Applied	
Recital and Research	
Guitar (MVS 3116)	
<i>Required Education Courses:</i>	33
	78

**Course Descriptions****Definition of Prefixes**

HUM — Humanities; MUC — Music: Composition; MUE — Music: Education; MUG — Music: Conducting; MUH — Music: History / Musicology; MUL — Music: Literature; MUM — Music: Commercial; MUN — Music: Ensembles; MUS — Music; MUT — Music: Theory; MVB — Applied Music-Brass; MVK — Applied Music-Keyboards; MVP — Applied Music-Perussions; MVS — Applied Music-Strings; MVV — Applied Music-Voice; MVW — Applied Music-Windwinds.

**MUC 4201 Music Composition I** (3)  
A course designed to give the advanced student intensive experience in creative writing. Compositional techniques and devices will be studied, through an analysis of works by major composers. Prerequisite: Orchestration, or permission of instructor.

**MUC 4202 Music Composition II** (3)  
A continuation of Music Composition I. The larger forms of music composition are analyzed

and composed. Prerequisite: Music Composition I, or permission of instructor.

**MUE 3140 Solfege** (3)  
A course designed to strengthen and build the student's ability to write and perform melodic, harmonic and keyboard dictation. It will also provide a rhythm pattern sequence necessary to write and understand the modern idiom of score reading analysis and transposition.

**MUE 5928 Workshop in Music** (2)  
Applications of materials and techniques in music in a laboratory or field setting.

**MUG 4101 Basic Conducting** (1)  
A basic conducting course to gain fundamental technique and interpretation. A prerequisite for both advanced instruments and choral conducting.

**MUG 4201 Choral Conducting** (1)  
With a background in basic theory, and having performed in organizations, the student will develop techniques of group conducting including madrigal, glee, choir, etc. A survey of choral literature will be included. Prerequisite: Basic Conducting.

**MUG 4301 Instrumental Conducting** (1)  
With a background in basic, theory, and having performed in organizations, the student will develop a knowledge of baton technique, score reading, and interpretation. Prerequisite: Basic Conducting.

**MUG 5105 Advanced Conducting Techniques** (3)

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.

**MUH 1001 Musical Art Course** (3)  
Lives and creations of great composers in various periods of history. A multi media course.

**MUH 3116 Evolution of Jazz** (3)  
A history course that surveys jazz styles from mid-19th century to 1977. A sociological and musical look at jazz, the personalities and their experience.

**MUH 3211 Music History Survey** (3)  
A survey of music from antiquity to 1750. Lecture on historical styles will be supplemented with slides, recordings and music analysis.

**MUH 3212 Music History Survey** (3)  
A survey of music from 1750 to the present. Lectures on historical styles will be supplemented with slides, recordings, and musical analysis.

**MUH 3372 Twentieth Century Music: Exploration** (3)  
An exploration of music since 1900. Lectures on style plus demonstrations will be supplemented with recordings and analysis. Elements of the popular idiom will be investigated.

**MUH 5375 Twentieth Century Music: "New Dimensions"** (3)  
A technical study of music since 1900. Lectures on style plus demonstrations and practical application will be supplemented with recordings

and analysis. Electronic and multi-media performance will be accented.

**MUL 3011 Understanding and Enjoyment of Music I** (3)  
A non-technical introduction to program music of the 19th century, and folk/popular music of the 20th century.

**MUL 3012 Understanding and Enjoyment of Music II** (3)  
A non-technical introduction to music before the 1800's and music of the 20th century. Comparisons of music up to and including electronic music.

**MUL 4400 Keyboard Literature** (3)  
Study of solo works for the keyboard from historical beginnings to the present. Performance practices and stylistic analysis will be emphasized, with illustrations of representative works.

**MUL 4500 Symphonic Literature** (3)  
Survey of symphonic literature from the 17th century to present day. Analysis and illustrations of representative works.

**MUL 4661 History and Literature of Opera** (3)  
Chronological survey of opera literature from the 17th century to present day. Analysis and performance of representative works.

**MUM 4301 Business of Music** (3)  
Principles and practices of modern publishing techniques; copyright laws; wholesale and retail distribution of music. Performance rights; agreements and relations between producers directors, performers, writers, personnel managers, and booking agents. Prerequisite: Permission of instructor.

**MUM 4302 Business of Music II** (3)  
Continuation of principles and practices of modern publishing techniques; copyright laws; wholesale and retail distribution of music. Performance rights; agreements and relations between producer, directors, performers, writers, personnel managers, booking agents. Prerequisite: MUM 4301.

**MUM 4940 Music Internship** (VAR)  
Practical experience utilizing music theory, composition and history in the commercial music industry. The precise nature of the work will be determined in consultation with an advisor. Prerequisite: MUM 4301.

**MUN 1140, 2140, 3140, 4140, 5145**  
**Wind Ensemble** (1)  
A group of wind and percussion instrumentalists. Prerequisite: Permission of conductor.

**MUN 1210, 2210, 3210, 4210, 5215**  
**Orchestra** (1)  
An instrumental ensemble performing works from the symphonic repertory. Prerequisites: Previous experience, and permission of conductor.

**MUN 1340, 2340, 3340, 4340, 5345**  
**Collegiate Chorale** (1)  
A small ensemble of selected mixed voices performing a repertoire in the modern popular idiom. Miniature contemporary accompaniment will be utilized. Prerequisite: Permission of conductor.

- MUN 1380, 2380, 3380, 4380, 5385**  
University Singers (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 conductor.
- MUN 1460, 2460, 3460, 4460, 5465**  
Chamber Music (1)  
Small ensemble in the performing of chamber music literature. Prerequisite: Permission of conductor.
- MUN 1710, 2710, 3710, 4710, 5715**  
Studio Jazz (1)  
An ensemble to provide creative professional-level experience in the contemporary popular idiom. Permission of conductor.
- MUS 3905, 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.
- MUS 3910, MUS 4910, MUS 5910**  
Research (VAR)  
Research composition or performance projects, under the guidance and direction of the music faculty. (May be repeated.)
- MUS 3949 Cooperative Education in Performing Arts** (VAR)  
A student majoring in Performing Arts may spend several semesters fully employed in industry or government in a capacity relating to the major.
- MUS 4949 Cooperative Education in Performing Arts** (VAR)  
A student majoring in Performing Arts may spend several semesters fully employed in industry or government in a capacity relating to the major.
- MUT 1111 First Year Music Theory I** (3)  
This course is designed to promote and develop comprehensive musicianship in all disciplines of the musical art, analysis, composition, performance and listening.
- MUT 1112 First Year Music Theory II** (3)  
This course is designed to promote and develop comprehensive musicianship in all disciplines of the musical art, analysis, composition, performance and listening. The second semester is a continuation of Theory I. Prerequisites: 1st year Music Theory I and Sight-singing I or equivalent.
- MUT 1221 Sight-singing I** (1)  
Development of Basic Musicianship through aural perception, Sight-singing and ear training exercises.
- MUT 1222 Sight-singing II** (1)  
Development of Basic Musicianship through aural perception, sight-singing and ear training exercises. The second semester is a continuation of Sight-singing I. Prerequisites: Sight-singing I and 1st year Music Theory I or equivalent.
- MUT 3031 Music Theory I** (3)  
Designed to review and develop skills in basic theory, harmony, and ear training.
- MUT 3032 Music Theory II** (3)  
Designed to review and further develop skills in basic theory, harmony, and ear training. Prerequisite: Music Theory I, or equivalent.
- MUT 3416 Counterpoint** (3)  
A study of linear writing through species counterpoint. Two and three-part instrumental and vocal counterpoint of the 18th century: Canon, inventions, fugues. Particular emphasis will be placed on formal analysis. Prerequisite: Music Theory II, or equivalent.
- MUT 3611 Form and Analysis** (3)  
Study and analysis from the smaller forms of musical composition to multimovement forms. Prerequisite: Counterpoint.
- MUT 4311 Orchestration** (3)  
With a background of basic theory, the student will explore the techniques of writing and arranging for instruments in performing organizations and choral groups.
- MUT 4561 Twentieth Century Theory-Composition** (3)  
This course will analyze and compose works using the following procedures: melodic-harmonic techniques developed in the late nineteenth century; serial, and improvisational techniques; and those derived from the use of electronic devices as performance media. Prerequisites: Survey of Basic Music, Counterpoint.
- MUT 4641 Jazz Improvisation I** (3)  
A beginning course in Jazz improvisation that teaches fundamental aspects, chord structures and extensions, chord scales, melodic patterns, and tunes. Course will involve both theory and practical application. A concert will be held at conclusion of term.
- MUT 4642 Jazz Improvisation II** (3)  
A follow-up course that both reinforces and extends all material learned in Jazz Improvisation I. Course stresses more complex chord structure, scales and tunes. A concert will be held at conclusion of the term.
- MUT 4643 Jazz Improvisation III** (3)  
A continuation of Jazz Improvisation II, this course teaches chromatic chords, advanced scales and progressions, patterns, repertoire. Individual and ensemble performance is required as a final project. Prerequisite: Jazz Improvisation II.
- MUT 4353 Jazz Arranging** (3)  
This course teaches the fundamental aspects of jazz arranging: instrumentation, transposition, section and ensemble writing, chord voicings, counterpoint, and form and analysis. The performance of an original arrangement is required as a final project. Prerequisite: Jazz Improvisation I.
- MUT 5325 Arranging** (4)  
A course in practical arranging for the public school teacher, including choral, band, and popular arranging.
- MVB 1314, 2324, 3334, 4345, 5355**  
Applied Music-Bass (1-2)  
Individual instruction in applied music on trumpet, French horn, trombone, baritone horn, or tuba.
- MVK 1111 Class Piano** (1)  
A course designed to teach piano skills and competencies to non-piano majors. This is a four-semester sequence for music majors. This course includes: keyboard familiarization, finger exercises and techniques, transposing and easy literature. Prerequisite: none.
- MVK 1311, 2321, 3331, 4341, 5351**  
Applied Music—Keyboard (1-2)  
Individual instruction in applied music on piano or organ.
- MVK 2111 Class Piano II** (1)  
A continuation of class piano I; The course includes continued work in finger technique, scales and fingering, transposing, simple accompaniments to folk songs, sight reading cadences and simple literature. Prerequisite: class piano I.
- MVP 1311, 2321, 3331, 4341, 5350**  
Applied Music—Percussion (1-2)  
Individual instruction in applied music on all percussion instruments.
- MVS 1312, 2321, 3332, 4343, 5353**  
Applied Music—Strings (1-2)  
Individual instruction in applied music in violin, viola, cello, string bass, guitar, or harp.
- MVS 3116 Guitar Skills** (3)  
Emphasis on music reading and elementary techniques. Open to all Florida International University students.
- MVS 3216 Intermediate Guitar Skills** (3)  
Emphasis on techniques and styles such as calypso, folk, blues, classical and jazz. Open to all Florida International University students.
- MVS 4975 Recital and Research** (1)  
All music majors, before graduation, must present at least one half of a public recital, and pass an oral examination on the music programmed.
- MVV 1311, 2321, 3331, 4341, 5351**  
Applied Music—Voice (1-2)  
Individual instruction in applied music in voice.
- MVV 3111 Class Instruction—Voice** (3)  
Class instruction on voice designed to and the student in developing performance skills and increased musical knowledge. (May be repeated.)
- MVV 4141 Intermediate Class Voice** (3)  
Emphasis on sight-singing, tonal production, interpretation and other vocal exercises. Particular attention is paid to vocal and acting improvisation. Prerequisite: MVV 3111.
- MVW 1313, 2323, 3333, 4345, 5353**  
Applied Music—Woodwinds (1-2)  
Individual instruction in applied music on the flute, oboe, clarinet, bassoon, or saxophone.

## Theatre

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Fine Arts in Theatre

LOWER DIVISION PREPARATION:

*Recommended Courses:* Three semester hours in acting; stagecraft; stage lighting; costuming; voice for the theatre; three to six hours in dance; and theatre workshop.

## UPPER DIVISION PROGRAM:

The goal of the Theatre Program is to provide well rounded theatre training through classes and productions conducted with professional theatre discipline and the highest possible aesthetic standards. In addition to satisfactory completion of all course work, a Theatre Major is required to participate in all of the major productions presented during enrollment in the Theatre Program.

Required courses for a BFA degree in Theatre:

TPP 3110	Acting I	3	34
TPP 3280	Theatre Speech and Movement I	2	
TPA 3200	Stagecraft I	3	
TPA 3220	Stage Lighting I	3	
TPA 3010	Scenic Design I	3	
TPA 4230	Stage Costuming	3	
TPA 3290L			
TPA 3292L	Technical Theatre Lab	3	
TPA 3650	Playscript Analysis	3	
TPP 3310	Directing	3	
THE 4110-			
THE 4111	Theatre History I, II	6	
THE 4970	Senior Project	2	
<i>Elective Courses</i>		26	
		60	

## Minor in Theatre:

## Required Courses:

THE 3000	Theatre Appreciation	3	21
TPA 3200	Stagecraft I	3	
TPP 3110	Acting I	3	
TPP 3650	Playscript Analysis	3	

## Theatre Electives

A grade of C or better in all courses required for the major is necessary for graduation.

## Course Descriptions

## Definition of Prefixes

DAA — Dance Activities; ORI — Oral Interpretation; SPC — Speech Communication; THE — Theatre; TPA — Theatre Production and Administration; TPP — Theatre-Performance and Performance Training.

## THEATRE MAJOR

DAA 3100 Modern Dance Technique I (2)  
Development of techniques and understanding of the art form of contemporary dance. May be repeated.

DAA 3101 Modern Dance Technique II (2)  
A continuation of basic techniques and understanding of the art form of contemporary dance. Prerequisite: DAA 3100 or permission of instructor. May be repeated.

DAA 3200 Ballet Technique I (2)  
Development of techniques and understanding of ballet. May be repeated.

DAA 3201 Ballet Technique II (2)  
A continuation of basic techniques and understanding of ballet. Prerequisite: DAA 3200 or permission of instructor. May be repeated.

ORI 3000 Basic Oral Interpretation (3)  
Development of the voice as an instrument for expressive interpretation of literature.

SPC 3600 Public Speaking (3)  
Study of the principles of ethical and effective public speaking, with practice in the construction and delivery of original speeches before an audience. For non-theatre majors only.

THE 3000 Theatre Appreciation (3)  
A study of theatre, process and product, for the audience.

THE 3051 Children's Theatre (3)  
Techniques of selection, production and performance of plays for children.

THE 3071 Introduction to Filmmaking (3)  
For the beginning student of filmmaking. Survey of the origins and development of cinematography as an art form. Presentation and technical analysis of selected films.

THE 4110 Theatre History I (3)  
The development of the theatre from its origins to the early 19th century.

THE 4111 Theatre History II (3)  
The development of the theatre from early 19th century to the present.

THE 4820 Creative Dramatics (3)  
The study of informal drama activity with children. Techniques of improvisation, sense recall, music and movement are employed.

THE 4916 Research (1-5)  
Supervised individual investigation of special research projects. Credit will vary with the nature and scope of the project. May be repeated.

THE 4950 Theatre Internship (1-15)  
Supervised internship in a professional company in acting, directing, stage management, design, technical theatre or theatre management.

THE 4970 Senior Project (2)  
Preparation of a final creative project in the student's area of emphasis under the direction of a faculty advisor. Prerequisite: prior arrangement with advisor.

THE 5916 Research (1-5)  
Supervised individual investigation in special research projects. Credit will vary with the nature and scope of the project. May be repeated.

TPA 3010 Scenic Design I (3)  
Fundamentals of designing effective settings for the play. Discussion and practice in: analysis, research, the creation of appropriate and exciting environments for the actor, and basic skills in rendering and model making. Prerequisite for Theatre majors: TPA 3200.

TPA 3200 Stagecraft I (3)  
An introduction to construction techniques used in stage. Direct experience with wood and metal working tools, blueprint reading, and various materials including wood, metal, plastics and fabrics. Lecture and laboratory.

TPA 3220 Stage Lighting (3)  
Familiarization with stage lighting equipment, purposes and aesthetics of stage lighting; development of an approach to designing lighting;

practical experience in the use of equipment. Lecture and laboratory.

TPA 3250 Stage Make-up (3)  
Fundamentals of straight and character make-up. Use of greasepaint, and three dimensional techniques.

TPA 3290L Technical Theatre Lab I (1)  
Supervised crew work in construction, painting, lighting, costuming and running major productions. Required of Theatre majors.

TPA 3291L Technical Theatre Lab II (1)  
Supervised crew work. Required of Theatre majors.

TPA 3292L Technical Theatre Lab III (1)  
Supervised crew work. Required of Theatre majors.

TPA 4061 Scenic Design II (3)  
Advanced skills in setting the mood of, and creating movement through a theatrical space. Emphasis will be placed upon rendering techniques and model making. Prerequisite: TPA 3010.

TPA 4201 Stagecraft II (3)  
Advanced problems in the construction and movement of scenery, properties and special effects. Prerequisite: TPA 3200.

TPA 4230 Stage Costuming I (3)  
Fundamentals of costume design. Study of period, character and concept. Familiarization with fabrics, and techniques of construction and trim.

TPA 4231 Stage Costuming II (3)  
Advanced skills in designing, rendering and construction costumes. Includes pattern making and charting the show. Prerequisite: TPA 4230.

TPA 4260 Sound for the Theatre (3)  
A study of the uses of sound effects and high fidelity electronics in theatrical production.

TPA 4400 Theatre Management (3)  
Survey of all aspects of theatre administration: budget planning and maintenance; public relations; box office and house management; unions and contracts.

TPP 3100 Introduction to Acting (3)  
An introduction to the acting process. Self awareness, physical and vocal control, basic stage technique and beginning scene work will be studied. Intended for the student with little or no acting experience.

TPP 3110 Acting I (3)  
This course is designed to free the actor as an instrument of his or her craft through improvisation, theatre games, and exercises. Work on basic voice projection, movement, stage language, scene study, and basic elements of character are included.

TPP 3111 Acting II (3)  
Beginning scene study and character building, continuing work begun in Acting I. Prerequisites: TPP 3110, TPP 3282.

TPP 3282 Theatre Speech and Movement (2)  
Development of the actor's two main instruments: the voice and the body.

**TPP 3283 Theatre Speech and Movement II** (2)  
A continuation of the development of the actor's voice and body. Prerequisite: TPP 3282.

**TPP 3310 Directing I** (3)  
Basic principles of play direction; including problems of selecting, analysing, casting and rehearsing plays. Prerequisites: TPP 3650.

**TPP 3650 Playscript Analysis** (3)  
Detailed playscript examination for directors, actors and designers, focusing on identification of those elements upon which successful theatre production depends.

**TPP 3730 Dialects** (3)  
A study of dialects common to western theatre. Prerequisite: TPP 3100 (Acting).

**TPP 4112 Acting III** (3)  
Advanced scene study, character and improvisation work. Elements of style, auditions techniques and ensemble playing will be explored. Prerequisite: TPP 3111.

**TPP 4280 Special Problems in Acting** (3)  
This course will concentrate on the Acting demands of a specific period, style, genre, or playwright. Prerequisite: TPP 4112 or permission of instructor.

**TPP 4311 Directing II** (3)  
A continued study of direction techniques culminating in the preparation of a play for public performances. Prerequisite: TPP 3310.

**TPP 4531 Stage Combat** (3)  
A study of combat techniques for the stage, including fencing, boxing, wrestling and tumbling.

**TPP 4600 Playwriting** (3)  
Study of the theory and principles of writing plays for the stage. Practice in writing either the short or long play. May be repeated.

## Philosophy

George Kovacs, *Professor*  
Kenneth Henley, *Associate Professor*  
Bongkil Chung, *Assistant Professor*  
Bruce Hauptli, *Assistant Professor*

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Arts

LOWER DIVISION PREPARATION:

*Required Courses:* None.

*Recommended Courses:* Philosophy, Religion.

UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<i>Required Areas:</i>	33
Epistemology	3
Metaphysics	3
Ethics and Aesthetics	3
Logic	3
History of Philosophy	6
Philosophy Seminar	3
Other Philosophy Courses	12
Courses in one other discipline	12
<i>Electives:</i>	15
	60

Students must take all philosophy courses included in the major for a letter grade and earn a grade of C or better in these.

*Remarks:* A more detailed description of the Philosophy Program is contained in a brochure available at the Department of Philosophy and Religion. Students select their required courses in philosophy with the approval of a faculty member of the Department.

Students are also encouraged to consider a "dual-major," and thus simultaneously meet the requirements of two academic majors. In this case, the twelve semester hour credits required in one other academic discipline or unified area (as part of the Philosophy Major) would be met by courses taken towards the second major.

The College of Arts and Sciences requires for the bachelor's degree that the student take a minimum of 9 semester hours outside the discipline; 6 semester hours of which are to be taken outside the department sponsoring the major program. For the various ways of meeting this requirement, please consult the Department.

The Department offers many of its courses at the Bay Vista Campus and participates in the Humanities Major. It also serves the community and professional groups by offering courses Off-Campus. For further information concerning these courses consult the Department.

### Minor in Philosophy:

A student majoring in another academic discipline would earn an academic minor in philosophy by taking an approved pattern of at least four philosophy courses (12 semester hours), based upon an academic rationale or unifying study theme, and approved by the Chairperson of the Department. An acceptable minor in philosophy would be four courses in one of the areas designated in the course list of the Philosophy Program. A student may propose still other patterns of four philosophy courses for a minor, provided the selection is based upon an acceptable academic rationale.

## Course Descriptions

### Definition of Prefixes

EDF — Education, Foundations; PHH — Philosophy, History of; PHI — Philosophy; PHM — Philosophy of Man and Society; PHP — Philosophers and Schools.

**EDF 3542 Philosophy of Education** (3)  
Notions of philosophy and education will be applied in the review of prominent philosophies of education. Special attention will be given to the development of the student's own philosophy of education and to the importance of philosophical assumptions in curriculum designs and teaching strategies.

**PHH 3042 Latin American Philosophy** (3)  
This course will examine the development of Latin American thought, with particular attention to the 19th and 20th centuries. It will consider the traditions and initiatives of prominent Latin American philosophers in the light of problems such as personal and cultural identity.

**PHH 3100 Ancient Philosophy** (3)  
The basic concerns and teachings of representa-

tive philosophers and schools of thought, particularly in the Greek and Roman cultural settings, and linkages to their past and future are emphasized in this course.

**PHH 3200 Medieval Philosophy** (3)  
The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the Middle Ages, and linkages to their past and future are emphasized in this course.

**PHH 3420 Early Modern Philosophy** (3)  
The basic concerns and teachings of representative philosophers and schools of thought in the period from the Renaissance to Kant and the linkages to their past and future are emphasized in this course.

**PHH 3440 Late Modern Philosophy** (3)  
The basic concerns and teachings of representative philosophers and schools of thought in the period from Kant to Nietzsche and the linkages to their past and future are emphasized in this course.

**PHH 3700 American Philosophy** (3)  
This course will examine the development of American philosophical thought, with particular attention to the 19th and 20th centuries. It will consider the traditions and initiatives of the prominent American philosophers, in the light of problems such as the relationship between theory and practice.

**PHH 3840 Indian Thought** (3)  
Major schools and works will be examined showing the development of Indian thought, from Hinduism through Buddhism. Emphasis will be placed on metaphysical and epistemological problems in Buddhism. Some historical relationships between the basic values of Buddhism and the diverse cultural, social and political forms in which they have been expressed will also be studied.

**PHH 4600 Twentieth Century Philosophy** (3)  
The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the present century, and linkages to past and emerging generations are emphasized in this course.

**PHI 2011 Philosophical Analysis** (3)  
This course introduces both the tools of philosophical thinking and some of their applications to fundamental topics such as knowledge, value, meaning and human society.

**PHI 2930 Special Topics** (3)  
In-depth study of topics of special interest in philosophy.

**PHI 3010 Introduction to Philosophical Thinking** (3)

This introductory course examines the presence of philosophy and the role of philosophizing in man's search for understanding of himself and of his world. It includes the study of the basic structure, the many applications, and some basic issues of philosophical thinking, through a dialogue with those original sources, more accessible for a first learning experience in philosophy, which represent basic events in the history of philosophizing.

**PHI 3100 Introduction to Logic** (3)  
This introductory course in logical thinking and argumentation will treat both practical and theoretical approaches to understanding human communications and solving problems. Students will be introduced to inductive and deductive logic, fallacies, and the role of logic in scientific explanation and popular expression.

**PHI 3300 Epistemology** (3)  
The viewpoints of various philosophers and schools of thought regarding types of knowledge, certitude, and creativity are the main emphasis of this introductory course. The meaning of truth and truthfulness is analyzed from both the classical and the contemporary perspectives.

**PHI 3320 Philosophy of Mind** (3)  
An inquiry into the concept of mind and subsidiary concepts such as sensation, perception, desire, emotion, intention, volition, imagination, and intellect. The course will address the problem of the relation of mind and body and such topics as the concept of a person, the nature of intentional action, and the nature of consciousness.

**PHI 3400 Philosophy of Science** (3)  
The philosophic background of scientific method will be examined. Attention will be given to the philosophical consequences of conceptual change in the sciences. Such topics as the growth and unity of science, explanation and prediction, and the role of science in society will be explored.

**PHI 3500 What Is Reality?** (3)  
This introductory course examines basic metaphysical questions regarding the nature of reality, as well as the meaning of these questions for man's concept of himself and his world. Fundamental texts from classical and contemporary philosophers will be considered.

**PHI 3600 Ethics** (3)  
What is intrinsically good? What ought one to do? How are moral claims justified? Competing views of major philosophers are considered.

**PHI 3636 Professional Ethics** (3)  
This course will examine the role of ethics in the professions. The focus will be on the moral issues arising in the professions with the aim of developing the analytical skills required to address such problems.

**PHI 3700 Philosophy of Religion** (3)  
This course will involve a study of the phenomena of religion, as a means of identifying and evaluating religion's essential and universal element. Consideration will also be given to the relations between the enterprises of philosophy and religion. The result of these investigations will then be applied to specific topics examined by both disciplines.

**PHI 3762 Eastern Philosophical and Religious Thought** (3)  
This introductory course examines the development of philosophical and religious thought in the East, from ancient to modern times. Hinduism, Buddhism, Confucianism, Taoism and other major viewpoints will be considered, in

themselves and in comparison with Western forms of thought.

**PHI 3800 Aesthetics** (3)  
An introduction to problems in aesthetics, with emphasis on those problems which are especially relevant to appreciation and criticism in the arts. Typical problems include the relation between form and content, truth and falsity in art, the nature of emotion in art and of the aesthetic response, as well as the nature of art itself. This course will include a study of selections from the writings of major thinkers and the consideration of those works of art which are relevant to this study.

**PHI 3949 Cooperative Education in Philosophy** (3)  
A student majoring in Philosophy may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Permission of Cooperative Education and Major Department.

**PHI 4130 Symbolic Logic** (3)  
This course provides an introduction to symbolic logic. Emphasis is upon both the formal techniques of analysis of argument and upon the theoretical aspects of formal logic.

**PHI 4221 Philosophy of Language** (3)  
This course examines the nature and structure of language from various philosophical perspectives. It includes an analysis of such themes as language and culture, language and thought and the origin of language.

**PHI 4222 Philosophy of Dialogue** (3)  
This course examines the meaning, the foundations, the limitations of dialogue, and the dialogical structure of expression and human relationships based on the Philosophy of Martin Buber. It includes a philosophical analysis of the dialogical principle and the application of its insights to the problems of human living and knowing.

**PHI 4630 Contemporary Ethical Issues** (3)  
After a review of basic questions regarding ethics, this course considers special ethical problems in contemporary society from the perspective of one or more philosophers or systems of ethics. Topics will be selected and announced in advance.

**PHI 4631 Ethical Issues in Business** (3)  
After a review of basic questions regarding ethical knowledge, norms and systems, students will consider the ethical dimensions of current problems and issues facing the business manager or worker: corporate decisions, personal responsibility, product quality and performance, production, marketing and advertising, management, and general economic rationality.

**PHI 4633 Biomedical Ethics** (3)  
After examining the foundations of ethics, this course will consider the human and ethical dimensions of current issues in the life sciences, such as the meaning of human living and suffering, ethics of genetic control, death and dying, personal responsibility in the medical and counseling professions.

**PHI 4680 What Is Value?** (3)  
Several questions will be examined in this

course in the context of classical and contemporary value theories. What is value? How are values known? What are the determinants of value? How do values differ from beliefs and attitudes? Are values relative?

**PHI 4882 Philosophy in Literature** (3)  
Philosophical implications of selected works and the impact of philosophical concepts such as the self, death, identity, alienation, responsibility, freedom and the absurd.

**PHI 4910 Independent Research** (VAR)  
Topics will be selected to meet the academic needs of the individual student.

**PHI 4930 Special Topics** (3)  
In-depth study of topics of special interest in philosophy.

**PHI 4935 Philosophy Seminar** (3)  
This seminar is designed for majors and other qualified students approved by the Department, and will be guided by one or more faculty members. The specific topic will be selected and announced in advance. The number of participants will be limited.

**PHI 4949 Cooperative Education in Philosophy** (3)  
A student majoring in Philosophy may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Permission of Cooperative Education and Major Department.

**PHI 5934 Special Topics** (3)  
Topics will be selected to meet the academic needs of groups of students.

**PHM 3040 Philosophical Anthropology** (3)  
This course attempts to interpret philosophically scientific perspectives concerning the nature of man and of the human condition. It seeks to elucidate the basic qualities that make man what he is and distinguish him from other beings.

**PHM 3200 Social and Political Philosophy** (3)  
The nature of society and the state, authority of society and the state over the individual, political obligation, legitimacy of government, and idea of social contract are considered.

**PHM 3500 Philosophy of History** (3)  
After exploring the definitions, dimensions and interrelations of philosophy and history, students will examine major philosophies of history. The social responsibility of the historical narrative and the philosophical assumptions of historiographies will be discussed.

**PHM 4020 Love and Sexuality** (3)  
This course analyzes the nature and meaning of love and sexuality, and studies the basic problems in human sexual living, such as love and the man-woman relationship, the formation of sexual union, and attitudes toward love and sexuality in contemporary society.

**PHM 4050 Philosophy of Death** (3)  
This course analyzes the meaning of death and man's attitude towards death and the dying. It examines how philosophy can share in the new confrontation between man and his death, and shows the ways philosophical thinking contrib-

utes to the discovery of an authentic attitude towards the phenomenon of death as part of human living.

**PHI 4123 Philosophy and Feminism** (3)  
This course will focus on the basic philosophical dimensions that must be included in any full understanding of feminine being as reality and experience. Topics will include ethical issues such as oppression of women and sexism in language and behavior.

**PHM 4400 Philosophy of Law** (3)  
This course will analyze the nature of law and judicial reasoning in the light of fundamental alternative interpretations, basic topics of legal philosophy will be considered, such as freedom and rights, responsibility and punishment, rule of law and civil disobedience, legality and justice.

**PHP 3840 Chinese and Japanese Philosophy** (3)  
This course will examine the main currents of Chinese and Japanese thought, with special focus on the quest of the Chinese people toward a more harmonious adjustment to their environment. The investigation will include consideration of the Confucian, Mohist, Taoist, Legalist and Zen Buddhist philosophies.

**PHP 4510 Marxism** (3)  
This course examines the philosophic insights of Marx and the main trends (anthropological, social, existential) in contemporary Marxism. It includes an analysis of the Marxist interpretation of alienation, work, and human authenticity.

**PHP 4782 Phenomenology** (3)  
This course analyzes the methods, the basic philosophical insights and the applications of 20th century Phenomenology. It includes the phenomenological analysis of knowing as well as basic questions regarding the nature of reality together with the study of fundamental texts from Husserl, Heidegger and Merleau-Ponty.

**PHP 4784 Analytic Philosophy** (3)  
This course examines the 20th century Anglo-American tradition of approaching philosophic problems by the methods of linguistic analysis. It will include study of techniques of linguistic analysis and an evaluation of their adequacy in dealing with meaning and truth, the mind-body problem, and free will.

**PHP 4786 Existentialism** (3)  
This course examines the origin, basic philosophical insights, and influence of the mainstreams of modern existentialism. It includes the study of fundamental texts of Kierkegaard, Nietzsche, Sartre, Jaspers and Camus.

## Physics:

John W. Sheldon, *Professor*  
Kenneth A. Hardy, *Associate Professor*  
Stephan L. Mintz, *Associate Professor*  
Richard A. Bone, *Lecturer*

The physics program is part of the Department of Physical Sciences. Additional information and counseling may be obtained from the De-

partmental Office. No D grades will be allowed in courses required for the major.

### Bachelor of Science

This program prepares students for careers as professional physicists in industry, government, or for continuing to graduate school in physics, engineering, or material science. It also prepares students for teaching careers. Students interested in teacher certification should contact the School of Education.

#### LOWER DIVISION PREPARATION:

*Required Courses:* algebra and trigonometry (advanced high school courses in algebra and trigonometry are acceptable); one year of general chemistry, differential and integral calculus, one year of physics with calculus including lab. These courses may be taken at the University, if not completed at the lower division.

#### UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
PHY 3123, PHY 3124 Modern Physics	6
PHY 4323, PHY 4324 Electromagnetism	6
PHY 4221, 4222 Mechanics	6
PHY 3503/CHM 3410 Thermodynamics	3
PHY 4604 Quantum Mechanics	3
PHY 4810L, PHY 4811L Senior Physics Lab	3
PHY 4921 Synopsis of Undergraduate Phys.	1
Approved electives in experimental theoretical Physics	8
Mathematics electives beyond 6 semester hours calculus	3
or Special Topics PHY 4936, 4937 or PHY 5936, 5937	3
PHY 4905, 4906, 4907	3
Independent Study	3
<i>Approved electives*</i>	<u>18</u>
	<b>60</b>

\*Must include PHY 3048 — 3049 and Laboratory if the equivalent is not taken in the lower division.

#### Minor in Physics:

This program is designed for the students who desire additional capabilities in physics beyond the basic sequence. This program is especially recommended for chemistry, mathematics, and engineering/technology majors.

	<i>Semester Hours</i>
PHY 3048, 3049 Physics with Calculus	10
PHY 3048L, 3049L Lab	2
PHY 3123, 3124 Modern Physics	6
Additional approved courses	6

#### Master of Science in Physics

The Department of Physical Sciences at the University participates jointly with the Department of Physics at Florida Atlantic University in offering the M.S. in Physics. Students entering the program must have a B.S. (or equivalent), and must satisfy the requirements for admission to the FAU Master's program and the

FAU requirements for the M.S. in Physics. The degree is awarded by Florida Atlantic University.

#### Cooperative Education

Students seeking the baccalaureate degree in physics may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Office of Academic Affairs. The student spends several semesters fully employed in an industrial or governmental physics laboratory. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

## Course Descriptions

### Definition of Prefixes

AST — Astronomy; PHS — Physics Specialized; PHY — Physics; PSC — Physical Sciences; ENU — Nuclear engineering.

**AST 3025L Observational Astronomy** (3)  
A study of astronomical objects visible from Miami: stars and their constellations, planets, binary stars, star clusters, variable stars, nebulae and galaxies will be discussed and observed.

**AST 3213 Modern Astrophysics** (3)  
An introduction to the structure of stars and galaxies and the evolution of the universe as a whole. Topics will include atomic spectra, stellar classifications, galactic structure and cosmology. Prerequisites: PHY 3048, 3049, Calculus I and II, and AST 3100.

**AST 3100 Modern Astronomy** (3)  
The structure and evolution of our solar system is studied with particular emphasis on physical concepts. Topics will include astronomical coordinate systems, celestial mechanics, the earth's motions, and a description of the solar system. Prerequisites: College algebra and geometry.

**ENU 4101 Introduction to Nuclear Reactors** (3)  
An elementary course in nuclear fission reactor theory and power plant operation. An overview of the relevant nuclear processes and their application to reactor design. Prerequisites: MAC 341I-3412, Calculus I & II; PHY 3048-3049, General Physics with Calculus I-II.

**PHS 4303 Nuclear Physics** (3)  
A treatment of the current state of the nuclear theory problem and a discussion of modern experimental methods. Prerequisites: PHY 3048, 3049, PHY 3123, 3124.

**PHS 5125 Seminar in Theoretical Physics** (3)  
The theoretical foundation of classical mechanics, relativity, fields, quantum mechanics, group theory and relativity.

**PHS 5400 Solid State Physics** (3)  
Crystalline form of solids, lattice dynamics, metals, insulators, semi-conductors, and dielectric materials. Prerequisites: general chemistry, general physics with calculus, and mathematics through Calculus II.

**PHY 3033 Physical Aspects of Unresolved Mysteries** (3)  
Topics peripheral to orthodox science, such as UFO's, attempts to communicate with alien beings, the theories of Velikovsky, Stonehenge,



and psychic phenomena, are presented for discussion. Emphasis is on physical ideas, scientific reasoning, and the interplay between theory and experiment.

**PHY 3048, PHY 3049 Physics with Calculus (5,5)**

Basic Physics sequence for students with calculus. PHY 3048 will cover Kinematics, Newton's Laws, conservation laws, gravitation, fluid dynamics, sound, and thermodynamics. Prerequisite: Differential calculus, corequisite: Integral calculus. PHY 3049 will cover electricity and magnetism, field theory, classical optics, modern optics and modern physics.

**PHY 3048L, PHY 3049L Junior Physics Laboratory (1,1)**

Laboratory section of PHY 3048 and PHY 3049. Prerequisites or Corequisites: PHY 3048, 3049.

**PHY 3050-PHY 3051 Physics without Calculus (4,4)**

A general introductory course using a non-calculus approach. PHY 3050 will cover kinematics. Newtonian mechanics, properties of fluids, thermodynamics, and wave motion. PHY 3051 will cover electricity and magnetism, geometrical and wave optics, and the structure of matter. Prerequisites: Students must have college algebra, trigonometry, and analytic geometry.

**PHY 3050L, PHY 3051L Physics Without Calculus Laboratory (1,1)**

Laboratory section of PHY 3050 and PHY 3051. Prerequisite or Corequisites: PHY 3050, 3051.

**PHY 3123, PHY 3124 Modern Physics (3)**

Recent developments in physics are discussed. Subject matter includes: review of classical physics, special relativity, four-vectors, particle aspects of waves, wave aspects of particles, the hydrogen atom, many electron atoms, nuclear instrumentation, nuclear structure, nuclear reactions, elementary particles, introduction to quantum mechanics, and solid state physics. Prerequisites: PHY 3048-3049.

**PHY 3424 Optics (3)**

General formulation of geometrical optics including matrix techniques, interference phenomena, and the theory of Fraunhofer and Fresnel diffraction, will be among the topics covered. Prerequisites: PHY 3048-3049.

**PHY 3503 Thermodynamics (3)**

Fundamental principles of thermodynamics, the first, second, and third laws, free energy, entropy, the chemical potential, phase rule and its applications. Prerequisites: general chemistry, general physics with calculus and mathematics through Calculus II.

**PHY 3772 Electronics (3)**

Including solid state theory and the theory of circuits, circuit operation and design in lecture and laboratory sessions. Prerequisites: PHY 3048-3049.

**PHY 3949, PHY 4949 Cooperative Education in Physics (3)**

One semester of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted

to the Co-op Program. A written report and supervisor evaluation will be required of each student.

**PHY 4221, PHY 4222 Intermediate Classical Mechanics I & II (3,3)**

Laws of motion, statics of particles and rigid bodies, motion of particles in one, two, and three dimensions, systems of particles, rigid bodies in a plane, central forces. Accelerated reference systems, rigid body in three dimensions, generalized coordinates, Lagrangian and Hamiltonian formulations of mechanics, vibrating systems and normal coordinates. Prerequisites: PHY 3048 or equivalent, differential and integral calculus.

**PHY 4323, PHY 4324 Seminar in Electromagnetism (3)**

The theory of electromagnetic fields and waves is developed from basic principles. Vector calculus, Coulomb's law, Gauss's Law, electrostatic potential, dielectrics, solutions to La Place's and Poisson's equations, magnetic induction, vector potential, magnetic scalar potential, Faraday's law, magnetic materials, Maxwell's equations and propagation of waves in space and various media are discussed. Prerequisites: PHY 3048, 3049.

**PHY 4526 Statistical Thermodynamics (3)**

Review of the fundamental laws of thermodynamics applied to simple systems. Elementary kinetic theory of gases applied to diffusion, viscosity, thermal and electrical conductivity. Boltzmann, Fermi-Dirac and Bose-Einstein distribution functions applied in the Boltzmann limit to the calculation of thermodynamic variables. Prerequisites: general chemistry, general physics with calculus, and mathematics through Calculus II.

**PHY 4604 Quantum Mechanics I (3)**

An introduction to the basic postulates of quantum mechanics. Solutions to the time independent Schrodinger equation are obtained for particles in one dimensional potential wells, the hydrogen atom solutions and the harmonic oscillator problem. Prerequisites: general chemistry, general physics with calculus. Differential Equations recommended.

**PHY 4750L Introduction to Scientific Instrumentation (3)**

The student learns to set up and operate such standard pieces of laboratory apparatus as bridges, amplifiers, oscilloscopes, frequency counters, flowmeters, and thermocouple circuits utilizing chart recorders. A background in general physics is recommended.

**PHY 4810L, PHY 4811L, PHY 4812L Senior Physics Lab (3)**

Advanced laboratory topics are treated. Modern physics laboratory equipment is used, and the student is introduced to current laboratory practice. Prerequisites: PHY 3048, 3049.

**PHY 4905, PHY 4906, PHY 4097 Independent Study (3)**

The student will work under the supervision of a faculty member on subject material of mutual interest.

**PHY 4921 Synopsis of Undergraduate Physics (1)**

A comprehensive review of undergraduate physics given in seminar form, on subjects of special interest to the students attending.

**PHY 4936, PHY 4937, PHY 4938 Special Topics (VAR)**

In-depth study of topics of special physics interest.

**PHY 5250 Physics of Fluids (3)**

Introduction to the constitutive equations of fluid mechanics. Topics in steady compressible and incompressible flows. Prerequisites: Classical Mechanics and Thermodynamics, or consent of instructor.

**PHY 5624 Introduction to Physics Research (3)**

Students are introduced to research techniques by assisting with an original investigation in experimental or theoretical physics.

**PHY 5910 Seminar in Advanced Theoretical Mechanics (3)**

A continuation course in classical mechanics which leads naturally into quantum mechanics. Topics to be covered will include Lagrangian and Hamiltonian methods, variational techniques, Poisson brackets, symmetries, algebra of quantum mechanics, representations, Dirac ladder operations, spin, and the hydrogen atom. Prerequisite: Intermediate Classical Mechanics.

**PHY 5936, PHY 5937, PHY 5938 Seminar in Special Topics (3)**

The student will work under the supervision of a faculty member on subject material of mutual interest.

**PSC 3001 Concepts in Physics (3)**

Self contained course for liberal arts majors covering the major concepts in physics; necessary concepts of elementary algebra and geometry will be covered in the beginning of the course and used to discuss Newtonian, relativistic, and quantum mechanics and their applications to atoms, stars and the universe as a whole. Throughout the course the dynamic nature of scientific laws will be stressed as new, more general laws are first hypothesized and then used to predict and eventually cross new frontiers of physics.

**PSC 3351 Earth Physics (3)**

The planet earth treated as a physical system. The formation and structure of the earth will be discussed as well as current dynamic changes.

**PSC 3810 Frontiers of Physics (3)**

An introduction on an elementary level to developments in physics in the 20th century. The subjects covered will include relativity, atomic and molecular structure, solid state physics, the laser, nuclear structure, particle physics and astrophysics. For nonscience majors.

## Political Science

John Stack, *Assistant Professor and Chairperson*

Joel Gottlieb, *Associate Professor*

Antonio Jorge, *Professor*

Joyce Lillie, *Associate Professor*

**Brian Nelson, Associate Professor**  
**Mary Volcansek, Associate Professor**  
**Mark Rosenberg, Assistant Professor**  
**Cheryl Rubenberg, Assistant Professor**  
**Christopher Warren, Assistant Professor**

A major in Political Science provides students with the opportunity to acquire a broad education that will equip them to adapt to a wide variety of careers. The program for majors is designed to encourage the analysis of theories, institutions, and processes of political systems in the context provided by the social sciences; to stimulate a grasp of the broad sweep of political science as a discipline; to develop a continuing and responsible interest in political activity and public affairs; to provide the opportunity to acquire a fundamental understanding of political science as a basis for citizenship, a career in government, or professional study and service; and to stimulate the qualified student's interest in graduate study in political science.

#### Bachelor of Arts in Political Science

##### LOWER DIVISION PREPARATION:

Students should complete a minimum of 60 semester hours, including the general education requirements. If a student has completed a minimum of 18 semester hours of general education credits, it is still possible to be accepted into this program. However, the general education deficiencies need to be completed prior to graduation from the University. Listed below are the required and recommended courses to enter this upper division major:

Required Courses:	Semester Hours
American Government*	3
<b>Recommended Courses:</b>	
State and Local Government	3
International Relations	3
American or World History	6
Economics	3
Introduction to Logic	3
Advanced Composition	3
Mathematics or Statistics	3

\*Remarks: The American Government requirement may be fulfilled by taking POS 3044 at entrance to the University, concurrently if desired, with other requirements of the major. POS 3044 will not, however, fulfill either the breadth or depth requirements of the major.

#### Florida International University Program:

In Political Science, specific courses are not required. Rather, courses are chosen freely but must be distributed in the following manner:

##### A. Breadth Requirements

One course in each of the following fields:

##### AMERICAN POLITICS (AP)

Breadth area requirement can be met by one of the following courses:

- PAD 3003 — The Administrative Process
- POS 3153 — Urban Politics
- POS 3413 — The Presidency
- POS 3424 — The Legislative Process
- POS 3453 — Political Parties

##### JUDICIAL POLITICS (JP)

Breadth area requirement can be met by one of the following courses:

- POS 3283 — The Judicial Process
- POS 3603 — Constitutional Law: Powers
- POS 3604 — Constitutional Law: Limits

#### COMPARATIVE POLITICS (CP)

Breadth area requirement can be met by one of the following courses:

- CPO 3055 — Authoritarian Politics
- CPO 3103 — Government and Politics of Western Europe
- CPO 3304 — Latin American Politics
- CPO 3502 — Government and Politics of the Far East
- CPO 3643 — Government and Politics of Soviet Union and Eastern Europe

#### INTERNATIONAL POLITICS (IP)

Breadth area requirement can be met by one of the following courses:

- INR 3002 — Dynamics of World Politics
- INR 3102 — American Foreign Policy

#### POLITICAL THEORY AND

##### METHODOLOGY (PT)

Breadth area requirement can be met by one of the following courses:

- POT 3013 — Ancient and Medieval Political Theory
- POT 3054 — Modern Political Theory I
- POT 3055 — Modern Political Theory II
- POT 3064 — Contemporary Political Theory
- POT 3104 — American Political Thought
- POT 3302 — Political Ideologies

##### B. Depth Requirements

Five courses in any one of these three areas of concentration:

1. AMERICAN/JUDICIAL POLITICS (AP, JP)  
Courses chosen may be all "AP" or "JP" or a mix of both
2. COMPARATIVE/INTERNATIONAL POLITICS (CP, IP)  
Courses chosen may be all "CP" or "IP" or a mix of both
3. POLITICAL THEORY (PT)

##### C. Electives:

The remaining courses necessary to complete the B.A. requirements may be taken outside the major but are normally chosen to complement the student's academic and career interests.

##### D. Remarks:

Students intending to graduate with a degree in Political Science must have a "C" or better in all courses used to fulfill the breadth and depth requirements of the major.

#### Minor in Political Science:

Tamiami and Bay Vista Campuses

1. No required courses, but note that POS 3044 will *not* count toward the minor.
2. Minimum of 5 courses in Political Science
3. Maximum of 1 course each in Political Science internships and independent studies may apply to the 5 course requirement.

PRE-LAW STUDENTS — The Department of Political Science recognizes the interests and needs of the Political Science major who plans to attend law school. The basic skills important to a pre-law student include: (1) thinking logically, (2) reading intelligently, and (3) expressing oneself clearly. Beyond these basic skills, the department encourages the student to acquire a broad background in political science, rather than to select only courses which deal with public law. Thus the requirements for the major allow the pre-law student to develop a

wide comprehension of five major areas within political science and then to achieve greater depth of understanding in one broad area. For most pre-law students, that area may be American and judicial politics. The Department will counsel a student on pre-law school concerns and preparation, as an integral part of the Department's overall advising program. In addition, special opportunities will be available to a student who is interested in participating in judicial internships.

Internships — The Department provides the student with opportunities for work-study experiences in governmental and non-governmental agencies. Five categories of internships are available to students: (1) judicial internships, (2) administrative internships, (3) legislative internships, (4) campaign internships, and (5) international internships. Standards for enrollment as an intern student include:

1. Enrollment is by permission of instructor only. A student wishing to enroll as a public affairs intern should consult with the appropriate faculty members and receive written permission to enroll. Ordinarily, specified courses must be taken prior to or concurrent with the internship.
2. A political science major may count a maximum of 10 credit hours in internships toward his major. Five additional hours may be counted as electives for a maximum of 15 credit hours in internship in political science.
3. All public affairs internships in political science will be on a "Credit-No Credit" basis. For further information, contact the Department of Political Science.

Upper Division Transfer Credit — As a general rule, students will receive transfer credits for junior and senior level courses in political science with a grade of "C" or better. These courses may then be applied to the 50 credit hours requirement for majors in political science.

Major Advising Program — All new majors meet with the Department Chairperson prior to being assigned an advisor. All advisors are members of the political science faculty and meet with students on a regular basis to discuss program design and scheduling matters.

## Course Descriptions

### Definition of Prefixes

CPO — Comparative Politics; INR — International Relations; PAD — Public Administration; POS — Political Science; POT — Political Theory; PUP — Public Policy.

CPO 3055 Authoritarian Politics (3)  
 The purpose of this course is to identify the conceptual and empirical characteristics of authoritarian regimes. An ideal typical authoritarian regime will be established, followed by case study analyses of modern authoritarian systems, like those of Brazil, Mexico, and Portugal. The course is designed to analyze the circumstances giving rise to non-totalitarian modern dictatorships, their political dynamics and their survival capability. (CP)

- CPO 3103 Government and Politics of Western Europe** (3)  
Studies of political systems of the major European countries on a comparative basis. Attention is focused on such factors as political party systems, the cabinet form of government, and the politics of the Common Market. Considers the implications of the impact of mass society on these nations. Enables the students to better understand the nations which have supplied many of the theoretical foundations of modern politics. (CP)
- CPO 3304 Latin American Politics** (3)  
This course analyzes the multiple structures, processes, and groups which are relevant to an understanding of Latin American political economy. Of special interest are the political impacts of land and wealth inequality and economic dependency. The dynamics of Latin American politics are considered, with an emphasis on the role of the military and the church. Alternate strategies for modernizing the region are considered. (CP, PT)
- CPO 3502 Government and Politics of Far East** (3)  
An intensive examination of the major political institutions of China, Japan, and Korea. A critical analysis of changing aspects of traditional relationships in Far Eastern political culture and major reform movements in contemporary Far Eastern politics. Allows the student to better understand nations whose political development will be an important factor in global development.
- CPO 3643 Government and Politics of the Soviet Union and Eastern Europe** (3)  
An intensive examination of the political structures and institutions of the Soviet Union and East European Communist states. Particular attention is paid to the historical and cultural underpinnings of the Soviet regime. The role of the Marxist-Leninist ideology in shaping policy processes and content is given careful analysis. (CP)
- CPO 4002 Theory in Comparative Politics** (3)  
This course introduces students to research strategies, concepts, and theories of comparative politics. There will be a focus on the three predominant types of modern political systems (democracy, authoritarianism, and totalitarianism), followed by an examination of the current theoretical approaches to studying cross-national political behavior. (CP)
- CPO 4005 Topics in Comparative Politics** (VAR)  
An intensive examination of selected political topics from a cross-national point of view. The subjects will vary, depending upon the desire of both students and faculty. Allows the student to choose topics of particular interest to him or her. (CP)
- CPO 4034 The Politics of Development and Underdevelopment** (3)  
This course is an analysis of the causes of development and underdevelopment in Third and Fourth World countries. It includes an analysis of major theoretical approaches to understand-
- ing development problems, as well as an analysis of the roles of major national and non-national actors (CP/IP)
- CPO 4053 Political Repression and Human Rights** (3)  
Examination of domestic factors resulting in political repression and violations of human rights. American, European, and South American examples will be used.
- CPO 4072 Comparative Electoral Behavior** (3)  
Public opinion, voting choice, and electoral patterns from a comparative and historical perspective. Attention will focus on Western Europe and Latin America. Differences from North American trends and patterns will also be detailed. (CP)
- CPO 4303 Government and Politics of South America** (3)  
A cross-national discussion of the political systems and cultures of the Latin American nations, with special emphasis on the larger countries. Attention is given to the role of the military, and to the problem of violence. Designed to give the student an overview of the political life of the nations with whom we share this hemisphere. (CP)
- CPO 4323 Government and Politics of the Caribbean** (3)  
Studies the political system of the major British, French, Dutch, and Spanish areas in the Caribbean basin. Attention is focused on such factors as political party democracies in a non-industrial setting. The paradoxes between modernity and tradition throughout the developing Caribbean, and the relationship between politics, economics, and culture are discussed. The student is helped to understand the dynamics of change in an important area of the world and to compare those dynamics with change in his own country. (CP)
- CPO 4333 Central American Politics** (3)  
This course analyzes the historical and contemporary political dynamics of the five countries of Central America. Special attention is given to problems of development and modernization within the context of the region's economic dependence on the United States. Special attention is given to the problem of political restraints on the modernization process and to those regional arrangements which have been created to solve the area's problems. The student will develop a better understanding of a region which has close ties to the United States. (CP)
- CPO 4360 Cuban Politics** (3)  
Examines the course of twentieth century Cuban politics. The course is subdivided into five parts covering the three periods of relatively stable politics and the two major revolutions. (CP)
- CPO 5935 Topics in Comparative Politics** (3)  
An intensive examination of selected political topics from a cross-national point of view. The subjects will vary, depending upon the desire of both students and faculty. Allows the student to choose topics of particular interest to him or her.
- CPO 6939 Seminar in Comparative Politics** (3)  
Graduate seminar on special topic in comparative politics. Topic to be announced in advance.
- INR 3002 Dynamics of World Politics** (3)  
An examination of actors, institutions, and processes in world politics. Attention is given to unfolding transnational institutions and processes, including the role of states, international organizations and non-governmental actors and examination of the nation-state system. Attention is given to the use of force in international affairs, as well as those organizations, such as the United Nations, which have an international dimension. The course will aid the student in understanding the complexities of world politics. (IP)
- INR 3102 American Foreign Policy** (3)  
An examination of the legal, administrative, and political structure by which American foreign policies are formulated and implemented. Includes a discussion of the objectives and consequences of United States foreign policy in selected regional, social-economic, and ideological areas. Enables the student to understand the procedures by which foreign policy is made and implemented in the United States. (IP, AP)
- INR 3403 International Law** (3)  
The law of nations, including the laws of war. Includes a discussion of the development of legal norms applicable to the international arena, from both Western and non-Western perspectives. Examines the emerging body of transnational law in social, economic, and technological areas of international relations. Enables the student to understand the difficulties involved in maintaining world peace. (IP, JP)
- INR 4084 Ethnicity in World Politics** (3)  
This course examines the political dimensions of ethnic conflict from a comparative perspective. It evaluates the dynamics of ethnic conflict in Western Europe, Africa, Latin America, and the United States, through a series of case studies. (IP)
- INR 4204 Comparative Foreign Policy** (3)  
This course is an analysis of the development of the foreign policy-making process in the United States, Britain, France, West Germany, and Italy. Particular attention is directed to the domestic and international factors which affect the making of foreign policy. (CP, IP)
- INR 4244 Latin American in World Politics** (3)  
This course will be primarily concerned with Latin America's role in the world political system. Of special interest will be the impact of the North-South split on Latin America, and in particular Latin America's relationship to the United States. Key issues of international politics concerning Latin America, including the Panama Canal, will be selected for study. (CP, IP)
- INR 4407 Political Foundations of International Law** (3)  
An examination of the interaction between politics and international law, with particular emphasis on such interaction during the present century. The role of international institutions in

the modifying of existing international law concepts and the developing of such concepts is also examined. (IP, JP)

**INR 4501 Multinational Organizations (3)**  
The course examines contemporary international politics through an analysis of intergovernmental and non-governmental actors. It emphasizes the prominent role played by increasing levels of transnational relations, interdependence, and global dominance in world politics.

**INR 4931 Topics in International Politics (VAR)**  
An intensive examination of selected topics with an international dimension. Subjects will vary, depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him or her. (IP)

**INR 4932 Topics in International Law (3)**  
An examination of selected topics in international law. Subjects will vary (including, for instance, the political dimension of international law) depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him or her.

**INR 4933 Topics in International Politics (3)**  
An examination of selected topics with an international dimension. Subjects will vary, depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him or her.

**INR 4942 International Internship (VAR)**  
An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between student and advisor.

**INR 5414 Topics in International Law (VAR)**  
An intensive examination of selected topics in international law. Subjects will vary (including, for instance, the political dimension of international law) depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him or her.

**INR 5936 Topics in International Politics (3)**  
An intensive examination of selected topics with an international dimension. Subjects will vary, depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him or her.

**INR 6007 Seminar in International Politics (3)**  
Graduate seminar on special topic in international politics. Topic to be announced in advance.

**INR 6205 World Politics (3)**  
This course provides graduate students with an understanding of the major conceptual approaches to world politics. It emphasizes the analysis of significant actors, institutions and processes at work in the contemporary global system as well as possible future alternatives.

**INR 6937 Seminar in International Law (3)**  
Allows for specialized and topical offerings by regular and visiting faculty. Also permits experimental courses.

**PAD 3003 The Administrative Process (3)**  
An introduction to the political environment of administrative decision-making in public agencies. Special emphasis is placed upon the politics of budgeting, personnel management, organizational requirements, and policy making. (AP)

**PAD 4803 Urban Government and Administration (3)**  
A study of the organization, administrative decision-making, and process of urban government; interaction with the political process. This course attempts to provide students with an understanding of the basic structure of urban government and administrative decision-making processes. The interaction of bureaucracy with political parties, interest groups, and voluntary citizen association groups will be examined. (AP)

**PAD 4944 Administrative Internship (VAR)**  
An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between student and advisor.

**POS 2002 Introduction to Politics (03)**  
An introduction to Political Science. Topics include individual and polity, the nation state, ideologies, comparative politics of developed and developing countries and international politics.

**POS 3001 Foundations of Political Science (3)**  
Introduces the student to the major fields of political science. Attention is given to the concepts, definitions, and terminology used in the discipline. Intended for the non-major. Elective credit only for political science majors.

**POS 3044 Government and Politics of the U.S. (3)**  
An examination of the origin and development, structure and operation of the Government of the United States, with an emphasis on the characteristics and political consequences of federalism. Allows the student to develop a better understanding of the political system in which he or she lives. (AP)

**POS 3153 Urban Politics (3)**  
An examination of the processes by which social conflicts in American urban areas are represented and regulated. Emphasis is placed on how urban problems are identified; and the way proposed solutions are formulated, legitimized, and administered by urban policy-making processes. Includes a discussion of urban political culture. Enables the student to understand major problems confronting communities in urban areas. (AP)

**POS 3283 The Judicial Process (3)**  
An introduction to the study of public law. Examines the relationship between politics and judicial structure and process. Emphasizes the judicial system as a particular kind of policy-making system, and evaluates its strengths and weaknesses from a policy-making perspective. (JP)

**POS 3413 The Presidency (3)**  
An examination of the various interpretations of the Presidency. Attention is directed to the role of the President in a technocratic society. Enables the student to understand one of the most visible political institutions. (AP)

**POS 3424 The Legislative Process (3)**  
Examines the context and process of legislative decision-making, including the impact of elections, groups, bureaucracies and the norms of legislative behavior. Evaluates legislatures in light of various theories of representation and conflict-management. (AP)

**POS 3453 Political Parties (3)**  
Studies the internal structure, political functions, and behavior of modern political parties. Attention is given to the relationships between political parties and various economic, military, ethnic, and regional interests. Enables the student to understand the problems of expressing and structuring political demands to facilitate or obstruct governmental decision-making. (AP)

**POS 3603 Constitutional Law: Powers (3)**  
An examination of the basic principles of American government, as defined through constitutional law. Focus will be on the nature of the union, federalism, national government powers, separation of powers, state government powers, and powers of the respective branches of government. (JP)

**POS 3604 Constitutional Law: Limitations (3)**  
An examination of the limitations on government as defined by the Supreme Court through constitutional law. Focus will be on the limitations of government with respect to the rights of the individual, of groups, and of the states. Particular attention will be paid to civil rights, civil liberties, the rights of the accused, political rights, and economic liberties. (JP)

**POS 3703 Methods of Political Analysis (3)**  
An introduction to the principal concepts and techniques of data collection and organization in political science. Includes practical exercise in data collection and organization. Highly recommended for those planning graduate study. (PT)

**POS 3949 Cooperative Education in Political Science (3)**  
A student majoring in Political Science may spend several semesters fully employed in industry or government in a capacity relating to the major.

**POS 4122 State Government and Politics (3)**  
A study of the political processes, structure, and development of state systems. This course attempts to provide the student with an understanding of the basic structure of state government and political processes. (AP)

**POS 4154 Topics in Urban Politics and Policy (3)**  
An 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, legitimized, and administered by urban policy-making processes.

includes a discussion of urban political culture. Enables the student to understand the major problems confronting communities in urban areas. (AP)

**POS 4233 Opinion and Electoral Behavior** (3)  
An examination of the social and psychological factors shaping public opinion and voting choice. Particular attention will be directed to the nature of trends and patterns in electoral results and systemic elements influencing such patterns. (AP)

**POS 4253 Political Violence and Revolution** (3)  
An examination of major historical instances and modern expressions of political violence; discussion of revolution from a comparative perspective. Attention will focus on the social origin and political determinants of such events. (CP, PT)

**POS 4284 Judicial Behavior** (3)  
An examination of various approaches, theories, and findings on the behavior of judicial actors, particularly as it relates to judicial decision-making. The focus of the course will be on judges, lawyers, prosecutors, and other relevant actors in the judicial process. (JP)

**POS 4463 Interest Group Politics** (3)  
An examination of the various types of voluntary associations which seek to influence the political process. Special attention is given to the role of private power in a pluralist system. Enables the student to understand the ambivalent American attitude towards pressure groups and lobbying activities in the legislative and administrative arenas. (AP)

**POS 4493 Politics of Judicial Administration** (3)  
This course is designed to examine the process of judicial administration, particularly from the political perspective. The politics of selecting judicial personnel, financing, budgeting, disposition of litigation, reorganization, and inter-governmental relations will be included. (JP)

**POS 4496 Comparative Judicial Politics** (3)  
An examination of the various modes of dispute settlement and rule adjudication cross-culturally. Emphasis is on the similarities and differences of judicial behavior, judicial decision-making, judicial recruitment and judicial powers in cross-national analysis. (JP CP)

**POS 4713 The Logic of Data Analysis in Political Science** (3)  
An introduction to the major concepts employed in the analysis of political data. Emphasis is on the logic of explanation rather than the techniques of such explanation. This is not a course in statistical method. Highly recommended for those planning graduate study. (PT)

**POS 4905 Independent Study** (VAR)  
By arrangement with the instructor.

**POS 4930 Topics in Public Law** (3)  
An examination of selected topics in the field of public law. The subjects will vary depending upon the desires of students and faculty.

**POS 4933 Topics in Politics** (VAR)  
Subject matter varies according to instructor.

**POS 4935 Honors Seminar** (VAR)  
Subject matter varies according to instructor.

**POS 4941 Legislative Internship** (VAR)  
An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between the student and advisor. (AP)

**POS 4944 Judicial Internship** (VAR)  
An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between the student and advisor. (JP)

**POS 4949 Cooperative Education in Political Science** (3)  
A student majoring in Political Science may spend one or two semesters fully employed in industry or government in a capacity relating to the major.

**POS 5605 Topics in Public Law** (VAR)  
An intensive examination of selected topics in the field of public law. The subjects will vary depending upon the desires of students and faculty. (JP)

**POS 5909 Independent Study** (VAR)  
By arrangement with instructor.

**POS 5934 Topics in Politics** (VAR)  
Subject matter varies according to instructor.

**POS 5932 Topics in Urban Politics**  
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, legitimized, and administered by urban policy-making processes, includes a discussion of urban political culture. Enables the student to understand the major problems confronting communities in urban areas.

**POS 6146 Seminar in Urban Politics** (VAR)  
Graduate seminar on special topics in urban politics. Topic to be announced in advance.

**POS 6934 Seminar in Politics** (VAR)  
Subject matter varies according to instructor.

**POS 6936 Seminar in Public Law**  
Graduate seminar on special topic in public law. Topic to be announced in advance.

**POT 3013 Ancient and Medieval Political Theory** (3)  
A study of the major political philosophers of the ancient and medieval periods. Primary emphasis is given to the Greek experience. The nature of political theory as a tradition of discourse is examined. (PT)

**POT 3054 Modern Political Theory I** (3)  
An analysis of the thought of the great political thinkers since Machiavelli, culminating with the nineteenth century theorists. Basic themes and ideas common to all these political theo-

rists will be discussed in detail. The problem of "modernity" will receive special attention. (PT)

**POT 3055 Modern Political Theory II** (3)  
An analysis of the thought of the great political thinkers of the late eighteenth, nineteenth, and early twentieth centuries. Primary emphasis is given to the important nineteenth century theorists such as J. S. Mill, Marx, and de Tocqueville. Their theoretical treatment of such modern political phenomena as the masses, bureaucracy, democracy, liberty, and violence is extensively analyzed. (PT)

**POT 3064 Contemporary Political Theory** (3)  
An overview of the major conceptual frameworks used by political theorists to describe, explain, and evaluate political behavior and processes. Stress is placed on political theory, not only as a basis for inquiry but also as a base for political action. This course enables the student to develop analytical abilities with which to interpret the political events of his or her time. (PT)

**POT 3204 American Political Thought** (3)  
An examination of American political thought from its 17th century origins to the contemporary period. The continuities and discontinuities in the development of American political ideas since colonial times will receive special attention. (PT)

**POT 3302 Political Ideologies** (3)  
An analysis of modern political ideologies since the French Revolution, including liberalism, conservatism, and socialism. Particular emphasis will be given to Marxism. The contemporary link between ideology and totalitarianism will be examined. (PT)

**POT 4930 Topics in Political Theory** (VAR)  
An intensive examination of selected topics dealing with political theory. Subjects will vary, depending upon the desires of students and faculty. (PT)

**POT 5934 Topics in Political Theory** (VAR)  
An intensive examination of selected topics dealing with political theory. The subjects will vary, depending upon the desires of students and faculty. Allows the student to choose topics of particular interest to him or her. (PT)

**POT 6007 Seminar in Political Theory** (VAR)  
Graduate seminar on special topic in political theory. Topic to be announced in advance.

**PUP 3004 Public Policy: U.S.** (3)  
An intensive examination of the theory and practice of formulating, legitimizing, administering, and evaluating public policy. Includes a discussion of the role of administrators, legislators, courts, interest groups and political parties in their processes. Gives the student an analytical basis for understanding and participating in the making of public policy in a variety of policy areas. (AP)

**PUP 4203 Environmental Politics and Policy** (3)  
A systematic examination of environmental policy making, emphasizing the various steps involved in transforming private preferences into authoritative public policies. Special attention is directed at the unique political problems

posed by pollution, preservation of natural areas, natural resource management, population dynamics, and ecological imperatives. Designed to enable the student, particularly the environmental studies student, to understand the overlapping policy matrices which constrain environmental action. Also enables the student to identify critical decision points in the environmental policy-making process. (AP)

#### PUP 4314 American Ethnic Politics (3)

This course examines American ethnic politics from conceptual and substantive perspectives. Special attention is devoted to the theoretical dynamics of ethnicity as well as an intensive investigation of Irish, Italian, Jewish, and Black ethnic politics. (AP)

#### PUP 4323 Women in Politics (3)

Examines the role of women in the political system as they act within, and are affected by, politics. Special attention to current and enduring political issues which particularly affect women. (AP)

#### PUP 4931 Topics in Public Policy

An examination of selected topics dealing with public policy. Subjects will vary, depending upon the desires of students and faculty. Allows the student to choose topics of interests to him or her.

#### PUP 5934 Topics in Public Policy (VAR)

An intensive examination of selected topics dealing with public policy. Subjects will vary, depending upon the desires of students and faculty. Allows the student to choose topics of particular interest to him or her. (AP)

#### PUP 6007 Seminar in Public Policy (VAR)

Graduate seminar on special topic in public policy analysis. Topic to be announced in advance.

#### URP 4146 Planning and Human Ecology (3)

A social and political introduction to urban and environmental planning and design utilizing a human ecology perspective. Examines issues of open space planning, urban design, neighborhood planning, and citizen participation.

## Psychology

Jacob Gewirtz, *Professor and Chairperson*

Edward Girden, *Distinguished Professor*

Milton Blum, *Professor*

Gordon Finley, *Professor*

Gary Moran, *Professor*

Bernard Saper, *Professor*

Marvin Dunn, *Associate Professor*

James Flanders, *Associate Professor*

Fernando Gonzalez-Reigosa, *Associate*

*Professor*

William Kurtines, *Associate Professor*

Janet Parker, *Associate Professor*

James Rotton, *Associate Professor*

Benjamin Algaze, *Assistant Professor*

Nancy Blaney, *Assistant Professor*

Lee Brownston, *Assistant Professor*

Luis Escovar, *Assistant Professor*

Arthur Flexner, *Assistant Professor*

Paul Foss, *Assistant Professor*

Mary Levitt, *Assistant Professor*

### BACHELOR OF ARTS

LOCATION: Tamiami and Bay Vista Campuses  
LOWER DIVISION PREPARATION:

*Required Course:* Introductory Psychology  
UPPER DIVISION PROGRAM:

*Semester Hours*  
*Specific Required Courses in Psychology* 10

PSY 3043C 1. Advanced General

Psychology 5

Lecture (2)

Laboratory (3)

*Note:* Lecture and Laboratory to be taken concurrently in junior year.

*Prerequisites:* STA 3122 must be taken before PSY 3043C.

2. Other advanced laboratory or field experience 5

*Note:* To be taken during senior year.

*Prerequisites:* PSY 3043C, STA 3122.

*Required Course in Statistics* 3  
STA 3122 (3)

*Note:* STA 3123 and COP 3112 (Mathematical Sciences Department) are recommended for students planning to enter graduate school.

*Elective Courses in Psychology* at least 21

*Note:* PSY 4693C is especially recommended for the student planning to take the psychology specialty part of the Graduate Record Examination.

*Elective Courses Outside of Psychology:* See *College-wide requirements* at least 6

#### *Distribution Requirements:*

In the course of fulfilling the above requirements, each student must take one course from each of the five areas A—E below. Note that, in each area, *either* a lecture course or a laboratory/field experience will suffice.

Lecture	Laboratory/Field Experience
Area A: Experimental	
EXP 3523	EXP 4214C
EXP 4204	EXP 4404C
EXP 4605	EXP 5055C
PSB 4003	
Area B: Social	
SOP 3004	SOP 4215C
SOP 4522	SOP 4714C
SOP 4525	
SOP 4842	
Area C: Community/Industrial/Consumer	
CYP 3003	CYP 4953
INP 3002	INP 4055C
SOP 4712	SOP 4649
SOP 4645	

Laboratory/Field Experience

Area D: Personality/Abnormal  
CLP 3003 PPE 4325C  
CLP 4144

EXP 3304

PPE 3003

Area E: Developmental  
DEP 3001 DEP 4704C  
DEP 3402  
DEP 4164  
DEP 4464

*Remarks:* (1) The student is strongly urged to contact the Psychology Department for advice in curriculum planning; (2) Limited funds

are available through the Psychology Department to senior students with demonstrated scholastic ability and financial need; (3) A grade of "C" or better is necessary in all courses required for the major. Elective courses may be taken under the Pass/Fail option if so offered.

#### *Bachelor's degree with Honors:*

Application must be made and departmental approval granted, before the second semester of the junior year, to undertake an independent project which must be approved by and carried out under the supervision of a member of the Department. Upon completion of the study, a satisfactory oral defense of the work must be presented to a Department committee.

*Note:* The Bachelor's degree offered in this program is a liberal arts degree and not a professional degree. While it is possible to concentrate courses in one's area of interest, it is not possible at the present time to obtain a "professional specialization" at the undergraduate level in psychology.

### Minor in Psychology

A Minor in Psychology requires 15 semester hours of approved psychology credits. Students seeking the minor must meet with a psychology faculty member for advisement and should file with the Psychology Department a written notice of intention to minor in psychology. A grade of "C" or better (or "Pass" if taken under the Pass/Fail option) is required in all courses counted toward the minor.

### Master of Science in Psychology

The Masters of Science in Psychology program at the University, which has a community specialization, is designed to train practitioners and researchers who can function in a variety of academic and applied settings. The core curriculum and admission prerequisites are intended to provide students with a base of knowledge in psychology. The advanced phases of training offer the possibility for developing a concentration in one of three broad areas: 1) community intervention and institutional change, 2) life span development, and 3) research on basic processes. A distinctive feature of the program is its emphasis on a close working relationship between student and faculty and the development of individual specialty areas for students. Under faculty supervision, students are encouraged to develop individually tailored programs of study that reflect both student interests and program strengths.

The curriculum consists of 48 semester hours of graduate study in which the exposures focus specifically on training the student to perform the skills mentioned above. Students are expected to select electives, project/thesis topics and supervised field experiences that meet not only the degree requirements, but also their academic interest and particular professional objectives.

#### *Admission Requirements*

*General:* The Florida State University System requires that applicants for admission to graduate study achieve:

1. A bachelor's degree or equivalent from a regionally accredited university or college.
2. A "B" or better grade point average in all work undertaken while the candidate was registered as an upper division student for the baccalaureate degree, or a total score (quantitative plus verbal) of 1,000 or higher on the Graduate Record Examination, or an equivalent score on some other measure specified by the University. The Department of Psychology requires that both GRE scores and official transcripts be submitted in order to ensure consideration for acceptance. In addition to these basic requirements, the Department reserves the right to acquire additional material.
3. Applicants should check with the Admissions Office to ascertain current requirements, since the objectives of academic and professional excellence sought by the Department of Psychology, and the intense competition among applicants for the limited number of graduate positions authorized, will result in increasing the effective requirements far beyond the University's minimum.

Applicants to the program who are not psychology majors may be accepted conditionally until they meet the category I-III requirements, listed below, early in their graduate career. A maximum of 9 semester hours credit earned in the special 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 I.** Satisfactory completion of one upper division course or laboratory course in four of the five following core course areas. At least one of the four courses must be from the experimental area. The core areas are: A) Experimental, B) Social, C) Community/Industrial/Consumer, D) Personality/Abnormal E) Developmental as noted in the undergraduate distribution requirements above.

**CATEGORY II.** Satisfactory completion of one psychology laboratory course.

**CATEGORY III.** Satisfactory completion of introductory statistics.

## Application Procedures

Students seeking admission to the graduate program in Psychology must complete the following steps:

1. Request application forms from the Admissions Office, Florida International University, Miami, Florida 33199. Information about the program itself must be requested from the Psychology Department.
2. Submit a completed graduate application for admissions form to the Admissions Office.
3. 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 Admissions Office. Cop-

ies submitted directly by applicants are not accepted for application purposes.

4. Have an official copy of the results of the Graduate Record Exam (GRE) sent to the Admissions Office. The GRE's are administered nationally and in many foreign countries by the Educational Testing Service, Box 955, Princeton, New Jersey 08540.
5. Submit *photocopies* of the documents in points 2, 3, and 4 directly to the Admissions Committee, Masters Psychology Program, Department of Psychology, Florida International University, Miami, Florida 33199.
6. Submit to the Community Masters Program Admissions Committee three letters of recommendation from previous instructors and/or persons familiar with the applicant's previous experience and background.
7. Submit to the Community Masters Program Admissions Committee a brief essay stating reason(s) for interest in the program.

### Degree Requirements

To be eligible to receive the Master's degree, a student must satisfy (a) all University requirements for a Master's degree and (b) the specific requirements of an approved program of study.

All students in this program of study are expected to complete a 30 semester-hour core course requirement.

## Grades, Credits, and Course Loads

The maximum recommended course load for full-time graduate students is 12 hours per semester. The recommended course load for working or part-time students is 6 semester hours.

Approval for exceptions must be obtained from the Graduate Program Committee. Course work in which a grade below "C" is earned may not be counted toward the Master of Science degree. All work applicable to the master's degree must be completed within four years immediately preceding the awarding of the degree. A student may receive permission to transfer up to a maximum of 6 semester hours of graduate credit to the degree program, provided that: 1) the course(s) were taken at the graduate level at an accredited college or university; 2) grade(s) of "B" or better were earned; and 3) the course(s) are judged by the faculty advisor to be relevant to the student's graduate program. Acceptable credit must not have been used toward another degree.

## Academic Warning, Probation and Dismissal/Graduate Students

**WARNING:** A student whose cumulative GPA falls below a 3.0, or who otherwise evidences that he or she is experiencing problems in the program, will be placed on WARNING indicating academic or practicum difficulties.

**PROBATION:** A student on WARNING whose cumulative GPA falls below 3.0 will be placed on PROBATION indicating serious academic difficulty. The Department will then communicate conditions which must be met in order for the student to continue to enroll.

**DISMISSAL:** A student on PROBATION whose cumulative and semester GPA falls below 3.0 will be automatically dismissed from his/her program and the University.

## Course Descriptions

### Definition of Prefixes

CLP — Clinical Psychology; CYP — Community Psychology; DEP — Developmental Psychology; EAB — Experimental Analysis of Behavior; EDP — Educational Psychology; EXP — Experimental Psychology; INP — Industrial and Applied Psychology; LIN — Linguistics; PCO — Psychology for Counseling; PPE — Psychology of Personality; PSB — Psychobiology; PSY — Psychology; SOC — Sociology; SOP — Social Psychology; SPA — Speech Pathology and Audiology.

**CLP 3003 Personal Adjustment (3)**  
Study of personal adjustment in the social and occupational life of the individual. Emphasis on interpersonal aspects of effective behavior.

**CLP 4144 Abnormal Psychology (3)**  
Various forms of behavior pathology are examined in the light of traditional and current concepts of mental health and illness. Problems of diagnosis and treatment are discussed. The role of social mores is examined.

**CLP 4374 Psychotherapy (3)**  
Current approaches to the treatment and improvement of psychological disorders are critically surveyed. Emphasis is placed on the examination of the various techniques of psychotherapy and behavior therapy. Broader strategies of prevention and mental health promotion, like consultation, counseling, and programmed agency services, are also studied.

**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 5175 Personality Dynamics (3)**  
A review of different approaches to the study of personality dynamics and of the related therapeutic modalities. Special consideration is given to psychoanalysis and neo-analytic psychology. Other therapeutic models which influence current psychological thought are also considered. Prerequisites: Successful completion of a course in theories of personality, or equivalent. Permission of 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. Prerequisite: Abnormal Psychology, or permission of the instructor.

**CLP 5931 Ethical Code in Psychological Practice** (1)

An examination of the ethical standards for psychological practice as established by the American Psychological Association, and the Association's standards for delivery of psychological services. Prerequisite: Admission to graduate study in psychology; (other graduate students admitted by permission of instructor).

**CYP 3003 Introduction to Community Psychology** (3)

An introduction to the issues and scope of Community Psychology. Students will be exposed to the development of Community Psychology as a growing discipline. Particular emphasis will be placed on the role of the community psychologists as an agent of social change.

**CYP 4953 Community Psychology Field Experiences I** (5)

Students will be organized into task oriented teams or will work independently in the community, for the purpose of becoming familiar with various community institutions and developing an action plan for assisting institutions in implementing change. Prerequisite: Introduction to Community Psychology.

**CYP 5302 Psychological Services for Hispanics** (3)

A review of the practical applications of the concepts of biculturality and acculturation in a multiethnic setting and their implications for the treatment and delivery of services to Hispanics. Prerequisites: CYP 6765 and CYP 6766 or permission of instructor.

**CYP 5303 Psychological Services for Blacks** (3)

A review of the consequences of institutionalized forms of social interaction among different racial groups and their implications for the treatment and delivery of services to Blacks. Prerequisites: CYP 6765 and CYP 6766 or permission of instructor.

**CYP 5515 Psychological Services Administration** (3)

A broad survey of the function of administrative institutions in society, from a psychological perspective. Focuses on the psychological theories, concepts, and practices involved in administration, organization and delivery of human services. Emphasizes prosocial data involved in political functioning and administrative behavior in the public sector. Prerequisites: enrollment in graduate program at FIU; permission of instructor.

**CYP 5526 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 setting. Prerequisites: Admission to graduate study in psychology (other graduate students admitted by 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 5535 Psychology of Institutional and Social Change** (3)

A study of the theoretical basis and strategies applied to the process of effecting social change in community institutions involved in the delivery of human services.

**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 6055 Psychological Theories and Research on Acculturation and Multiculturalism** (3)

A review of theories and research on acculturation and multiculturalism concepts with an emphasis on those models that have generated a substantial body of empirical research. Stress will be placed on the implications of these findings for community stability and disruption as well as the implications for the delivery of human services in multicultural settings.

**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. Prerequisite: graduate standing at FIU, or permission of 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 theoreti-

cal, practical, and professional aspects of the field of Community Psychology. Topics discussed may lead to the graduate project required of each student. Prerequisite: Admission to graduate study in psychology (other graduate students admitted by permission of instructor).

**CYP 6937 Seminar in Community Psychology** (3)

In-depth examination of specific scientific-professional areas of importance in the field of Community Psychology, including the current research and practice in Community assessment and advocacy, systems analysis, human relations facilitation, program evaluation, and related topics of interest to graduate students. Prerequisite: Graduate status in the M.S. program in Community Psychology or permission of instructor.

**CYP 6956 Field Experience in Community Psychology** (VAR)

Placement of students in applied settings for the purpose of developing community-based experience in the application of theoretical and methodological approaches. Prerequisites: CYP 5535, CYP 5515, CYP 6936, CLP 5931, STA 5126, STA 5707.

**DEP 3000 Human Growth and Development: Introductory Developmental Psychology** (3)

An introductory study of the development of personality, intelligence, and motivation, from childhood to adulthood. Emphasis is on development of cognitive systems through social learning. The full life span of human growth and development will be considered.

**DEP 3001 Psychology of Infancy and Childhood** (3)

An introduction to human development focusing on infancy and childhood. Particular attention will be devoted to intellectual, personality, and social development. Consideration will be given to both theoretical and empirical perspectives.

**DEP 3303 Psychology of Adolescence** (3)

An examination of psychological, sociological and biological factors contributing to the changes from childhood to adolescence, and from adolescence to young adulthood.

**DEP 3402 Psychology of Adulthood** (3)

The transition from youth to middle age is studied. Focus is on changing roles in family, work, and societal settings, as these factors influence personality and other aspects of psychological function.

**DEP 4044 Psychology of Moral Development** (3)

The course is intended to be a critical survey of psychological theories and psychological research concerning the development of moral attitudes and behavior, and the application of research in moral development to social problems. Emphasis is given to those theories that have generated a substantial body of empirical research. The major theories to be reviewed include psychoanalytic theory (Freud, and the ego psychologists), cognitive developmental theory as it is applied to the development of moral judgment (Piaget, Kohlberg, etc.), and social learning theory (Aronfreed, Bandura, Hill, etc.).



- DEP 4164 Children's Learning** (3)  
Learning in infancy and childhood, with particular emphasis on simple conditioning, discrimination shifts, mediation, transposition, observational and concept learning. Prerequisite: Students enrolling in this course should have completed successfully at least one prior course in developmental psychology.
- DEP 4204 Pediatric Psychology** (3)  
Aspects of normal and abnormal child care and child rearing are examined. Adult-child interaction in the home and in institutional settings is explored, and common problems of childhood discussed.
- DEP 4213 Childhood Psychopathology** (3)  
Various forms of abnormal behavior in infancy, childhood and adolescence are examined, within the context of traditional and contemporary psychological theory. Problems of differential diagnosis and forms of remediation are discussed.
- DEP 4464 Psychology of Aging** (3)  
An examination of the factors which contribute to the psychological profile characterizing old age. Biological and sociological components are considered, and their impact on perceptual, cognitive, and personality processes is analyzed.
- DEP 4704C Developmental Psychology: Lecture (2) and Laboratory (3)** (5)  
Laboratory / observation exercises illustrative of the concepts and research techniques used in developmental psychology. Particular emphasis is given to cognitive and social-cognitive development. This course is for seniors who have completed PSY 3043C and one developmental psychology course.
- DEP 5145 Culture and Childhood** (3)  
An examination of cultural and societal influences on children's motor, perceptual, intellectual, and personality development. Extensive readings in cross-cultural research literature serve as the focus for class discussions and independent projects. Prerequisite: Senior or graduate standing.
- DEP 5405 Psychological Processes of the Maturing Adult** (3)  
An intensive examination of the literature dealing with the maturing adult, with particular emphasis on psychological considerations of career development, intellectual and personality evaluation, changing roles as applied to career choice, deparenting and preparation for retirement. Prerequisite: Graduate standing. Seniors may be admitted by permission of instructor.
- EAB 4794 Principles and Theories of Behavior Modification** (3)  
Studies different approaches to the modification of problem behavior, through the application of learning principles and theories.
- 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 instructor.
- EDP 3004 Introductory Educational Psychology** (3)  
An introduction to the ways in which the principles of psychology apply to educational practices, considering aspects of basic processes such as development, learning, individual differences, and adjustment; with special reference to the problems of teacher effectiveness and teacher-student interaction. This course is designed for students who have not had a prior course in educational psychology.
- EDP 6935 Special Topics in Educational Psychology** (VAR)  
An intensive analysis of a particular topic in education psychology. Students must have topics approved by the instructor prior to registration. Open only to advanced and graduate students in the School of Education.
- EXP 3304 Motivation and Emotion** (3)  
Introduces several perspectives from learning theory, perception, and personality theory to explore ways in which people move through their physical and social environment.
- EXP 3523 Memory and Memory Improvement** (3)  
This introduction to human memory considers the topics from a number of points of view. The following issues are addressed: the nature of memory and its phenomena; the capabilities and limitations of an ordinary and an extraordinary memory; and the skills which can aid an ordinary memory. (Formerly listed as PSB 3523C.)
- EXP 3652 Psychology of Creativity** (3)  
An exploration of the psychological processes involved in the act of creation. Several approaches to the understanding of creators and their creations are used, including the study of eminent creative people, and sessions with persons involved in creative efforts. A survey of scientific studies of creation, and personal involvement and introspection by the student.
- EXP 4204 Sensation and Perception** (3)  
Basic concepts in sensation and perception are explored, with an emphasis on models of peripheral and central neural processing. Topics such as receptor function, brightness and color vision, movement and object perception, perceptual memory and pattern recognition are considered. Psychophysical techniques, such as subjective magnitude estimation and signal detection theory, are covered.
- EXP 4214C Human Perception: Lecture (2) and Laboratory (3)** (3)  
Lectures concern the methods researchers use to learn about the phenomena of sensation and perception. Laboratory exercises allow students to apply these methods and to experience the perceptual phenomena under investigation. Prerequisites: PSY 3043, STA 3122.
- EXP 4404C Human Learning and Remembering: Lecture (2) and Laboratory (3)** (5)  
Lectures on the research and theoretical contributions to the understanding of human learning and remembering; and laboratory exercises illustrative of the concepts and techniques used in conducting experimental studies of human learning and remembering. Prerequisite: Advanced General Psychology with Laboratory (PSY 3043C).
- EXP 4605 Cognitive Processes** (3)  
Investigation of the mental processing underlying experiences and behavior. Topics include: games, puzzles, and problems; intuitive and creative thought; conceptualization, reasoning and clinical diagnosis; choices and decisions; conceptions of time and space; and thought in abnormal or altered states of consciousness.
- EXP 4934 Current Experimental Theories** (3)  
The stress in this course is on current specific theories determining the nature and direction of the research and interest in the several important areas, such as psychophysics, learning and remembering, developmental patterns and motivation, personality, etc. Topics to be covered will be announced at the beginning of the academic year. May be taken twice for credit toward the major.
- EXP 5005C Advanced Experimental Psychology: Lecture and Laboratory** (5)  
Lecture and laboratory course investigating experimental research in the fundamental processes of human behavior. Includes perceptual, cognitive, and linguistic processes. Prerequisites: PSY 3043C, STA 3122 and STA 3123.
- 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.
- INP 3002 Introductory Industrial/Organizational Psychology** (3)  
Introduction to the study of behavior in the work environment. Illustrative topics included formal and informal organization, work motivation, satisfaction and performance, leadership, job analysis, selection and performance evaluation, training and development.
- INP 4055C Industrial/Organizational Psychology Lecture (2) and Laboratory (3)** (5)  
Students gain experience with the use of psychometric instruments in the areas of job analysis, personnel selection, performance appraisal, job satisfaction, criteria analysis, and management training and development. Prerequisites: Statistics, and Introductory Industrial / Organizational Psychology, or Personnel Psychology, or Personnel Management, are recommended.
- INP 4203 Personnel Psychology** (3)  
Techniques and procedures applicable to the

selection, placement, utilization, and evaluation of personnel in organizations are considered. The emphasis will be on empirical procedures, rather than the management function in the personnel area. Topics such as quantitative methods and models for selection, criteria analysis, performance appraisal, management training, and job satisfaction are discussed. Prior course in statistics *strongly recommended*.

**INP 6940 Strategies and Methods of Applied Psychological Research (3)**

A practicum course in behavioral research, in which an investigation is planned, carried out, analyzed, and reported. Discussion is directed to single- and multiple-subject research; experimental, quasi-experimental, and non-experimental designs; obtrusive and nonobtrusive measures; mathematical and logical tools for analysis of results; computer applications in data collection and analysis, and ethical considerations in research on human populations. Prerequisites: STA 5206 and STA 5707.

**LIN 4701 Psychology of Language (3)**

An overview of the psychology of language and the psychological "reality" of linguistic structure. Behavioristic vs. cognitive views of psycholinguistics are examined. Consideration is given to the biological bases of language and thought, language acquisition, and language pathology.

**LIN 4710 Language Acquisition (3)**

An examination of the way children acquire language, based on experimental findings from contemporary linguistic, psycholinguistics and behavioral theory.

**PPE 3003 Theories of Personality (3)**

An examination of various theories of personality. Consideration is given to traditional and contemporary approaches to personality development.

**PPE 3502 Psychology of Consciousness (3)**

Normal and altered states of human consciousness are analyzed from the perceptual and neuropsychological viewpoint. Broad topic areas include physiologically determined levels of arousal, from deep sleep to intense excitement; selective attention; perceptual plasticity; illusions; sensory deprivation; biofeedback; psychosomatic disease; hypnotism and suggestibility; as well as a critical treatment of the phenomena of parapsychology.

**PPE 4105 Humanistic Psychology (3)**

Studies the methodology, research and findings of the humanistic orientation in psychology. Topics such as counseling, encounter groups, higher consciousness, biofeedback, intentional communities, education, mysticism and religion are examined from the humanistic viewpoint. Prerequisite: Prior completion of a course in Theories of Personality is recommended.

**PPE 4123 Nonverbal Behavior (3)**

An overview of theory and research relating to nonverbal channels of communication, including eye-contact, personal space, territoriality, touching, facial gestures, body language, and vocal cues.

**PPE 4325C Differential Psychology:**

**Lecture (2)**  
**and Laboratory (3) (5)**

Lectures and laboratory field experiences in the principles and methods underlying the administration, construction and evaluation of psychological tests. Practice in the administration and interpretation of selected psychological tests. Prerequisite: STA 3122, or an equivalent introductory course in statistics.

**PPE 4514 Psychology of Dreams and Dreaming (3)**

An in-depth examination of the most important psychological theories of dream function and of the use of dreams in different therapeutic approaches. The current research on the physiology and psychology of sleep is also evaluated. Prerequisite: Theories of Personality or its equivalent.

**PPE 4604 Psychological Testing (3)**

An introduction to the rationale underlying the use of psychological tests. Topics include basic test terminology, test administration, interpreting standard scores, reliability, validity, tests of intelligence, interest inventories, personality tests, the ethics of testing, and the fairness of tests for different segments of the population.

**PPE 4930 Topics in Personality (VAR)**

Special topics will be announced in advance.

**PSB 4003 Introductory Bio-Psychology (3)**

A study of the more important psychobiologic correlates of behavior in basic psychological phenomena. Open only to majors in the senior year or otherwise qualified students.

**PSY 3013 Introductory Psychology (3)**

Psychological principles underlying basic processes such as perceiving, learning, thinking, motivation and emotions. Students are introduced to theories and research methods in terms of their contributions to contemporary psychology. Note: This course does not count towards the major in psychology. It is designed for non-majors and is a prerequisite for majors who have not had an introductory course in psychology.

**PSY 3043C Advanced General Psychology with Laboratory: Lecture (2)**  
**and Laboratory (3) (5)**

An intensive lecture and laboratory course, designed to present the basic concepts and methods of traditional and contemporary psychology. Emphasis is placed on the role of methodology and experimentation in all phases of psychology. Students study sensory systems, information processing, perception, and other psychological processes. In addition to classroom experience, students participate in laboratory exercises designed to illustrate concepts covered in lectures. The laboratory exercises provide students with an opportunity to develop and use skills and techniques employed in the execution of human psychological experiments, while fulfilling laboratory course requirements in experimental psychology. Note: This course is required of all psychology majors and must be completed during the first year of residence. Prerequisite: STA 3122.

**PSY 4693C Overview of Psychology (3)**

A consideration of the historical origins and

developments of modern psychology as a viable discipline, in light of the major influences upon its growth. Prerequisite: 12 semester hours in upper division psychology courses.

**PSY 4900 Independent Readings in Psychology (VAR)**

Limited to qualified students who have permission from a faculty member and who present a plan of study including area and objectives. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their study.

**PSY 4914 Honors Research Project (VAR)**

Limited to qualified seniors seeking honors in psychology. Students must submit a research plan and have a research advisor's approval of the research project prior to enrollment in the course. A written report of the research in the A.P.A. publication style must be submitted for evaluation before credit will be awarded.

**PSY 4916 Independent Research in Psychology (VAR)**

Limited to qualified students who have permission from a faculty member and who present a written proposal for research. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their research.

**PSY 4936 Special Topics in Psychology (VAR)**

Special topics will be announced in advance.

**PSY 4931 Senior Seminar in Psychology (1)**

An advanced seminar for seniors. Analysis of major contemporary trends in psychological theory and research.

**PSY 4941 Independent Field Experiences in Psychology (VAR)**

Limited to qualified students who have permission from a faculty member and who present a plan of study including area and objectives. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their experiences.

**PSY 5206C Design of Experiments in Psychological Research (3)**

Reviews the Analysis of Variance, and introduces the student to randomized and blocking designs, factorial designs, fractional factorial, main effects and other plans as they are used in psychological research. Main emphasis is on the rationale behind the several designs, and the techniques for applying these to psychological experiments. Prerequisites: STA 3122 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, Hotelling's T<sup>2</sup>, MANOVA, principle component analysis and factor analysis. Prerequisite: STA 3123 or equivalent; linear algebra recommended.

**PSY 5908 Directed Individual Study (VAR)**

Under the supervision of an instructor in the graduate degree program, the graduate student

dives 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 instructor.

**PSY 5939 Special Topics in Psychology (VAR)**  
Special topics will be announced in advance.

**PSY 6971 Master's Project in Psychology (VAR)**

Terminal project leading to the M.A. degree, individually designed to meet each student's needs. Constitutes an original approach to a problem related to the discipline, and requires the submission of a final paper or equivalent work. Prerequisites: all required courses for the M.A. must be completed or in progress.

**SOP 3004 Introductory Social Psychology (3)**  
Introduction to the study of the relationship of the individual to social systems, including topics such as social behavior, attitude development and change, social conflict, group processes, mass phenomena, and communication.

**SOP 3724 Psychology of Racism (3)**  
Consideration is given to the nature and development of institutional racism in America. The historical, social, economic and psychological aspects of racism are examined.

**SOP 3742 Psychology of Women (3)**  
An examination of women from various perspectives, such as biological, anthropological, mythological, religious, historical, legal, sociological, and psycho-analytical points of view. Discussions of ways in which these various perspectives influence the psychological development of contemporary women.

**SOP 3772 Psychology of Sexual Behavior (3)**  
An examination of the nature, development, decline and disorders of sexual behaviors, primarily from the perspectives of normal adjustment and interpersonal relations. Discussion also addresses love, intimacy, and similar emotionally charged sociopsychological topics. Modern and popular treatment approaches — including the "new sex therapies" — are critically evaluated.

**SOP 3783 Black Psychology (3)**  
An examination of the social-psychological consequences of being black in America. This course focuses on contemporary black attitude(s) and their relationship to the historical, social and economic realities of the American blacks' sojourn in the U.S. Specific attention is given to the individual and the family, and their attitudes towards the broader social milieu.

**SOP 3931 Psychology of Giving, Helping and Volunteering (3)**  
Theories, research data, and community applications of prosocial activities, such as giving, helping, volunteering and altruism.

**SOP 3932 Psychology of Drugs and Drug Abuse (3)**

This course will cover some basic information about the nature and effects of drugs abused, the social and personal dynamics involved in the phenomena of drug abuse and the various re-

habilitation programs currently being employed to combat drug abuse.

**SOP 4015 Social and Personality Development (3)**

This course provides a survey of social and personality development throughout the life cycle. Emphasis will be placed on the interaction between psychological and environmental variables on life-span development changes.

**SOP 4050 Social Psychology in Latin America (3)**

Upper division seminar on Social Psychology in Latin America. The course will provide the student with the opportunity to survey the literature and research in social psychology from different countries in Latin America and to compare that material with on-going research and literature in the United States. Prerequisites: SOP 3004 and reading knowledge of Spanish.

**SOP 4215C Experimental Social Psychology: Lecture (2) and Laboratory (3) (5)**

The primary purpose of this course is to have students conduct actual social psychological experiments. Lecture material will be secondary to (and in the interest of) allowing students to execute representative experiments in areas such as attitude measurement and change, group structure and communication, etc.

**SOP 4444 Attitudes and Ethnicity: A Cross-Cultural Psychological Approach (3)**

Comparative study of the attitudes and practices of racial and ethnic groups toward each other in a variety of cultural and national settings.

**SOP 4505 Theories of Human Relations (3)**

Research methods and findings on the topic of interpersonal interaction in face-to-face situations. Emphasis on content of research methods and findings, rather than in-class experiments.

**SOP 4513 Psychology of Conflict (3)**

This course examines the psychological factors involved in conflict situations. The focus is on intrapersonal, interpersonal and intergroup conflict resolutions, and the applicability of such resolutions to various conflict conditions. These may include racial or religious conflicts, and even international wars. The course also considers the ultimate disintegration of the individual personality as a result of internalized conflict, and attempts to familiarize students with the psychological factors underlying varying conditions of conflict and resolution.

**SOP 4522 Social Motivation (3)**

Focuses upon those sources of human motivation which are a consequence of man's social-interpersonal environment and his striving to obtain valued goals. Topics discussed include test-taking anxiety, alienation and affiliation motivation, internal vs. external orientation, achievement motivation, etc. The measurement of social motives and their roots and consequences for behavior are discussed.

**SOP 4525 Small Group Behavior (3)**

Introduction to the study of the structure and function of groups, emphasizing the behavior of individuals as affected by the group. The course

focuses on experimental evidence concerning such topics as social facilitation, group decision making, phases in group development, physical factors in group behavior, etc.; rather than upon student experience in sensitivity or encounter training.

**SOP 4645 Consumer Psychology (3)**

This course addresses the psychological components contributing to satisfaction and dissatisfaction in buying and selling transactions. The consequences of such transactions, as they affect the environment in which we live as well as society in general, are examined. The interface between business, labor, government and the consumer — as all four groups are involved in consumer affairs — is analyzed objectively.

**SOP 4649 Experimental Consumer Psychology (5)**

Using the interactional workshop and objective observational methods, students will be required to conduct original research projects related to solving consumer affairs problems. Laboratory requirements include both on- and off-campus work. The former emphasizes techniques and evaluation. The latter is necessary for the gathering of data.

**SOP 4705 Psychology of Social Change (3)**

An examination of methods of implementing institutional change. Consideration is given to alternatives such as violent vs. non-violent confrontation, and the use of information as an instrument of change.

**SOP 4712 Environmental Psychology (3)**

An introduction to the man-environment interaction, including psychological, sociological and physical aspects.

**SOP 4714C Environment and Behavior (5)**

Students gain experience with laboratory and field techniques used in the study of the reciprocal relationship between the physical environment and human behavior. PSY 3043 or permission of instructor is prerequisite for enrollment.

**SOP 4715 Psychological Influence of Culture on Learning and Thinking (3)**

An analysis of the research and theory relating cultural and societal influences of learning and thinking. Consideration is given to the controversies concerning assessment, individual and group differences. Prior course work in developmental psychology would be helpful.

**SOP 4735 Psychological Aspects of International Relations and Conflict (3)**

A study of the psychological, especially social, factors in the dynamics of international behavior interactions, which may increase or decrease tensions and conflicts.

**SOP 4834 Psychology of Health and Illness (3)**

Course provides an overview of the field of behavioral medicine, the interface of psychology with health and health care. Psychological factors in illness, health, and health delivery systems will be covered. Prevention and early intervention will be stressed.

**SOP 4842 Legal Psychology** (3)  
Particular emphasis will be given to interpersonal courtroom processes. Topics considered included scientific jury selection, proxemics, persuasive argumentation, witness demeanor, eyewitness testimony, and similar influences upon juror decision making. Prerequisite: None.

**SOP 5058 Advanced Social Psychology** (3)  
An in-depth examination of the role of social psychology in the social sciences and the major substantive problems as they relate to contemporary societal issues. Minimum Prerequisite: An introductory course in social psychology or its equivalent.

**SOP 5616 Social Psychology of Organizations** (3)  
The application of concepts and theories from social psychology and sociology to the organizational setting. Emphasis would 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 5765 Psychology of Community Development** (3)  
An in-depth study of the psychological aspects of community development and related intervention strategies. Emphasis is placed on variables which show consistent relationships across levels of analysis.

**SPA 5401 Disorders of Language in Childhood** (3)  
This course focuses on failures of children to acquire normal speech and language. The various causes of such disorders, and theories to account for failure to acquire language are considered. Techniques for assessing language disorders in children are evaluated. Students enrolling in this course should ordinarily have completed one course in development psychology.

## Religious Studies

James Huchingson, Associate Professor and Chairperson, Department of Philosophy and Religion

Bongkil Chung, Assistant Professor  
Robert Hann, Assistant Professor

LOCATION: Tamiami Campus only

DEGREE: Bachelor of Arts

LOWER DIVISION PREPARATION:

Required Courses: None

Recommended Courses: Religion, Philosophy  
UPPER DIVISION PROGRAM:

Required Areas:	Semester Hours
Religion and Culture	6
Ecumenical and Historical Studies	3
Biblical Studies	3
Religious Studies Seminar	3
Other Religious Studies Courses or Optional Tracks	15

Courses in one other discipline	12
<i>Electives:</i>	18
	60

Students must take all religious studies courses included in the major for a letter grade and earn a grade of C or better in these.

**Remarks:** A more detailed description of the Religious Studies Program is contained in a brochure available at the Department of Philosophy and Religion. Students select their required courses in religious studies with the approval of a faculty member of the Department.

Students are also encouraged to consider a "dual-major" i.e., simultaneously meet the requirements of two academic majors. In this case, the twelve semester hour credits required in one other academic discipline or unified area (as part of the Religious Studies Major) would be met by courses taken towards the second major.

The College of Arts and Sciences requires for the bachelor's degree that the student take a minimum of 9 semester hours outside the discipline, 6 semester hours of which are to be taken outside the department sponsoring the major program. For the various ways of meeting this requirement, please consult the Department.

The Department offers many of its courses at the Bay Vista Campus and participates in the Humanities Major. It also serves the community and professional groups by offering courses Off-Campus. For further information concerning these courses consult the department.

### Minor in Religious Studies:

A student majoring in another academic discipline would earn an academic minor in religious studies by taking a pattern of at least four REL courses (12 semester hours), based on an academic rationale or unifying study theme, approved by the Chairperson of the Department. An acceptable minor in religious studies would be four courses in one of the areas designated in the course list of the Religious Studies Program. A student may propose still other patterns of four religious studies courses for a minor, provided the selection is based upon an acceptable academic rationale.

## Course Descriptions

### Definition of Prefixes

REL — Religion.

GRW — Greek Writings.

**GRW 4250 Introduction to Biblical Greek** (3)  
This course introduces the Greek of the New Testament and other ancient writings. Its goal is to prepare students to use specialized dictionaries and other tools for biblical study, and for more advanced Greek study.

**REL 2936 Special Topics** (3)  
In-depth study of topics of special interest in religion.

**REL 3100 Religion and Culture** (3)  
This course will explore both the ways religion uses culture to express its basic concerns and the ways that culture and lifestyle reflect religious perspectives. Attention will be given to traditional and popular expressions of American culture.

**REL 3131 American Sects and Cults** (3)  
Examines several recent religious movements in American life, such as the Unification Church, the International Society for Krishna Consciousness, UFO cults, and others.

**REL 3160 Science and Religion** (3)  
The methods, assumptions, and goals of religion will be compared with those of the natural and human sciences. Specific issues, such as evolution, sociobiology, and the new astronomy will be considered to illustrate similarities and differences between the two approaches.

**REL 3172 Religion and Ethics** (3)  
This course will examine the nature of ethics in its relationship to faith orientation. After considering the various religious foundations of ethics in the thought of influential ethical thinkers, attention will be given to the application of these perspectives to pressing ethical problems in contemporary society.

**REL 3204 Introduction to the Bible** (3)  
An introduction to the scriptures of Judaism and Christianity, including such topics as their background, their most important writers, and their uses in postbiblical religion.

**REL 3205 How to Study The Bible** (3)  
This course introduces the Bible and the methods and tools of biblical study, including translations, word studies, historical studies, and the use of appropriate secondary resources.

**REL 3224 The Prophets and Israel** (3)  
Examines the setting of the prophets in the history of Israel, their contributions to biblical religion, and their use in later religious and renewal movements.

**REL 3270 Biblical Theology** (3)  
Explores the ideas of God, man, redemption, ethics, and the after-life, tracing each through its development from earliest Hebrew through to the rise of post-biblical Judaism and Christianity.

**REL 3300 Religions of the World** (3)  
Introduction to the major faiths of mankind. Included in the discussion will be Hinduism, Buddhism, Taoism, Judaism, and Christianity. This course will involve a comparison of common elements in these major religions while respecting their distinctive features.

**REL 3303 Forgotten Religions** (3)  
Examines the beliefs and practices of ancient Egyptian, Semitic, Greek, and Germanic religions, their influences on later civilization and religious thought, and the possible continuing insights offered by each.

**REL 3411 Meaning of Life** (3)  
This introductory course examines the convergent and divergent views of philosophies and religions regarding the meaning of life. Special emphasis is given to the variety of strategies available to the individual in the personal search for such meaning.

**REL 3510 Early Christianity** (3)  
This course will survey the development of Christian thought and practice from its beginnings as a primitive church to its establishment as a major faith in the Middle Ages. It will then

consider the relevance of this early experience for modern movements of this faith.

**REL 3532 Reformation** (3)  
The lives and thoughts of the leaders of the Protestant Reformation will be the focus of this course. Significant attention will be given to the personal experiences and theological perspectives which directed the actions of such persons as Luther, Calvin, and Zwingli, as well as the movements they founded.

**REL 3600 Judaism** (3)  
This course is an introduction to this major world religion. Following a survey of the history of Judaism, major themes in Jewish religious thought will be highlighted, especially as they relate to modern movements of this faith.

**REL 3939 Cooperative Education in Religion** (3)  
A student majoring in Religious Studies may spend one or two semesters fully employed in industry, government, or other appropriate institutional setting in a capacity relating to the major. Permission of Cooperative Education and Major Department.

**REL 4173 Technology and Human Values** (3)  
This course will explore the sources and impact of modern technology from philosophical and religious perspectives. Topics to be discussed include the effects of technology upon the understanding of human nature; and the relationship among technology, the natural environment, and hopes for a livable human future.

**REL 4251 Jesus and Paul** (3)  
Examines the historical settings, teachings, significance, and later interpretations of Christianity's founder and its foremost interpreter.

**REL 4311 Oriental Meditation** (3)  
A detailed examination of the various techniques of meditation found in Eastern religious traditions. This examination will be pursued on both the theoretical and practical levels with major emphasis on class participation in the techniques themselves.

**REL 4420 Contemporary Religious Thought** (3)  
A survey of major figures in contemporary theology for the purpose of understanding their thought and its application to current issues in religion and society.

**REL 4440 Man and Nature** (3)  
This course will explore resources from philosophy and religion that could contribute to a solution of the current environmental crisis. Ethical issues of the environment will especially be examined in the light of these resources.

**REL 4481 Contemporary Latin American Religious Thought** (3)  
The major trends of religious thought in Latin America and their impact on the society of the area will be investigated. Special reference will be made to Post-Vatican II theology and to very recent theologies of liberation.

**REL 4493 Religion and Modern Man** (VAR)  
An examination of relevant issues in religion

concerning modern man. Behavioral as well as conceptual expressions are analyzed.

**REL 4808 Applied Theology** (VAR)  
The study of contemporary problems and methodologies of pastoral theology both in a practical and a theoretical context.

**REL 4910 Independent Research** (VAR)  
Topics will be selected to meet the academic needs of the individual student.

**REL 4931 Religious Studies Seminar** (3)  
This seminar is designed for majors and other qualified students approved by the Department. The specific topic will be selected and announced in advance. The number of participants will be limited.

**REL 4936 Special Topics** (3)  
In-depth study of topics of special interest in religion.

**REL 4949 Cooperative Education in Religion** (3)  
A student majoring in Religious Studies may spend several semesters fully employed in industry, government, or other appropriate institutional setting in a capacity relating to the major. Permission of Cooperative Education and Major Department.

**REL 5937 Special Topics** (3)  
Topics will be selected to meet the academic needs of groups of students.

## Sociology Major

Sociology is part of the Department of Sociology and Anthropology and all information should be obtained from that Department's office.

LOCATION: Tamiami Campus

DEGREE: Bachelor of Arts

**MAF 3210 Marriage and the Family** (3)  
An introduction to the intensive study of the kinship relationship of man known as the family. The family is distinguished from other social units, and behavior variations of this special unit are analyzed and associated with special functions. Contemporary manifestations of the family and the dynamic changes indicated are considered.

**MAF 4510 Comparative Family Systems** (3)  
The study of family organization and function in selected major world cultures. Emphasis is given to the inter-relationships of the family, the economic system, urbanization, and human development.

**MAF 4511 Studies in Comparative Lifestyles** (3)  
A problem-oriented course emphasizing the differential behavior associated with categories such as nationalism, social class, income distribution, and political or religious affiliation.

**SOC 3001 The Basic Ideas of Sociology** (5)  
The course introduces the student to the ideas of community, authority, status, alienation, and the sacred, as used in sociological literature.

**SOC 3020 Social Problems** (3)  
An introduction to the concept of a social problem and the approaches used to understand more fully the total dimensions of some specific problems. Special emphasis is given to clarifying one's understanding of the underlying nature of selected social problems, an analysis of those aspects amenable to remedy, and an inventory of the knowledge and skills available.

**SOC 3101 Social Deviancy (Deviant Behavior)** (3)  
The study of behavior that counters the culturally accepted norms or regularities. The social implications of deviancy are reviewed, and theoretical formulations regarding deviant behavior are analyzed.

**SOC 3130 Delinquency** (3)  
An analysis of behavior which is extra-legal, with major concentration on its appearance among young people (juveniles) and society's response. Particular emphasis is given to the dynamic thrusts being made in establishing juvenile rights as a distinct part of human or civil rights.

**SOC 3150 Criminology** (3)  
An introduction to the study of criminal behavior, its evidence in society, society's reaction to the subjects involved, and the current state of theoretical thought on causality and treatment.

**SOC 3281 School and Society** (3)  
A specialized course dealing with the place of schools (particularly public) in society, the import of social criteria for school personnel, and the influence of such criteria on educational processes within the school system (institution).

**SOC 3300 The Community** (3)  
The social group known as the community is identified and analyzed for its distinctive qualities. By distinguishing it from other social groups, its dominating force on the behavior of its members is isolated. Attention is given to the interaction of individuals and groups as they exist within the community.

**SOC 3402 Social Change** (3)  
The study of major shifts in focus for societies or culture, and the indicators associated with such changes. Particular attention is given to the development of industrial societies and the dynamics involved for nations emerging from various stages of "underdevelopment."

**SOC 3500 Research Methods** (3)  
An introduction to the scientific methods and its application to anthropological and sociological research. Topics include: formulation of research problems; research design; field methods and collection of data; hypothesis testing and interpretation of results.

**SOC 3610 Sociological Theories** (3)  
Examines the emergence of sociology as the study of social relations. Compares and contrasts the work of selected theorists, with respect to their methodologies, treatment of the emergence and consequences of modern society, political sociology, conception of social class, and analysis of the role of religion in society. The student is expected to gain in-depth knowl-

edge of opposing theories, as well as an appreciation of the contingent nature of sociological theories.

**SOC 3820 Small Groups** (3)  
Survey of small group studies, their development and the associated theoretical schools of thought. The significance of small group studies for social theory is evaluated.

**SOC 3830 The Individual in Society** (3)  
Introduction to the study of the individual as a social being, with particular emphasis on man's social origins, human perceptions, and the interaction of the individual and the group within society.

**SOC 3850 Collective Behavior** (3)  
The study of human behavior as found in relatively unstructured forms, such as crowds, riots, revivals, public opinion, social movements and fads. The interplay of such behavior and the rise of new norms and values is analyzed.

**SOC 3949 Cooperative Education in Social Sciences** (3)  
A student majoring in one of the Social Sciences (Economics, International Relations, Political Sciences, Sociology, or Psychology) may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

**SOC 4003 Sociology of the 20th Century** (3)  
An examination of the sociological implications evident in the events of our modern world. Heavy reliance is placed on intellectual materials other than social science, especially literature.

**SOC 4004 Sociology Through Film** (3)  
Popular and documentary films as data for the analysis of various sociological problems.

**SOC 4211 Sociology of Religion and Cults** (3)  
The study of religions institutions, their structure and function in various societies. Leadership qualities, participation and practices, and the relationship of religious institutions to other social institutions are studied.

**SOC 4221 Political Sociology** (3)  
The underlying social conditions of political order, political process, and political behavior are explored. Examples are drawn from empirical and theoretical studies of power, elites, social class and socialization.

**SOC 4243 Sociology of Death** (3)  
An introduction to "death" as social phenomenon. Attention given to various approaches which systematically study death, with primary emphasis given to the sociological approach. Major attention is given to an exploration of attitudes toward death, and an assessment of the implications for the respective groups involved.

**SOC 4265 Man, Society and Technology** (3)  
The study of contemporary society, man's role in it, and effects of technological change. A study of interrelationships, with special attention given to vocational study and instruction within the framework of the relationships perceived.

**SOC 4301 Community Organization** (3)  
An intensive study of how communities are organized, with special emphasis on the interactive processes of the varied components of a community. Special study, permitting students to concentrate on interest areas, is required.

**SOC 4310 Urban Sociology** (3)  
Study of the urban community, with particular attention to the problems associated with urban life. The development of urban societies is reviewed historically, and factors associated with this development are identified.

**SOC 4331 Latin American and Caribbean Social Structures** (3)  
Exploration of the types of social structures, statuses, and roles, and the resulting distributions of power and authority in the hemisphere.

**SOC 4406 The Problems of Bureaucracy in The Modern World** (3)  
The course deals with the micro-sociological problems of the internal organization of bureaucracies; the relation between bureaucracy and personality; the macro-sociological problems of the emergence of the bureaucratic form; bureaucratization and contemporary life; general problems of affluence; meaningless activity; ways to beat the bureaucracy; and bureaucracy and atrocity.

**SOC 4410 Social Stratification (Mobility)** (3)  
The study of society structured hierarchically with particular attention to the form and content of the various levels. Problems in the social order and differential human behaviors associated with stratification are analyzed.

**SOC 4440 Social Conflict** (3)  
The study of conflict in society and its place in social relationships. A study of causes and resolutions, with particular emphasis on methods of resolution and their influence on social change.

**SOC 4464 Sociology of the Underprivileged Societies** (3)  
An examination of the various theories concerning what is happening in the "underdeveloped world." The political, social, and economic events of these societies are subjected to sociological analysis.

**SOC 4475 Seminar in Ethnicity** (3)  
An upper-level seminar, stressing a comparative sociological approach to the study of two or more racial-ethnic groups. Emphasis on the interrelations of ethnic communities within the same society and the socio-political effects of these interrelations. Prerequisite: Minorities, SOC 4745, or permission of Dept.

**SOC 4490 Area Studies: Social Structures and Problems** (3)  
Special courses on the social structures and related problems of specific geographical and cultural areas. To be offered at various times.

**SOC 4504 Basic Research Design** (3)  
Advanced course in social research, providing research practicum for studying patterns of human behavior; analyzing findings of studies, methodical and analytical procedures; reporting and explaining these results; and applying these inferences to concrete situations. Also ac-

quaints the student with the use of computers in research in the behavioral sciences.

**SOC 4540 Historical Sociology** (3)  
The authenticity and meaning of historical data for sociological research. Systematic theories in history are analyzed for their utility in sociology. Particular emphasis on the sociological uses of the comparative method in history.

**SOC 4611 Advanced Social Theory** (3)  
An analysis of various classical and current sociological theories, with particular attention paid to their conceptions of man in society and the wider implications such conceptions have. The theories of Durkheim, Parsons, Weber, Goffman, Bendix and Dahrendorf are examined.

**SOC 4613 Social Theory and Third World Innovations** (3)  
An examination of the contributions to social theory by intellectuals of the Third World. Particular attention is paid to theory derived from classical Marxism.

**SOC 4620 Comparative Sociology** (3)  
A cross-cultural and cross-national survey of sociological studies, with particular emphasis on theoretical and methodological issues. Examples will be drawn from studies on culture patterns, social structures, sexual mores, power relationships and the ethical implications of cross-national research.

**SOC 4651 Sociology of Art and Literature**  
This course approaches the question of art and society through an analysis of: the social production of art; the relationship between imagination and society; the role of the artist; and the ideological impact of aesthetic theory.

**SOC 4705 The Role of Women in Contemporary Society** (3)  
A concentrated study of women in society, addressing role origins and their development in contemporary society. Particular attention given to how such behaviors become normalized and the rapidity with which they change.

**SOC 4745 Minorities/Race and Ethnic Relations** (3)  
The study of social groups identified by racial or ethnic characteristics. Particular emphasis is given to the role of minorities in society, and the interactive process resulting from their contact with the majority. Social behaviors of minorities are reviewed and related to institutional structures and their accepted norms.

**SOC 4746 Social Conflict in Multi-Ethnic Societies** (3)  
Cases are selected from a variety of societies with differing types of majority-minority situations. Prejudice and discrimination are seen as weapons in group and class conflict. The consequences of prejudice are analyzed in terms of the costs to every group in the society.

**SOC 4829 Ethnomethodology** (3)  
The analysis of practical, everyday actions and circumstances as a means of reaching a logical and common sense knowledge of social structures.

**SOC 4833 Role Theory** (3)  
An analysis of the relation between man and

society, from the perspectives of role theory. The course explores the effect society has on individual biography and action.

**SOC 4835 Clinical Sociology** (3)  
The problems of alienation, anomie, and happiness will be analyzed. A third position between social work and social change will be sought. Personal adjustment, social revolution, and individual calculation will be weighed as responses to the demands of social life.

**SOC 4841 Mass Culture** (3)  
Analysis of the social, political and cultural impact of mass communications.

**SOC 4842 Symbols and Society** (3)  
An analysis of the effect of culture on the individual and on society. The roles of popular and intellectual culture will be examined.

**SOC 4905 Directed Individual Study** (VAR)  
Supervised readings and/or field research and training. May be repeated.

**SOC 4941 Directed Field Research** (VAR)  
Permission of instructor required.

**SOC 4949 Cooperative Education in Social Sciences** (3)

A student majoring in one of the Social Sciences (Economics, International Relations, Political Science, Sociology, or Psychology) may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

**SOC 5140 Sociology of Law and Legal Processes** (3)

An examination of the role of law and of legal institutions in American society. Included are such topics as the use and/or misuse of the legal process for conflict resolution and as agents of social change.

**SOC 5255 Sociology of Mental Health** (3)

A concentrated study of mental illness, with particular emphasis on definitional conceptualizations and the relationship of such to incidence data. Includes study of the social factors on the etiology of mental disorders and the epidemiology of such illnesses. Family effects of mental illness discovery and treatment are assessed, and mental health programs and their effectiveness are reviewed.

**SOC 5261 Industrial Sociology** (3)

Concentrated study of industrialization and the sociological theory involved. Manpower, unemployment, apprentice programs, and classificatory schemes are studied.

**SOC 5264 Conflict Resolution: Society and Labor** (3)

A concentrated study of conflict as evidenced in labor's relationship to society. The development of methods of resolution, and an assessment of prevailing approaches. Attention is given to the historical roots of labor's development as a distinct social entity, and the tensions precipitated within different societies and their varied economic and political systems.

**SOC 5284 Sociology of Education** (3)  
An analysis of education as a social process and the interrelationship of educational systems and

society. The study of education as a socialization process; the social structure of education, and its role as an agent in social change.

**SOC 5656 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.

**SOC 5909 Directed Individual Study** (VAR)  
Supervised readings and/or field research and training. May be repeated.

**SOC 5941 Directed Field Research** (VAR)  
Permission of instructor required.

**SSI 3303 Ethical Issues in Social Science Research** (3)

An introduction to the problems of possibilities of ethical premises in the perspectives and work of social scientists. Examination of historical interrelationships between moral philosophies and developing scientific methodologies. Analyses of contemporary social ethicists' attempts to assume moral postures while examining social relations. Case studies involving issues such as nation building in areas of accelerated change including Africa and Asia.

## Visual Arts Major

Francis Wyroba, *Professor and Chairperson*

Ralph F. Buckley, *Associate Professor*

William Burke, *Associate Professor*

James M. Couper III, *Associate Professor*

Richard Duncan, *Assistant Professor*

Barbara Forbes, *Assistant Professor*

Ellen Jacobs, *Associate Professor*

William Maguire, *Assistant Professor*

Dahlia Morgan, *Lecturer/Gallery Director*

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Fine Arts

LOWER DIVISION PREPARATION:

*Required Courses:* 6 semester hours of art survey or departmental exam; 6 semester hours of design or acceptable portfolio, 6 semester hours of drawing; 6 semester hours of beginning studio.

*Recommended Courses:* Painting, Sculpture, Printmaking, Ceramics, Photography, Weaving, Jewelry, Glass, Drawing.

*Remarks:* The student who does not have an A.A. degree and/or who lacks proficiency in required courses will be expected to take more than 60 semester hours to complete the bachelor's degree, or to make up courses at the lower division level.

UPPER DIVISION PROGRAM:

	Semester Hours	
<i>Required Courses:</i>		39
ARH 4450	20th Century Art	3
ARH 4470	Contemporary Art	3
Art History Elective		3
Studio Major		15-18
ART 4955	Thesis and Portfolio	3
Studio Electives		
outside of major		12-21
Electives outside of Visual Arts		12-21
Department		60

*Remarks:* A grade of "C" or better in all courses required for the major is necessary for graduation.

MINOR IN VISUAL ARTS

ARH 4450	20th Century Art	3
ART 3310	Drawing	
OR		
ART 3331	Figure Drawing	3
ART Electives in Studio		12
		18

MINOR IN ART HISTORY

ARH 4450	20th Century Art	3
ARH 4470	Contemporary Art	3
ART Studio Elective		3
ARH Electives		9
		18

## Course Descriptions

Definition of Prefixes

ARH — Art History; ART — Art; HUM — Humanities.

**ARH 2050 Art History Survey I** (3)

A broad survey of the visual arts and architecture from the Paleolithic Period through the Middle Ages.

**ARH 2051 Art History Survey II** (3)

A broad survey of the visual arts and architecture from the Renaissance through the Modern Age.

**ARH 3009 Survey of Contemporary Art** (3)

A survey of the most recent developments in the fields of visual arts and architecture, through lectures, films and speakers. Open to all students.

**ARH 4014 History of Decorative Arts** (3)

A survey of the more important and influential periods in history in the production of ceramics, fabrics, glass, jewelry and silversmithing. Slides, lectures, student research.

**ARH 4131 Greek Art** (3)

Lectures, slides, research. The Art of Greece from the Bronze Age through the Classical Period.

**ARH 4151 Roman Art** (3)

Lectures, slides, research. The Art of Ancient Rome from the Early Iron Age through the Late Roman Empire.

**ARH 4310 Early Italian Renaissance** (3)

Lectures, slides, research. From the origins of Italian Renaissance in the Late Gothic Period to the Early 15th Century.

**ARH 4312 Later Italian Renaissance** (3)

Lectures, slides, research. The Art of Italy in the later 15th and 16th Century.

**ARH 4431 19th Century Painting** (3)

A study of the various challenges offered artists at the beginning of the nineteenth century, and of subsequent solutions created by painters in America, England, France, Germany and Italy. Styles such as neo-classicism, romanticism, realism, eroticism, pre-raphaeliticism, luminism and impressionism will be examined.

**ARH 4450 20th Century Art** (3)

Lectures, films, slides. A survey of European and American Art from 1890-1945.

- ARH 4470 Contemporary Art** (3)  
Lectures, slides, visitors and student research. A survey of art from 1945 to the present.
- ARH 4552 Art of China and Japan** (3)  
An introduction to the art of China to the Ming Dynasty and of Japan through the 18th century. The emphasis will be on painting and sculpture, with some ceramics and architecture.
- ARH 4610 American Art** (3)  
Lectures, slides, visitors and student research.
- ARH 4650 Pre-Columbian Art** (3)  
Slides, lectures, research. A survey of Pre-Columbian Art from approximately 2000 B.C. to 1500 A.D. of Mesoamerica. (Intermediate area from Honduras to Columbia and the Andes).
- ARH 4670 20th Century Latin American Art** (3)  
Lectures, films, slides. The Art of Central, South America and the Caribbean of the Twentieth Century.
- ARH 4710 History of Photography** (3)  
A chronological look at the tradition of the richly descriptive still photograph, from its invention in the 1830's. Sources include science, photojournalism and work of artists who photograph.
- ARH 4832L Art Gallery and Display** (1-3)  
The study and participation of all aspects of Gallery operations, from daily operation to special exhibitions and events. Permission of Gallery Director.
- ARH 4905 Directed Studies** (VAR)  
A group of students with the approval of the art faculty, may select a master teacher of their research or criticism in selected areas as film, painting, sculpture, architecture, crafts, art history, multi-media art, etc. Arrangements must be made at least a semester before course is offered. May be repeated.
- ARH 4910 Research** (VAR)  
Art history, criticism and theory in areas not covered by the present program and which the student wishes to study. Permission of instructor required. May be repeated.
- ARH 4931 Women and Art** (3)  
Women in the history of art; past, present and future. Slides, lectures, films, panels and discussions.
- ARH 5907 Directed Studies** (VAR)  
See ARH 4905.
- ARH 5913 Research** (VAR)  
See ARH 4910.
- ART 1201C 2D Design** (3)  
Studio course introducing the basic art elements such as line, value and color to develop the students vocabulary and awareness of two-dimensional potential in various media.
- ART 1202C 3D Design** (3)  
Studio course introducing the basic elements inherent in three dimensional works of art. Shape, mass, balance, proportion and scale are elements which will be explored.
- ART 3111C Ceramics** (3)  
A beginning course for art and non-art majors. Fundamentals of throwing, hand-building, and glaze application. May be repeated.
- ART 3133C Fabrics and Fibers** (3)  
A creative approach to fabrics and fibers, using processes such as dyeing, embroidery, quilting, soft sculpture, batik, on and off loom weaving, etc. May be repeated.
- ART 3150C Jewelry and Metals** (3)  
A study of basic metal techniques and strengthening of three-dimensional design concepts for the beginner. The advanced student will explore the more difficult technical aspects of areas such as hollow ware, enameling, casting, and stone setting. May be repeated.
- ART 3163C Glassblowing** (3)  
A basic course in off-hand glass blowing, concerned with preparing, forming, and finishing glass; understanding of glass as an art form; operation and maintenance of a glass studio. May be repeated.
- ART 3310C Drawing** (3)  
Drawing will be considered as an essential part of every art student's curriculum. Depending on his lower level work, a student will be encouraged to take at least one drawing course at the University. Off-campus studio work may be arranged. May be repeated.
- ART 3331C Figure Drawing** (3)  
Drawing from the model during assigned studio time. Open to all students. May be repeated.
- ART 3401C Printmaking** (3)  
With a knowledge of basic intaglio and relief printing, the student will explore specific media such as etching, lithography, silk-screen and other experimental techniques. May be repeated.
- ART 3510C Painting** (3)  
A study of the student's work through the use of visual aids and individual criticism. Any media may be used. May be repeated.
- ART 3601C Photography** (3)  
With a knowledge of beginning developing, printing, and use of a camera, the art student will pursue his own direction with emphasis on individual approach, print quality, use of equipment, and criticism. May be repeated.
- ART 3702C Sculpture** (3)  
With a background in beginning sculpture, the student will develop standards of excellence, both in concept and technique, with stress on individual expression. An equipped shop will be available to the student. May be repeated.
- ART 3949C Cooperative Education in Visual Arts** (3)  
A student majoring in Visual Arts may spend several semesters fully employed in industry in a capacity relating to the major. Must have permission of chairperson.
- ART 4114C 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: ART 3111C, or permission of the instructor. May be repeated.
- ART 4116C Glaze and Clay Calculation** (3)  
The study of the nature, formulation and altering of ceramic glazes and clays.
- ART 4133C Fabrics and Fibers** (3)  
See ART 3133C.
- ART 4151C Jewelry and Metals** (3)  
See ART 3150C.
- ART 4164C Glassblowing** (3)  
See ART 3163C.
- ART 4320C Drawing** (3)  
See ART 3310C.
- ART 4332C Figure Drawing** (3)  
See ART 3331C.
- ART 4402C Printmaking** (3)  
See ART 3401C.
- ART 4532C Painting** (3)  
See ART 3510C.
- ART 4604C Photography** (3)  
See ART 3601C.
- ART 4703C Sculpture** (3)  
See ART 3702C.
- ART 4710C Figure Sculpture** (3)  
To develop skills in representational structure and anatomy from the model and learn mold-making techniques. May be repeated.
- ART 4906C Directed Study** (VAR)  
A group of students, with the approval of the Visual Arts Department faculty, may select a master artist teacher and pursue a course of art study in selected areas such as graphic design, film, multi-media, environmental design, sound, etc. Arrangements must be made at least one semester before course is offered. May be repeated.
- ART 4910C Research** (VAR)  
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 4949C Cooperative Education in Visual Arts** (3)  
See ART 3949C.
- ART 4955C Thesis and Portfolio** (3)  
Studio work in student's major area with major professor, resulting in a student exhibit. Arrangements with major professor one semester before graduation. Written thesis required. Prerequisite: 15 semester hours of studio major. (Fall and Spring only).
- ART 5125C Ceramics** (3)  
See ART 4114C.
- ART 5133C Fabrics and Fibers** (3)  
See ART 3133C.
- ART 5159C Jewelry and Metals** (3)  
See ART 3150C.
- ART 5165C Glassblowing** (3)  
See ART 3163C.
- ART 5340C Drawing** (3)  
See ART 3310C.
- ART 5341C Figure Drawing** (3)  
See ART 3331C.



- ART 5403C Printmaking (3)  
See ART 3401C.
- ART 5580C Painting (3)  
See ART 3510C.
- ART 5620C Photography (3)  
See ART 3601C.
- ART 5710C Figure Sculpture (3)  
See ART 4710C.
- ART 5730C Sculpture (3)  
See ART 3702C.
- ART 5907C Directed Study (VAR)  
See ART 4906C.
- ART 5910C Research (VAR)  
See ART 4910C.

- PHH 3700 American Philosophy 3  
REL 3100 Religion and Culture 3  
An appropriate American Literature course  
An appropriate American History course  
AMS 4938 Seminar in American Studies

## Consumer Affairs Certificate Program

Director: Milton L. Blum (*Psychology*)  
Coordinating Committee: Myrna Crabtree (*Home Economics Education*), Dennis Marzella (*Hospitality Management*), Betty Morrow (*Home Economics*), Samuel Shapiro (*Mathematical Sciences*).

LOCATION: Tamiami Only.

With the collaboration of all the academic units and the approval of the Vice President for Academic Affairs, the Consumer Affairs Institute administers a Consumer Affairs interdisciplinary Certificate sanctioned by the College of Arts and Sciences.

The increasing number of issues and conflicts involving consumers, business, government, and labor demand study and research so that more appropriate resolutions can be achieved. The Certificate Program in Consumer Affairs is intended to provide a sound educational base for those dealing with consumer affairs matters — be they buyers or sellers. The courses leading to the Certificate can serve those pursuing careers in consumer affairs, and provide personal benefit to individuals in their roles as consumers.

The Certificate Program is intended to provide business, government, industry, and labor with a resource for educating selected personnel in a broad range of subject matter related to consumer affairs.

A Certificate in Consumer Affairs will be awarded upon satisfactory completion of 6-7 courses from the courses listed in the Certificate requirements. Completed courses are recorded on a University transcript. These courses may be taken by Special Students with the advice of the Certificate Program Director. Special Student enrollment and course registration can be completed simultaneously at the time of registration. Students can be admitted to the Program at the beginning of any semester.

## Course Descriptions

### Definition of Prefixes

COA — Consumer Affairs; ECO — Economics; EVR — Environmental Studies; FOS — Food Science; HUN — Human Nutrition; MAR — Marketing; PHI — Philosophy; PSY — Psychology; PUP — Public Policy; SOP — Social Psychology.

*Required Courses:* The Following are the required courses.

- COA 3410 Consumer Resources (3)  
Evaluation of information needed by consumers to make wise spending decisions, including sources of consumer help, information and protection. Experiences in product comparison provided.

COA 4460 Consumer and Technology (3)  
Study of the inter-relationship of the consumer and the industrial / business community, including the roles and responsibilities of each. Special topics include the effectiveness of decisions on product cost, life styles and the environment, as well as the role of government in the marketplace.

SOP 4645 Consumer Psychology (3)  
Factors that cause satisfaction and dissatisfaction in buying and selling transactions, and their environmental effects. Analysis of interactions between business, labor, government and the consumer.

SOP 4649 Experimental Consumer Psychology (5)  
This course emphasizes original research on the part of the student, using the methodologies of the Interactional Workshop and the Observational Guide.

**ELECTIVE COURSES:** The remaining hours are to be chosen, from the following courses. However, in addition, the student may be permitted to select alternative consumer-oriented courses in his or her major department of study.

COA 4440 Consumer Counseling (3)  
Application of consumer and management knowledge and skills in financial decision making. Case study approach. Prerequisites: COA 3410, HME 4210, and permission of instructor.

COA 5450 Consumer Legislation (3)  
Presentation of scope, enforcement and problems related to consumer law at the local, state and federal levels.

ECO 3040 Consumer Economics (3)  
Effects of public policy on family incomes and expenditure patterns. Consumer behavior, advertising, and other influences affecting demand. The consumer protection movement.

EVR 3011 Environmental Science (3)  
For non-science majors. An introduction to the fundamental principles and concepts of ecology; and to air pollution and water resources.

EVR 3012 Environmental Science II (3)  
For non-science majors. An introduction to energy resources and conservation; agricultural pollution; noise pollution; and solid waste problems.

FOS 3004 Food and the Consumer (3)  
Survey of nutrition information relating to problems and issues of concern to today's consumers.

HUN 3122 Nutrition and Culture (3)  
Nutrients and their interrelationships, in reference to food habits and needs of various population groups. Introduction to the impact of culture on nutrition, and study of personal food pattern development.

MAR 4503 Consumer Behavior (3)  
The consumer as the basis for development of marketing programs by business organizations.

PHI 4631 Ethical Issues in Business (3)  
Ethical dimensions of current problems and issues facing the worker or business manager.

PSY 4941 Independent Field Experience in Psychology (VAR)

## Certificate Programs

### American Studies Certificate Program

Director: Darden A. Pyron, (*History*).

Coordinating Committee: Darden Pyron (*History*), Don Watson (*English*), Eric Lead (*History*), Lynn Berk (*English*), Howard Rock (*History*), Tucker Arnold (*English*).

LOCATION: Tamiami and Bay Vista Campuses

The American Studies Certificate Program provides the opportunity for students to examine the nature of American civilization through an interdisciplinary study of American history, literature, culture, and thought. The program provides a grounding in American literature and American history, a sampling of how each discipline approaches the study of American civilization, and an opportunity to sample the approaches of political science, anthropology, philosophy and religion. Through a seminar in American studies students will apply the insights of the various disciplines to problems of their own choosing.

The Certificate in American Studies is awarded with a bachelor's degree or, upon completion of Certificate requirements, to a student who already possesses that degree.

**General Requirements:** A total of 7 courses chosen among the prescribed certification courses with a grade of "C" or better.

#### Specific Requirements:

- AML 3104 Survey of American Literature I 3  
AML 3109 Survey of American Literature II 3  
2 consecutive semesters chosen from the following:  
AMH 3012 American History 1600-1763 3  
AMH 3013 American History 1763-1877 3  
AMH 3020 American History 1877-present 3  
2 electives chosen from the following:  
POT 4204 American Political Thought 3  
ANT 3402 Anthropology of Contemporary Society 3

**PUP 4203 Environmental Politics and Policy** (3)  
Steps in the environmental policy-making process whereby private preferences are transformed into public policy.

## Environmental Studies Certificate Program

Director: G. Dalrymple (*Biological Sciences*)  
Coordinating Committee: J. Brown (*Sociology/Anthropology*), J. Gottlieb (*Political Science*), J. Huchingson (*Philosophy and Religion*), J. Parker (*Physical Sciences*).

LOCATION: Tamiami Campus

The Certificate Program in Environmental Studies is designed to provide students in various majors with the unique perspective of interdisciplinary ecological education to both enrich and expand the breadth of their primary training. The Certificate seeks to provide participants with an analytic basis for understanding the milieu of local and global environmental problems and processes. The curriculum requires no prerequisite and is complementary to majors in all disciplines and schools at FIU.

### Required Courses:

1. Environmental Science 3010, 3011, and 3013 or Air Resources (EVR 4231), Water Resources (EVR 4211), and Energy Resources (EVR 4311).
2. Environmental Politics and Policies (PUP 4203).
3. Two Electives from the following, at least one of which must be from the Social Sciences or Humanities:

ECP 3303	Environmental Economics
SOP 4712	Environmental Psychology
ANT 3403	Cultural Ecology
REL 4440	Man and Nature
PCB 3033	Fundamentals of Ecology
PCB 4320	Terrestrial Ecology
EVR 3013	Ecology of South Florida
EVS 3420	Environmental Instrumentation
GEO 3510	Earth Resources
ANT 4031	Environmental Revitalization
INR 4054	World Resources, World Order
INR 3043	Population and Society

## Ethnic Studies Certificate Program

Director: John F. Stack, Jr. (*Political Science*).  
Coordinating Committee: Ralph S. Clem (*International Relations*), Anthony P. Maingot (*Sociology/Anthropology*), Mark D. Szuchman (*History*).

LOCATION: Tamiami Campus only

The College of Arts and Sciences offers the student a program in ethnic studies, in recognition of the place ethnic studies enjoys in the social sciences and humanities, and the importance of ethnic studies in today's world. The Program seeks to establish a proper balance

between its academic goals and objectives and the ongoing concerns of the University's local and international constituencies. The Program contains four specialized areas: Black Studies, Jewish Studies, Cuban Studies, and Comparative Studies.

The Certificate in Ethnic Studies is awarded with a bachelor's degree or upon completion of Certificate requirements, to a student who already possesses that degree. The Certificate will specify the area of concentration chosen by the student.

A student may acquire the Certificate in Ethnic Studies by fulfilling the following requirements:

### General Requirements:

1. A minimum of 6 courses with a grade "C" or better.
2. Courses in both the "Core" and "Specialized" areas (indicated below) must be taken from at least two different departments.
3. A maximum of 1 course in a relevant language will be accepted.
4. A maximum of 2 courses of independent study will be accepted.
5. The Program Director must approve the student's overall plan and all special topics courses must be approved by Certificate advisors in each area.

The Program is especially eager to encourage programs of study abroad and field work in general. Credit for such programs will be awarded on an individual basis after evaluation by the Director and the Coordinating Committee, but in no case will it consist of more than 3 courses towards the Certificate.

### Specific Requirements:

1. A core of a minimum of two to three courses in a theoretical and conceptual nature in the area of ethnic studies
2. A minimum of three to four specialized courses in one of the four distinct areas:
  - a) Black Studies
  - b) Jewish Studies
  - c) Cuban Studies
  - d) Comparative Studies

### Definition of Prefixes

AML — American Literature; ANT — Anthropology; ECP — Economic Problems and Policy; ECS — Economic Systems and Development; FOL — Foreign and Biblical Languages; GEA — Geography-Regional Area; HIS — History-General; INR — International Relations; LAH — Latin American History; LIT — Literature; MUH — Music: History/Musicology; POS — Political Science; PUP — Public Policy; REL — Religion; SOC — Sociology; SOP — Social Psychology.

Core Courses: SOC 4745 or ANT 4451: Minorities; PUP 4314: Ethnic Politics; INR 4084: Ethnic Conflict in Transnational Politics; INR 4024: Ethnicity and Nationality; ECP 3144: Economics of Race and Sex Discrimination; SOP 4444: Attitudes and Ethnicity.

*Specialized Courses:* (Note: this is not an exhaustive list; students should consult with the Director of the program on current offerings.)

### Specialized Courses in Cuban Studies:

ECS 4430	The Economic Development of Cuba
FOW 4390	Genre Studies (with reference to Cuban Literature)
INR 3246	International Relations of the Caribbean
LAH 3930	Cuban History
SOC 4331	Latin American and Caribbean Social Structures
SOC 4613	Third World Theory

### Specialized Courses in Black Studies:

AML 5212	Major American Literary Figures
ANT 4315	Afro-American Anthropology
ANT 4352	Area Studies
LIT 4203	Regional Literature in English
LIT 4930	Special Topics
MUH 3116	Evolution of Jazz
SOC 4746	Social Conflict in Multi-Ethnic Societies

### Specialized Courses in Jewish Studies:

GEA 3630	Population and Geography of the Middle East
INR 3274	International Relations of the Middle East
POS 4147	Political Urban Jewish Leadership
REL 3224	The Prophets

## Latin American and Caribbean Studies Certificate Program

Director: Mark B. Rosenberg (*Political Science*)

Advisory Council: John Jensen (*Modern Languages*), William Lefland (*International Affairs Center*), Barry Levine (*Sociology/Anthropology*), Anthony Maingot (*Sociology/Anthropology*), James Mau (*Sociology/Anthropology*), Jorge Salazar (*Economics*), Mark Szuchman (*History*), William Vickers (*Sociology/Anthropology*), Mayda Watson (*Modern Languages*), Ewart Archer (*International Relations*), Marian Goslina (*Library*).

LOCATION: Tamiami (DM 212)

Latin American and Caribbean Studies represents one way in which the University fulfills its commitment to furthering international understanding. The program in Latin American and Caribbean Studies encourages students to take an interdisciplinary approach to this important area by awarding a Certificate to both degree and non-degree students who successfully complete the Certificate requirements (see below). For students pursuing a bachelor's degree, the Certificate Program should be understood as a complement to the student's regular major area or discipline of study. For non-degree students, the Certificate represents the way in which a fuller, more complete understanding of Latin America and the Caribbean can be gained without pursuing a full course of study at the university.

Students who are interested in the Certificate Program should consult directly with either the Director or the Assistant Director of the Latin American and Caribbean Center, which administers the program.

In addition to its Certificate administration responsibilities, the Latin American and Caribbean Center, in consortium with the Center for Latin American Studies of the University of Florida, is one of twelve federally recognized and supported Latin American and Caribbean Area Studies Centers in the United States. The Center sponsors and coordinates a wide range of activities to promote both student and community awareness and study of the Americas, including lectures and seminars on such varied topics as the historical and ideological aspects of Caribbean society, the role of the opposition in Latin America, Peronism, human rights, migration and U.S. foreign policy in the Americas.

The Latin American and Caribbean Center also promotes and supports faculty research on Latin America and the Caribbean. During the past two years, area studies faculty have conducted research in Argentina, Barbados, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Guatemala, Jamaica, Mexico, Peru, Trinidad and Venezuela with Center funding.

An important component of the Latin American and Caribbean studies Program is the Library. During the past five years, the Latin American and Caribbean acquisitions program has concentrated on establishing a sound resource base for undergraduate research and study. Holdings on the region range from primary and secondary source materials to maps, slides and films, and periodicals.

The Center publishes a newsletter (available upon request) which describes on-going seminars, lectures and courses offered in conjunction with the Certificate Program. Papers and paper dialogues are periodically published and are also available on request.

#### *Certificate Requirements:*

(Total of 18 semester hours)

1. A minimum of 9 semester hours with a grade of "C" or better in courses certified by the program.
2. The introductory language sequence in Spanish, Portuguese or French, or exemption through demonstrated proficiency as determined by the Department of Modern Languages. The language sequence will not count toward the 18 semester hour requirement.
3. A requirement of 3 semester hours of independent study under faculty supervision during which a research paper will be written.
4. Courses must be taken from at least three different departments.
5. After fulfilling all requirements, students will participate in a colloquium with the faculty to discuss their research.

The following courses fulfill Certificate requirements. These courses should be understood as a partial list; students should consult with the Director of the Certificate Program about current course offerings.

<b>ANTHROPOLOGY</b>		LAH 4511	Order and Revolution in Argentina
ANT 3144	Prehistory of the Americas	LAH 4932	Topics in Latin American History
ANT 3251	Peasant Society	EDF 4521	Topics in Latin American History
ANT 3435	The Individual in Anthropology	HIS 4306	Topics in Latin American History
ANT 4324	Many Mexicos	<b>INTERNATIONAL BUSINESS</b>	
ANT 4328	Maya Civilization	MAN 3602	International Business
ANT 4332	Latin America	MAN 4600	International Management
ANT 4334	Comparative Latin American Cultures	MAN 4610	International and Comparative Industrial Relations
ANT 4340	Cultures of the Caribbean	<b>INTERNATIONAL RELATIONS</b>	
ANT 4343	Cuban Culture and the Revolution	CPO 3326	Population and Geography of the Caribbean
<b>EARTH SCIENCES</b>		GEA 3400	Population and Geography of Latin America
GLY 3157	Elements of Caribbean Geology	INR 3245	International Relations of Latin America
GLY 4190	Caribbean Earth Sciences Seminar	INR 3246	International Relations of the Caribbean
GLY 4792	Caribbean Mineral Resources Field Trip	INR 4247	Caribbean Regional Relations
GLY 5620	Caribbean Stratigraphic Micropaleontology	<b>MODERN LANGUAGES</b>	
GLY 5793	Caribbean Shallow-Marine Environments	FRE 3500	Civilization I (Latin American course)
<b>ECONOMICS</b>		SPN 3500	Civilization I (Latin American course)
ECS 3402	The Political Economy of South America	FRE 4501	Civilization II (Latin American course)
ECS 3440	Economics of Central America	SPN 4501	Civilization II (Latin American course)
ECS 4013	Economic Development	FRW 3520	Prose and Society (Latin American course)
ECS 4403	The Latin American Economies	SPW 3520	Prose and Society (Latin American course)
ECS 4404	Economic Integration-Latin America	FRW 3580	Intellectual History (Latin American course)
ECS 4430	The Economic Development of Cuba — Past and Present	SPW 3580	Intellectual History (Latin American course)
ECS 4432	Economic Integration — Caribbean	POW 4390	Special Topics (Latin American course)
ECS 4433	Economics of the Caribbean	<b>PHILOSOPHY AND RELIGIOUS STUDIES</b>	
ECO 4733	Multinational Corporation	PHH 3042	Latin American Philosophies
<b>EDUCATION</b>		REL 4481	Contemporary Latin American Religious Thought
EDF 5710	National Education Systems: A Comparative Analysis	<b>POLITICAL SCIENCE</b>	
EDF 5720	Latin American Education: A Historical and Contemporary Overview	CPO 3303	Government and Politics of South America
EDF 5789	Intercultural Education: National and International Perspectives	CPO 3304	Theories of Latin American Politics
<b>HISTORY</b>		CPO 3323	Government and Politics of the Caribbean
LAH 3410	Mexico and the Caribbean	CPO 3333	Government and Politics of Central America
LAH 3482	Cuba from Bourbons to Castro	CPO 4005	Topics in Comparative Politics
LAH 4132	The Formation of Latin America	CPO 4055	Authoritarianism
LAH 4133	Spain in America	CPO 4327	Topics in Caribbean Politics
LAH 4201	Latin America: The 19th Century	CPO 4360	Cuban Politics
LAH 4300	20th Century Latin America	INR 4244	Latin America in International Politics
LAH 4474	Topics in Caribbean History		

**PSYCHOLOGY**

SOP 4004 Social Psychology in Latin America

**SOCIOLOGY**

SOC 4332 Latin American and Caribbean Social Structures

SOC 4490 Area Studies (Latin American and/or Caribbean)

SOC 4613 Third World Theory

SOC 4746 Social Conflict in Multi-Ethnic Societies

## Linguistic Studies Certificate Program

Director: Lynn Berk (English)

Coordinating Committee: Virginia Gathercole (English), John Jensen (Modern Languages), David Jeuda (Modern Languages), Reinaldo Sanchez (Modern Languages), George Kovacs (Philosophy), John Stacek (Education-TESOL), Paul Foss (Psychology).

LOCATION: Tamiami Campus Only.

The University does not offer an undergraduate degree in linguistic studies, but it does provide a Certificate acknowledging that a student has demonstrated competence in course work pertaining to the study of linguistics. This Certificate is designed to meet the needs of those who have a general interest in linguistic studies, as well as those for whom work in linguistics would assist in career planning or advancement.

A student can acquire a Certificate in Linguistic Studies by fulfilling the following requirements:

1. The successful completion of at least six courses in linguistics or linguistic-related courses. These courses are listed below.
2. Courses must be selected from at least two different departments. It is recommended that courses be selected from three departments. Students should consult their Certificate advisor in selecting courses.
3. With the advice of the Coordinating Committee, the student is encouraged to attain some degree of proficiency in a language other than his/her native language.

In addition to the requirements noted above, all of the requirements for obtaining a bachelor's degree in the College of Arts and Sciences or in one of the professional schools must be met, including the majors and minors appropriate to that degree.

A Coordinating Committee, representing various fields and consisting of faculty engaged in the teaching of one or more courses in linguistic studies will advise students and grant the Certificate.

A student wishing to earn a Linguistics Studies Certificate will choose courses from the following list of offerings:

**Definition of Prefixes**

FOL — Foreign Languages; FRE — French; LIN — Linguistics; MHF — Mathematics, History & Foundations; PHI — Philosophy; SPN — Spanish; POR — Portuguese.

**Required Courses:**

1. LIN 3010 Introduction to General Linguistics (taught by Modern Languages and English) or SPN 3733 — General Linguistics (taught in Spanish) or FRE 3700 — General Linguistics (taught in French)
2. LIN 4341 — Modern English Grammar or FRE 4800 — Contrastive Morphology or SPN 4800 — Contrastive Morphology
3. Four (4) of the following courses:
  - LIN 4621 — Black English
  - LIN 4403 — Applied Linguistics (English)
  - LIN 4341 — Modern English Grammar
  - LIN 4136 or 5146 — Historical Linguistics
  - LIN 5107 — History of the English Language
  - LIN 5342 — Advanced Syntax
  - LIN 4221 or 5222 — General Phonology
  - LIN 4330 or 5331 — General Morphology and Syntax
  - LIN 4801 or 5805 — Semantics
  - FOL 3732 or 5735 — Romance Linguistics
  - FRE 3705 — Applied Linguistics (in French)
  - FRE 3780 — French Phonetics
  - FRE 3820 — Dialectology (in French)
  - FRE 3840 — History of the French Language
  - FRE 4791 — Contrastive Phonology (French/English)
  - FRE 4800 — Contrastive Morphology (French/English)
  - FRE 4562 or 5565 — Studies in Bilingualism (French/English)
  - FRE 5730 — Special Topics in French Linguistics
  - LIN 3010 — Introduction to General Linguistics
  - LIN 3200 — Phonetics
  - LIN 3400 — Applied Linguistics (Modern Languages)
  - LIN 3610 — Dialectology
  - LIN 4226 — Contrastive Phonology
  - LIN 4333 — Contrastive Morphology
  - LIN 4418 — Problems in Language Learning
  - LIN 4620 or 5625 — Studies in Bilingualism
  - LIN 5934 — Special Topics in Linguistics
  - POR 3930 — Special Topics in Portuguese Language/Linguistics
  - SPN 3705 — Applied Linguistics (in Spanish)
  - SPN 3780 — Spanish Phonetics
  - SPN 3820 — Dialectology (in Spanish)
  - SPN 3840 — History of the Spanish Language
  - SPN 4562 or 5565 — Studies in Bilingualism (Spanish/English)
  - SPN 4790 — Contrastive Phonology (Spanish/English)
  - SPN 4800 — Contrastive Morphology (Spanish/English)
  - SPN 4822 — Hispanic-American Sociolinguistics
  - SPN 4828 — Dialectology of the Spanish Caribbean

SPN 5930 — Special Topics in Spanish Linguistics  
 LIN 4701 — Psychology of Language  
 LIN 4710 — Language Acquisition  
 PHI 4221 — Philosophy of Language  
 PHI 4222 — Philosophy of Dialogue  
 MHF 4302 — Mathematical Logic

## Marine Science Certificate Program

Director: W. M. Goldberg (Biological Sciences)  
 Coordinating Committee: J. Makemson (Biological Sciences) P. McLaughlin (Biological Sciences) F. Maurrasse (Physical Sciences) J. Sheldon (Physical Sciences) A. Thorhaug (Biological Sciences) M. Tracey (Biological Sciences)

LOCATION: Tamiami Campus Only

The Marine Science Program is designed to meet the needs of students whose general interests are geared to the natural sciences, environmental sciences or engineering. The traditional disciplines of biology, chemistry, physics and geology are reflected in the four courses required for the Certificate in Marine Sciences. The broad background, in turn, prepares students for work in technical fields, for advanced graduate work, or for secondary school teaching. The Certificate is awarded to both degree and non-degree seeking students who have successfully completed the requirements listed below.

**Definition of Prefixes**

EVS — Environmental Sciences; GLY — Geology; MCB — Microbiology; OCB — Biological Oceanography; OCC — Chemical Oceanography; OCE — Oceanography; ZOO — Zoology.

**Certificate Requirements:**

LOWER OR UPPER DIVISION

**PREPARATION:**

2 semesters of inorganic chemistry with laboratory; 2 semesters of biological sciences with laboratory.

UPPER DIVISION PROGRAM.\*

**Required Courses:**

	<i>Semester Hours</i>
OCB 4010 Biological Oceanography	3
OCB 4674L Techniques in Biological Oceanography	1
GLY 4730 Marine Geology	3
GLY 4730L Marine Geology Lab	1
OCE 3014 Physical Oceanography	3
OCC 3002 Chemical Oceanography	3
OCC 3002L Chemical Oceanography Lab	1
	15

**Plus one of the Following Electives:**

MCB 5735+L Marine Microbiology	3 + 1
GLY 5793 Caribbean Shallow-Marine Environments	3
ZOO 3253+L Marine Invertebrate Zoology	3 + 1

OCB 5635+L Coral Reef Ecology 3 + 1  
 ZOO 5625+L Biology of  
 Crustaceans 3 + 1

\*All required courses require a grade of "C" or better.

ACC 3300	Accounting for Decisions	3
ARC 3127C	Graphic Communication	3
LAA 3370C	Landscape Design I	3
		21

\*All required courses require a grade of "C" or better.

## Tropical Commercial Botany Professional Certificate Program

Director: David W. Lee (*Biological Sciences*)  
 Coordinating Committee: George Dalrymple (*Biological Sciences*), John Makemson (*Biological Sciences*), Martin Tracey (*Biological Sciences*).

LOCATION: Tamiami Campus Only.

This Certificate Program provides background in the plant sciences, principally for those with practical experience in horticulture. The curriculum is designed to give solid information on the plants being grown: their anatomy and morphology, reproduction, taxonomy, development and physiology. This background should prepare students for work in the more technical aspects of horticulture in South Florida. Those fulfilling its requirements, along with a B.S. degree in Biological Sciences or Environmental Studies, would have excellent preparation for post-graduate work in Botany or Horticulture.

### Definition of Prefixes:

ACC — Accounting; ARC — Architecture; BOT — Botany; ENY — Entomology; LAA — Landscape Architecture; PLP — Plant Pathology.

### Certificate requirements:

LOWER OR UPPER DIVISION PREPARATION:

General Biology or Botany, 4 credits minimal  
 General Chemistry, 4 credits minimal (equivalent to CHM 3030 + 3030L)

Organic Chemistry, 4 credits minimal (equivalent to CHM 3200 + 3200L)

Mathematics through College Algebra (such as MAC 3132)

Plant Morphology (BOT 3353C or similar course)

Practical Horticultural Experience (BSC 3949 Cooperative Education in Biology, 4 credits)

### UPPER DIVISION PROGRAM

#### Required Courses\*

	Semester	Hours
BOT 3663C	Tropical Botany	4
BOT 4504	Plant Physiology	3
BOT 4504L	Plant Physiology Laboratory	1
BOT 3723C	Taxonomy of Tropical Plants	4
ORH 4411C	Applied Horticultural Physiology	4
		16

#### Electives (2 of the below)

BOT 4314C	Plant Development	4
PLP 4001C	Plant Pathology	4
ENY 3004	General Entomology	3
ENY 3004L	General Entomology Lab	1

advised by the Director of the Certificate Program or, by mutual agreement, by another advisor of the students choice. Students are responsible for contacting their advisor on the progress of their course work and other matters related to completion of Certificate requirements.

### Course Listing:

The following list may be modified from time to time. The student should consult with his or her advisor about current course offerings.

#### Ancient-Medieval

EUH 3420 Greece and Rome  
 HIS 3001 Introduction to History  
 HUM 3225 The Ancient World  
 LIT 4401 Literature Among the Arts and Sciences\*\*  
 PHH 3100 Ancient Philosophy  
 PHH 3200 Medieval Philosophy  
 PHI 3401 Social and Political Philosophy\*  
 PHM 4400 Philosophy of Law\*  
 POT 3013 Ancient and Medieval Political Theory  
 POT 4930 Topics in Political Theory\*\*  
 POT 5934 Topics in Political Theory\*\*

#### Modern

ENL 4137 Shakespeare's Histories  
 ENL 4138 Shakespeare's Comedies  
 ENL 4139 Shakespeare's Tragedies  
 EUH 3142 Renaissance and Reformation  
 EUH 3452 French Revolution and Enlightenment  
 EUH 4200 Early Modern Europe 1500-1650  
 EUH 4286 Topics in European Intellectual History  
 LIT 3510 Themes in Literature  
 LIT 4401 Literature Among the Arts and Sciences\*\*  
 PHI 3401 Social and Political Philosophy\*  
 PHM 4400 Philosophy of Law\*  
 POT 3054 Modern Political Theory I  
 POT 4204 American Political Thought\*  
 POT 4930 Topics in Political Theory\*\*  
 POT 5934 Topics in Political Theory\*\*  
 SOC 4640 Intellectual Precursors of Sociology

#### Contemporary

AMH 3331 American Intellectual History  
 AMH 3332 American Intellectual History  
 ANT 3086 Anthropological Theories  
 ECO 3303 The Development of Economic Thought

## Western Social and Political Thought Certificate Program

Director: Brian Nelson (*Political Science*)  
 Coordinating Committee: Charles Elkins (*English*), Steven Fjellman (*Anthropology/Sociology*), Bruce Hauptli (*Philosophy/Religion*), Antonio Jorge (*International Relations*), Eric Leed (*History*), Barry Levine (*Sociology*).

LOCATION: Tamiami Campus Only.

The Certificate Program provides interested students with a broad background in the history of western social and political thought. As such, the Certificate student will be expected to take courses from a variety of disciplines and at least three tutorials. Each tutorial will concentrate on one prescribed book which will be the same for all students. At the beginning and end of each semester the students will meet as a group with the instructors in the Program to discuss the different perspectives which they have developed on the common subject matter.

### Course Requirements:

A total of 5 courses in prescribed Certificate courses and three tutorials with a grade of C or better:

1. 4 courses in three historical eras (Ancient-Medieval, Modern, and Contemporary) from at least three different departments (Economics, English, History, Philosophy/Religion, Political Science, Sociology/Anthropology).
2. IDS 4920, Liberal Studies Colloquium on "Visions of Order and Revolt." (Under exceptional circumstances another course may be substituted with the advisors approval).
3. Three independent study tutorials taken in three blocs.

### Admission to the Program:

Admission to the program will be by invitation from a member of the certificate faculty, or by request from the student. In either case, final approval for admission rests with the Coordinating Committee of the Certificate Program. GPA, intellectual interests, and academic potential will be the criteria considered for admission to the Program.

### Advising

The student's advisor will be the designated Certificate representative in his or her major. It is the function of the Certificate advisor to aid students in the selection of relevant courses, to insure that all Certificate requirements have been completed before graduation, and to assign the tutorial grades. Students who are majoring in a discipline other than those listed will be

ECO 4307 Radical Political Economy  
 EUH 4286 Topics in European Intellectual History

HIS 3244 History of Communism

LIT 4401 Literature Among the Arts and Sciences\*\*

PHI 3401 Social and Political Philosophy\*

PHM 4203 Contemporary Social and Political Issues

PHM 4400 Philosophy of Law\*

PHP 4510 Marxism

POT 3064 Contemporary Political Theory

POT 4055 Modern Political Theory II

POT 4302 Political Ideologies

POT 4204 American Political Thought\*

POT 4930 Topics in Political Theory\*\*

POT 5934 Topics in Political Theory\*\*

SOC 3001 The Basic Ideas of Sociology

SOC 3610 Sociological Theories

SOC 4221 Political Sociology

SOC 4611 Advanced Social Theory

\*Thematic Courses that cover more than one historical period.

\*\*Depending on subject taught, these courses may cover one or more than one historical period. Students should consult their advisor before enrolling.

In any particular semester, appropriate special topics courses may be taken as electives with the approval of the Director.

## College of Arts and Sciences

Dean James A. Mau

Associate Dean, Budget and Development Arthur W. Herriott

Associate Dean, Curriculum and Advisement Marcelle Welch

Associate Dean, Bay Vista Charles Elkins

Chairpersons: Biological Sciences Martin Tracey  
 Economics Jorge Salazar-Carrillo

English Donald Watson  
 Environmental Studies George Dalrymple

History Howard Kaminsky  
 Humanities Kenneth Henley

International Relations Ralph Clem  
 Liberal Studies John Stack, Jr.

Mathematical Sciences Toby Berk  
 Modern Languages John Jensen

Performing Arts Philip Fink  
 Philosophy and Religion James Huchingson

Physical Sciences Leonard Keller  
 Political Science John Stack, Jr.  
 Psychology Jacob Gewirtz

Sociology and Anthropology Anthony Maingot  
 Visual Arts Frank Wyroba

Breslin, Thomas A., Ph.D. (University of Virginia), Director, Sponsored Research, Associate Professor, International Relations  
 Brown, Jerry, Ph.D. (Cornell University), Associate Professor, Sociology and Anthropology

Buckley, Ralph, M.F.A. (Maryland Institute), Assistant Professor, Visual Arts

Burke, William, M.F.A. (State University of New York at New Paltz), Associate Professor, Visual Arts

Carvajal, Manuel, Ph.D. (University of Florida), Associate Professor, Economics

Chen, Chun-Fan, Ph.D. (University of Michigan), Associate Professor, Biological Sciences

Chung, Bongkil, Ph.D. (Michigan State University), Assistant Professor, Philosophy and Religion

Church, Philip, M.F.A. (University of California at Irvine), Assistant Professor, Performing Arts

Clem, Ralph, Ph.D. (Columbia University), Chairperson and Associate Professor, International Relations

Comfort, John C., Ph.D. (Case Western Reserve University), Associate Professor, Mathematical Sciences

Couper, James, M.A. (Florida State University), Associate Professor, Visual Arts

Crosby, James, Ph.D. (Yale University), Professor, Modern Languages

Cruz, Robert, B.A. (Georgetown University), Instructor, Economics

Cuervo, Leon, Ph.D. (University of Maryland), Associate Professor, Biological Sciences

Dalrymple, George, Ph.D. (University of Toronto), Director of Environmental Studies and Associate Professor, Biological Sciences

de Alonso, Irma, Ph.D. (University of York, England), Associate Professor, Economics

Draper, Greenville, Ph.D. (University of the West Indies), Assistant Professor, Physical Sciences

Duncan, Richard, M.F.A. (Southern Illinois University), Assistant Professor, Visual Arts

Dunn, Marvin, Ph.D. (University of Tennessee), Associate Professor, Psychology

Dwyer, Richard, Ph.D. (University of California at Los Angeles), Professor, English

Elkins, Charles, Ph.D. (Southern Illinois University), Associate Dean, Bay Vista Campus and Associate Professor, English

Elkins, Mary Jane, Ph.D. (Southern Illinois University), Assistant Professor, English

Escovar, Luis, Ph.D. (Pennsylvania State University), Assistant Professor, Psychology

Fink, Philip, Ph.D. (University of Miami), Chairperson and Professor, Performing Arts

Finley, Gordon, Ph.D. (Harvard University), Professor, Psychology

Fisher, Robert, Ph.D. (University of Kansas), Professor, Mathematical Sciences

Fjellman, Stephen, Ph.D. (Stanford University), Associate Professor, Sociology and Anthropology

Flanders, James, Ph.D. (Vanderbilt University), Associate Professor, Psychology

## Faculty

Algaze, Benjamin, Ph.D. (University of South Florida), Assistant Professor, Psychology

Antrim, Harry, Ph.D. (University of Florida), Professor, English

Archer, Ewart, Ph.D. (University of Texas at Austin), Assistant Professor, International Relations

Arnold, St. George Tucker, Jr., Ph.D. (Stanford University), Associate Professor, English

Barton, David, Ph.D. (University of Cambridge, United Kingdom), Associate Professor, Mathematical Sciences

Belzer, Jack, B.S.E.E. (University of Pittsburgh), Distinguished Lecturer, Mathematical Sciences

Berk, Lynn, Ph.D. (Purdue University), Associate Professor, English

Berk, Toby, Ph.D. (Purdue University), Associate Professor, Mathematical Sciences

Blaney, Nancy, Ph.D. (University of Texas), Assistant Professor, Psychology

Blum, Milton, Ph.D. (New York University), Professor, Psychology

Bone, Richard, Ph.D. (University of West Indies, Jamaica), Lecturer, Physical Sciences

Boothoo, Ken, Ph.D. (University of the West Indies, Jamaica), Associate Professor, International Relations

Brain, Carlos, Ph.D. (West Virginia University), Assistant Professor, Mathematical Sciences

## Women's Studies Certificate Program

Director: Joyce Shaw Peterson, (History)

Coordinating Committee: Mary Volcansek, (Political Science), Nancy Blaney, (Psychology), Steve Fjellman, (Sociology / Anthropology), Ann Marie Rizzo (Public Administration, Public Affairs), Sybil DeGroot, (Industrial Systems, Technology).

LOCATION: Tamiami and Bay Vista

A student may acquire the Certificate in Women's Studies by fulfilling the following requirements:

Required Core Courses:

WOH 3280 History of Women  
 SOP 3742 Psychology of Women  
 PUP 4323 Politics of Contemporary Women's Issues

Three (3) Electives from the following:

ANT 3302 Male and Female: Sex Roles and Sexuality  
 AMH 3560 History of Women in the United States  
 LIT 3411 Women and Literature  
 CCJ 4663 Women, Crime and the Criminal Justice System  
 SOW 4621 Crises in the Lives of Women  
 PAD 5435 Administrator and the Role of Women,  
 OR  
 ETI 4691 Women in Industry

- Flexser, Arthur, Ph.D. (*Stanford University*), Assistant Professor, Psychology
- Foos, Paul, Ph.D. (*Bowling Green State University*), Assistant Professor, Psychology
- Forbes, Barbara, Ph.D. (*University of California at Berkeley*), Assistant Professor, Visual Arts
- Fox, Tillie, M.S. (*University of Miami*), Instructor, Mathematical Sciences
- Gathercole, Virginia, Ph.D. (*University of Kansas*), Director of English Language Skills Center and Assistant Professor, English
- Ghai, Gauri, Ph.D. (*Iowa State University*), Associate Professor, Mathematical Sciences
- Gewirtz, Jacob, Ph.D. (*State University of Iowa*), Chairperson and Professor, Psychology
- Girden, Edward, Ph.D. (*University of Illinois*), Distinguished Professor, Psychology
- Goldberg, Walter, Ph.D. (*University of Miami*), Associate Professor, Biological Sciences
- Gonzalez-Reigosa, Fernando, Ph.D. (*Florida State University*), Associate Professor, Psychology
- Gorman, Susan, Ph.D. (*University of Maryland*), Instructor, Mathematical Sciences
- Gotterer, Malcolm, D.B.A. (*Harvard University*), Special Assistant to the Vice President of Academic Affairs for Academic Computing and Professor, Mathematical Sciences
- Gottlieb, Joel, Ph.D. (*University of California at Riverside*), Associate Professor, Political Science
- Guers-Villate, Yvonne, Ph.D. (*Bryn Mawr College*), Professor, Modern Languages
- Hall, James, Ph.D. (*University of Utah*), Associate Professor, English
- Hann, Robert, Ph.D. (*Temple University*), Assistant Professor, Philosophy and Religion
- Hardy, Kenneth, Ph.D. (*Tulane University*), Associate Professor, Physical Sciences
- Hauptli, Bruce, Ph.D. (*Washington University*), Assistant Professor, Philosophy and Religion
- Henley, Carol, M.S. (*University of Miami*), Instructor, Mathematical Sciences
- Henley, Kenneth, Ph.D. (*University of Virginia*), Director of Humanities and Associate Professor, Philosophy and Religion
- Herriott, Arthur, Ph.D. (*University of Florida*), Associate Dean, College of Arts and Sciences and Professor, Physical Sciences
- Howell, Ina Parks, M.S. (*University of South Florida*), Assistant Professor, Mathematical Sciences
- Huchingson, James, Ph.D. (*Emory University*), Chairperson and Assistant Professor, Philosophy and Religion
- Jacobs, Ellen, M.S. (*Illinois Institute of Technology*), Associate Professor, Visual Arts
- Jensen, John, Ph.D. (*Harvard University*), Chairperson and Associate Professor, Modern Languages
- Jeuha, David, A.B.D. (*Northwestern University*), Instructor, Modern Languages
- Jhabvala, Farrokh, Ph.D. (*Fletcher School of Law and Diplomacy*), Director of International Studies and Associate Professor, International Relations
- Johnson, Paulette, Ph.D. (*Kansas State University*), Assistant Professor, Mathematical Sciences
- Jorge, Antonio, Ph.D. (*Villanova University*), Professor, International Relations
- Kaminsky, Howard, Ph.D. (*University of Chicago*), Chairperson and Professor, History
- Kandel, Randy, Ph.D. (*City University of New York*), Associate Professor, Sociology and Anthropology
- Kaufman, Arie, Ph.D. (*Ben Gurion University*), Assistant Professor, Mathematical Sciences
- Keller, Leonard, Ph.D. (*Yale University*), Chairperson and Associate Professor, Physical Sciences
- Kovacs, George, Ph.D. (*University of Louvain*), Professor, Philosophy and Religion
- Kraynek, William, Ph.D. (*Carnegie-Mellon University*), Associate Professor, Mathematical Sciences
- Kurtines, William, Ph.D. (*Johns Hopkins University*), Associate Professor, Psychology
- Landrum, John, Ph.D. (*University of Southern California at Los Angeles*), Assistant Professor, Physical Sciences
- Lee, David, Ph.D. (*Rutgers University*), Assistant Professor, Biological Sciences
- Leed, Eric, Ph.D. (*University of Rochester*), Associate Professor, History
- Leeds, Marie, M.A. (*University of Miami*), Assistant Professor, Performing Arts
- Levine, Barry, Ph.D. (*New School for Social Research*), Associate Professor, Sociology and Anthropology
- Levitt, Mary, Ph.D. (*Syracuse University*), Assistant Professor, Psychology
- Liassatos, Pongas, Ph.D. (*University of Pennsylvania*), Associate Professor, Economics
- Lilie, Joyce R., Ph.D. (*John Hopkins University*), Associate Professor, Political Science
- Lipner, Kenneth, Ph.D. (*Rutgers University*), Assistant Professor, Economics
- Lowery, Shearon, Ph.D. (*Washington State University*), Assistant Professor, Sociology and Anthropology
- MacDonald, Charles, Ph.D. (*University of Virginia*), Assistant Professor, International Relations
- Mackey, Wesley, Ph.D. (*University of Manitoba*), Assistant Professor, Mathematical Sciences
- Maguire, William, M.S. (*Illinois Institute of Technology*), Assistant Professor, Visual Arts
- Maingot, Anthony, Ph.D. (*Florida State University*), Chairperson and Professor, Sociology and Anthropology
- Makemson, John, Ph.D. (*Washington State University*), Associate Professor, Biological Sciences
- Martinez, Zaida, M.A. (*Pennsylvania State University*), Instructor, Physical Sciences
- Mau, James A., Ph.D. (*University of California at Los Angeles*), Dean, College of Arts and Sciences and Professor, Sociology and Anthropology
- Maurasse, Florentin, Ph.D. (*Columbia University*), Associate Professor, Physical Sciences
- Mazer, Paul, M.F.A. (*Pennsylvania State University*), Associate Professor, Performing Arts
- McElfresh, Clair, D.M.A. (*Case Western Reserve University*), Director of Lower Division and General Education, Director of Faculty Scholars and Professor, Performing Arts
- Mendoza, Ramon, Ph.D. (*Frei Universitat, Berlin*), Professor, Modern Languages
- Mintz, Stephan, Ph.D. (*John Hopkins University*), Associate Professor, Physical Sciences
- Moncarz, Raul, Ph.D. (*Florida State University*), Professor, Economics
- Moore, Howard, Ph.D. (*University of Arkansas*), Professor, Physical Sciences
- Morgan, Dahlia, Diplomate of College Teaching (*University of Florida*), Director of Art Gallery and Lecturer, Visual Arts
- Moran, Gary, Ph.D. (*Katholieke University, Nijmegen, Netherlands*), Associate Chairperson and Professor, Psychology
- Murison, Gerald, Ph.D. (*John Hopkins University*), Associate Professor, Biological Sciences
- Navlakha, Jai, Ph.D. (*Case Western Reserve University*), Assistant Professor, Mathematical Sciences
- Nelson, Brian, Ph.D. (*University of California at Riverside*), Associate Professor, Political Science
- Obata, Yoshihiro, Ph.D. (*Michigan State University*), Associate Professor, Performing Arts
- Okubo, Case, Ph.D. (*University of Guelph*), Assistant Professor, Biological Sciences
- Osborne, William, Jr., Ph.D. (*Emory University*), Associate Professor, Sociology and Anthropology
- Parker, Janet, Ph.D. (*University of California at Berkeley*), Associate Professor, Psychology
- Parker, John, Ph.D. (*University of California at Berkeley*), Associate Professor, Physical Sciences
- Peterson, Brian, Ph.D. (*University of Wisconsin*), Associate Professor, History
- Peterson, Joyce, Ph.D. (*University of Wisconsin*), Assistant Professor, History
- Pinto, Carmela A., Ph.D. (*Michigan State University*), Assistant Professor, English
- Pyron, Darden, Ph.D. (*University of Virginia*), Assistant Professor, History
- Ritter, David, Ph.D. (*Louisiana State University*), Assistant Professor, Mathematical Sciences
- Rock, Howard, Ph.D. (*New York University*), Associate Professor, History
- Rohm, Joseph, Ph.D. (*Florida State University*), Associate Professor, Performing Arts
- Rosenberg, Mark, Ph.D. (*University of Pittsburgh*), Director of Latin American and Caribbean Center and Associate Professor, Political Science
- Rotton, James, Ph.D. (*Purdue University*), Associate Professor, Psychology
- Roy, Dev, Ph.D. (*University of Rochester*), Assistant Professor, Mathematical Sciences
- Rubenberg, Cheryl, Ph.D. (*University of Miami*), Assistant Professor, International Relations
- Rubin, Richard, Ph.D. (*Washington University*), Associate Professor, Mathematical

## Sciences

Salazar-Carrillo, Ph.D. (*University of California at Berkeley*), Chairperson and Professor, Economics

Sanchez, Reinaldo, Ph.D. (*Washington University*), Associate Professor, Modern Languages

Saper, Bernard, Ph.D. (*University of California at Los Angeles*), Professor, Psychology

Sauleda, Orlando, M.S. (*Florida International University*), Instructor, Mathematical Sciences

Schwartz, Richard, Ph.D. (*University of Chicago*), Assistant Professor, English

Shapiro, Samuel, Ph.D. (*Rutgers University*), Professor, Mathematical Sciences

Sheldon, John, Ph.D. (*Texas A&M University*), Professor, Physical Sciences

Shershin, Anthony, Ph.D. (*University of Florida*), Associate Professor, Mathematical Sciences

Slifker, James, Ph.D. (*University of Notre Dame*), Assistant Chairperson and Associate Professor, Mathematical Sciences

Stack, John, Jr., Ph.D. (*University of Denver*), Director, Liberal Studies Chairperson and Assistant Professor, Political Sciences

Stayman, Andree, M.A. (*University of Miami*), Instructor, Modern Languages

Stein, Abraham, Ph.D. (*University of Southern California*), Professor, Biological Sciences

Stepick, Alex, Ph.D. (*University of California at Irvine*), Assistant Professor, Sociology and Anthropology

Sugg, Richard, Ph.D. (*University of Florida*), Associate Professor, English

Szuchman, Mark, Ph.D. (*University of Texas*), Assistant Professor, History

Thomas, Babatunde, Ph.D. (*Indiana University*), Associate Professor, Economics

Todd, Therald, Ph.D. (*University of Oregon*), Associate Professor, Performing Arts

Tracey, Martin, Ph.D. (*Brown University*), Chairperson and Associate Professor, Biological Sciences

Vagramian-Nishanian, Violet, Ph.D. (*University of Miami*), Associate Professor, Performing Arts

Vickers, William, Ph.D. (*University of Florida*), Assistant Professor, Sociology and Anthropology

Volcansek, Mary, Ph.D. (*Texas Tech University*), Director, Lower Division Advising and Associate Professor, Political Science

Warren, Christopher, M.A. (*Lehigh University*), Instructor, Political Science

Washington, J. Charles, D.A. (*Catholic Univer-*

*sity*), Director, Diagnostic and Testing Center, Lecturer, English

Watson, Donald, Ph.D. (*University of Virginia*), Chairperson and Associate Professor, English

Watson-Espenser, Maida, Ph.D. (*University of Florida*), Associate Professor, Modern Languages

Waugh, Butler, Ph.D. (*Indiana University*), Professor, English

Welch, Marcelle, Ph.D. (*University of Michigan*), Associate Dean, College of Arts and Sciences and Assistant Professor, Modern Languages

Whidden, Matrid, M.Ed. (*Florida Technological University*), Instructor, Mathematical Sciences

Wilkins, Mira, Ph.D. (*Cambridge University*), Professor, Economics

Williams, Willie, Ph.D. (*Michigan State University*), Associate Professor, Mathematical Sciences

Wyroba, Francis, M.A. (*Columbia University*), Chairperson and Professor, Visual Arts

Yamaguchi, Ryuji, Ph.D. (*McGill University*), Assistant Professor, Mathematical Sciences

Yudin, Florence, Ph.D. (*University of Illinois*), Professor, Modern Languages





# School of Business and Organizational Sciences

# School of Business and Organizational Sciences

The School of Business and Organizational Sciences offers academic programs leading to the undergraduate degree of *Bachelor of Business Administration* and the graduate degrees of *Master of Business Administration*, *Master of International Business*, and *Master of Science in Management*.

The School is organized into the Departments of Accounting, Finance and International Business, Management, and Marketing. Complete undergraduate and Master's level programs are offered at the Tamiami Campus while selected courses are offered at the Bay Vista Campus. At the Tamiami Campus there is a central undergraduate advising unit (DM 361) and a Graduate Coordinator (DM 362B). Advisors also are available at the Bay Vista Campus.

## Programs of Study

Every student must have a program of study completed by the end of his or her first semester. Entering students should promptly make a program counseling appointment by calling (305) 554-2781 at the Tamiami Campus or (305) 940-5870 at the Bay Vista Campus. At the time of the appointment the appropriate counselor will assist the student in completing a formal program of study. (A completed program of study is one that has been filled out and signed by the student, the counselor, and the appropriate Department Chairperson). Questions of interpretation regarding course or degree requirements will be resolved at the time the program of study is developed. If, for some reason, a program of study is not completed at least two semesters before a student is expected to graduate, the student may not be permitted to register for future classes.

Please note that no more than 15 semester hours of undergraduate credit completed by a special student may be applied toward a degree. Additionally, students who register for any graduate business course must be formally admitted to a graduate degree program at the University or receive approval from a graduate program counselor.

## Academic Standards

1. SBOS undergraduates must earn a grade of "C" or better in all courses within their major(s).
2. SBOS undergraduates will be required to pass a Readiness Examination in the areas of English, statistics, and accounting. Students must pass the Readiness Examination in the areas noted as a prerequisite for registration in any core or major course.
3. Undergraduate and graduate students may not enroll more than twice in any SBOS course without the written permission of

the Dean. This permission will be granted only in those exceptional cases where failure to complete a course successfully is demonstrated to be unrelated to classroom performance.

4. All SBOS students must satisfy the requirements of their respective programs of study and, additionally, must satisfy all University requirements for graduation.
5. See University General Information regarding Academic Warning, Probation, and Dismissal.

## Undergraduate Study: General Information

A student entering into a Bachelor's program of the School is required to have completed the *Associate of Arts* degree or its equivalent, and is encouraged to have some knowledge of accounting, mathematics, computer programming, and economics (accounting majors should also have coursework in the area of calculus and logic). The broad liberal arts exposure inherent in the *Associate of Arts* degree usually enables a student to complete the *Bachelor of Business Administration* requirements in the equivalent of two years, and to take most of the professional work with the School of Business and Organizational Sciences. This professional work includes:

- 1) Pre-core courses where necessary;
- 2) Certain required courses designed to provide the student with a common body of knowledge, including:
  - a. a background of concepts and processes in the marketing, production, and financing of goods and services in the business enterprise and related organizations;
  - b. a background of the economic and legal environment as it pertains to profit and non-profit organizations along with ethical, social, and political influences;
  - c. a basic understanding of concepts and applications in accounting, quantitative methods, computers, and management information systems;
  - d. a study of communication theory, behavior, and interpersonal communications;
  - e. a study of administrative processes and decision-making under conditions of uncertainty, including policy analysis at the overall management level;
- 3) Courses required for the students major;
- 4) Approved elective courses.

The student entering an undergraduate program of the School of Business and Organizational Sciences is required to meet the following four standards:

- 1) 60 semester hours completed.
- 2) grade point average of 2.0 or above.
- 3) satisfaction of general University requirements for admission, including, in this case, the general education requirements. The general education requirements are: English composition (12) semester hours, humanities (6) semester hours, social science (6) semester hours, natural science (6) semester hours, mathematics (6) semester hours.

If a student has above a 2.0 GPA, he or she may

be deficient in 3 semester hours of general education credits and still be accepted into this program. All lower division deficiencies must be completed during the student's first two semesters at the University.

## Upper Division Transfer Credits

Previous credit may be considered acceptable for transfer toward upper level academic study in the School if the credit was earned within the last six (6) years, and was designated as junior-senior level credit at an accredited four year upper level institution, or can be validated by some acceptable measure to verify its equivalence. Students wishing to transfer to the School of Business and Organizational Sciences must be in good standing at their previous school or college.

## Credit-By-Examination

A student registered for a course in the School may, at the discretion of the instructor and Department Chairperson, and after presenting sufficient justification, may seek credit by examination. The special examination will be given by the course instructor, preferably during the first week of classes to allow registration for another course that academic semester. A grade of EM will be noted on the course grade roll at the end of the semester if the student, in the judgment of the professor, has passed the special examination.

## Undergraduate Majors

Major programs leading to the Bachelor's degree are offered in Accounting, Finance (including International Business, Insurance, and Real Estate), Management (including Personnel Management and Information Systems), and Marketing (including Transportation).

## Course Selection

Generally, a junior level student should concentrate on the 30 to 36 semester hours of core courses (and pre-core courses, if needed). Courses at the 4000 and 5000 levels are normally taken during the senior year, and the student must have the necessary background before enrolling.

## Change of Major

Any student changing to a new or revised major in the School of Business and Organizational Sciences must meet the requirements that exist at the time of the change.

## Residency Requirements

A student must complete his or her last 30 semester hours of course work at the University to qualify for the BBA degree from the School.

## Graduation Procedures

1. During the first year in the program, under-

graduate and graduate students develop and sign, along with their counselor and chairperson, advance standing forms and programs of study. This program of study becomes the basic contract between the School and the student, and is used in determining student eligibility for a degree.

2. Approximately four months prior to the expected graduation date, the student files an Application for Graduation with the Office of Registration and Records.
3. The Dean's Office, upon receipt of this application, has the appropriate faculty advisor review the student's record to determine that he or she has fulfilled, or is in the process of fulfilling, the courses required for graduation (as listed in the program of study).
4. If the student's degree progress is deemed satisfactory, the faculty advisor, Department Chairperson, and Dean certify the application for graduation, contingent upon satisfactory completion of course work taken as the student's final semester of study.

## Undergraduate Business Program Requirements

### LOWER DIVISION PREPARATION:

The following courses, in addition to the other requirements for the *Associate of Arts* degree, should be a part of the 60 semester hours of lower division coursework completed in order to enter these upper division majors: 6 semester hours of accounting; 6 semester hours of economics; 3 semester hours of college algebra; 3 semester hours of statistics; 3 semester hours of computer programming. If completed at Florida International University, this coursework will normally be taken *in addition* to the 60 semester hours of required upper division work.

**Computer Programming Proficiency Requirement:** The rapidly increasing need of the professional administrator for exposure to computer technology and terminology requires that fundamental experience in this area be achieved. Therefore, prior to enrollment in CIS 3000 (or ACC 4731), each student must demonstrate computer programming proficiency. This requirement may be completed in *any* of the following ways:

- Successful completion of a computer programming course at the lower division.
- Successful completion of COP 3172 — Basic Programming for Business.
- Self-study, or work experience. An examination is offered on a regular basis for students selecting this alternative.

Further details may be obtained from the undergraduate counselors.

### UPPER DIVISION PROGRAM:

Pre-Core Courses Required for Business Administration Students:		Semester Hours
*ACC 3300	Accounting for Decisions	3
COP 3172	Basic Programming for Business	3
*ECO 3003	Economics, Man & Society-Micro	3

ECO 3011	Economics, Man & Society-Macro	3
*STA 3132	Quantitative Methods for Administration	3

\*NOTE: STA 3132, ECO 3003, ECO 3011 and ACC 3300 will be waived if the student received an A, B, or C in the appropriate lower division courses. A student should see a counselor to determine whether these courses should or should not be added to the program of study. If a student has successfully completed comparable courses at the lower level, upper division credit will not be given for STA 3132, ECO 3003, ECO 3011 and ACC 3300.

### Core Courses Required for Business Administration Students:

		Semester Hours:
FIN 3403	Financial Management	3
MAN 3010	Organization and Management	3
MAR 3023	Marketing Management	3
**CIS 3000	Introduction to Information Systems	3
**ACC 3303	Accounting for Planning and Control	3
ECO 3432	Applied Macroeconomics	3
QMB 3150	Applications of Quantitative Methods in Business	3
MAN 3503	Managerial Decision Making	3
MAN 4521	Operations Management	3
MAN 3701	Business and Society	3
MAN 3602	International Business	3
MAN 4722	Policy Analysis	3
		<b>30-36</b>

\*\*These courses should *not* be taken by students majoring in accounting. (See model schedule for accounting majors).

Major: Required Credits	12-27
Approved Elective Credits	3-12

TOTAL (does not include deficiencies) 60  
NOTE: All electives must be approved in advance by the Counseling Office.

## Business Core Courses

As noted under SBOS General Information (Academic Standards), undergraduates must pass a Readiness Examination in the areas of English, Statistics, and Accounting as a prerequisite for registration in any core or major course. The core courses in the School Business are as follows:

FIN 3403 FINANCIAL MANAGEMENT — ACC 3300 or its equivalent.
MAN 3503 MANAGERIAL DECISION MAKING — College algebra, statistics, and QMB 3150 or its equivalent.
MAR 3023 MARKETING MANAGEMENT — None.
QMB 3150 APPLICATION OF QUANTITATIVE METHODS IN BUSINESS — STA 3132, or its equivalent, and college algebra.

CIS 3000 INTRODUCTION TO INFORMATION SYSTEMS computer programming proficiency requirement (COC I300 at Miami-Dade, COP 3172 at FIU).

ACC 3303 ACCOUNTING FOR PLANNING AND CONTROL — ACC 3300 or its equivalent.

MAN 4521 Operations Management — MAN 3503 and QMB 3150.

MAN 3010 ORGANIZATION AND MANAGEMENT — None

MAN 3701 BUSINESS AND SOCIETY — ECO 3003 and ECO 3011 or equivalent.

MAN 3602 INTERNATIONAL BUSINESS — ECO 3432.

ECO 3432 APPLIED MACROECONOMICS — ECO 3003 and ECO 3011 or equivalent.

MAN 4722 BUSINESS POLICY — Completion of all core course requirements. Course should be taken in student's last academic semester before graduation.

## Professional Accounting Majors

Charles A. Nickerson, *Professor and Chairperson*

Kwabena Anyane-Ntow, *Assistant Professor*  
Rolf Auster, *Professor*

Richard B. Byars, *Associate Professor*  
William L. Campfield, *Visiting Professor*

Jack L. Carter, *Assistant Professor*  
Lucia S. Chang, *Associate Professor*

Manuel Dieguez, *Instructor*  
Hassan Espahbodi, *Assistant Professor*

Reza Espahbodi, *Assistant Professor*  
Donald W. Fair, *Instructor and Assistant*

Dean  
Irving L. Fantl, *Professor*

Rosalie C. Hallbauer, *Associate Professor*  
Harvey S. Hendrickson, *Professor*

David Lavin, *Associate Professor*  
Myron S. Lubell, *Associate Professor*

Kenneth S. Most, *Professor*  
Leandro S. Nunez, *Instructor*

Robert B. Oliva, *Assistant Professor*  
Edward P. Phillips, *Assistant Professor*

Leonardo Rodriguez, *Associate Professor*  
and Dean

Lois Slutsky, *Instructor*  
Theodor Sokolowski, *Instructor*  
Doria Yeaman, *Lecturer*

The Bachelor's Degree program in accounting consists of two parts: the core (30 semester hours) and the concentration in accounting (30 semester hours).

Accounting majors must complete MAC 3233 (Calculus) and PHI 3100 (Logic) as prerequisite courses or present acceptable coursework in the areas of calculus and logic at the lower division level.

Required courses for an emphasis in Managerial Accounting are: ACC 4102, ACC 4122, ACC 4201, ACC 4301, ACC 4501, ACC 4522, ACC 4731, ACC 4348.

Required courses for an emphasis in Financial and Public Accounting are: ACC 4102, ACC 4122, ACC 4201, ACC 4301, ACC 4501, ACC 4522, ACC 4601, ACC 4731.

## Florida CPA Requirement

Completion of a Bachelor of Business Administration degree program with emphasis in accounting, while available, will not be accepted by the Florida State Board of Accountancy as fulfilling requirements to sit for the Certified Public Accounting Examination after August 1, 1983.

The law relating to the practice of public accounting (Chapter 473, Florida Statutes 1979) provides in Rule 21A-9.02, Concentrations in Accounting and Business, that:

(1) For purposes of section 473, F.S., if application for the Uniform CPA Examination is made prior to August 2, 1983, an applicant must have a baccalaureate degree from an accredited college or university with a major in accounting, or its equivalent, with a concentration in accounting and business subjects. A concentration in accounting and business is defined as an educational program that includes at least 18 semester hours or 27 quarter hours, or the equivalent, in accounting education above the elementary level and 27 semester or 40 quarter hours, or the equivalent, in general business education.

(2) For purposes of Section 473, F.S., if application is made after August 1, 1983, an applicant must have at least a baccalaureate degree or its equivalent, from an accredited college or university with a major in accounting, or its equivalent, plus at least 30 semester hours or 45 quarter hours, or the equivalent, in excess of those required for the baccalaureate degree including a total educational program with a concentration in accounting and business as follows:

(a) 36 semester or 54 quarter hours in accounting education which shall include not less than: 9 semester or 14 quarter hours in financial accounting, including cost accounting, 6 semester or 9 quarter hours in auditing and 6 semester or 9 quarter hours in accounting taxation, and

(b) 39 semester or 58 quarter hours in general business education.

(3) For purposes of this rule, accounting hours (other than elementary) above the minimum requirement may be substituted for general business hours.

## Model Schedule—Public Accounting Major

The following is a model schedule (with several options) that must be followed by the typical full-time student who (1) has completed all of the freshman-sophomore requirements, and (2) wishes to complete the undergraduate accounting program with emphasis in public accounting. Deviations from this schedule must be approved by the Chairperson of the Accounting Department. (The student possessing a non-business baccalaureate degree should consult an academic counselor for alternative programs that meet the Florida State Board of Accountancy requirements).

### First Year

Pre-Calculus Algebra English Composition  
English Composition Calculus I  
Social Science Humanities  
Natural Science Intro. to Logic  
Intro. to Data Processing

### Second Year

Princ. of Accounting I Princ. of Accounting II  
Princ. of Economics I Princ. of Economics II  
English Elective Business Statistics  
Natural Science Physical Education  
Intro. to Psychology or  
Social Science Health Maintenance  
Humanities

### Third Year

*Semester 1* *Semester 2*  
FIN 3403 ACC 4122  
QMB 3150 MAN 3503  
ACC 4102 MAR 3023  
ECO 3432 BUL 4111  
MAN 3010 MAN 3701

### Fourth Year

*Semester 1* *Semester 2*  
ACC 4301 ACC 4201  
ACC 4501 ACC 4522  
ACC 4601 ACC 4731  
BUL 4112 MAN 4521  
MAN 3602 MAN 4722

Note: Pre-core deficiencies must be completed in Semester 1 of the third year.

## Finance Major

George Simmons, *Distinguished Service Professor and Chairperson*

Alan Gart, *Professor*

Soga Ewedemi, *Assistant Professor*

Jean-Francois Hennart, *Associate Professor*

Arun Prakash, *Assistant Professor*

Emmanuel Roussakis, *Professor*

William Welch, *Associate Professor*

The Finance program leading to the BBA degree is designed to give the undergraduate student managerial finance skills in the areas of banking, corporate finance, investments, and financial markets. The program consists of:

(1) 36 semester hours of general business core courses

(2) 12 semester hours of finance core courses:

FIN 3414 Intermediate Finance

FIN 4304 Financial Markets and Institutions

FIN 4502 Security Analysis

FIN 4324 Commercial Bank Management

\*3) 9 semester hours of finance electives selected from any 4000 or 5000 level FIN prefixed courses or REE 5305 or REE 5207, and

\*4) A 3 semester hour free elective course. The prerequisite for FIN 3414 and all 4000 and 5000 level finance courses is FIN 3403.

\*International Business double majors are required to complete FIN 4611 International Finance and 3 additional 4000 or 5000 level International Business courses.

## Insurance Major

An insurance major is offered through the Department of Finance and International Business. An insurance major is required to take 15 semester hours of insurance courses at the 4000 level. For most students majoring in insurance the following five courses are recommended:

RMI 4015	Principles of Insurance
RMI 4212	Property Insurance I
RMI 4213	Property Insurance II
RMI 4220	Casualty Insurance I
RMI 4221	Casualty Insurance II

These five insurance courses have been approved by the State of Florida Insurance Commissioner's office to fulfill the educational requirements for taking the 2-20 license examination.

A student may, however, after consultation with his or her major advisor, choose to take other courses such as RMI 4115 — Life Insurance, RMI 4016 — Management of Insurance Enterprise, or other insurance offerings. Students may also be eligible for the Certificate of Professional Insurance Accomplishment.

## International Business Major

George B. Simmons, *Distinguished Service*

*Professor and Program Coordinator*

Irving Fantl, *Professor*

Alan Gart, *Professor*

Jean-Francois Hennart, *Associate Professor*

Richard Hodgetts, *Professor*

David Lavin, *Associate Professor*

Jan B. Luytjes, *Professor*

Kenneth S. Most, *Professor*

Marta Ortiz, *Assistant Professor*

Leonardo Rodriguez, *Associate Professor*

and Dean

Emmanuel Roussakis, *Associate Professor*

Bruce Seaton, *Associate Professor*

George Sutija, *Associate Professor*

Ronald H. Vogel, *Associate Professor*

## (For Non-Accounting Majors)

An International Business (IB) major is offered through the Department of Finance and International Business. The IB major must take MAN 3602 — International Business in the Business core. All IB majors are required to declare a functional major (such as Finance, Management, or Marketing), and to satisfy the requirements of that major. In so doing, however, the international course in the functional major must be taken (such as FIN 4611 — International Financial Management or MAR 4243 — International Marketing). In addition, the elective courses (three minimum) provided for in the functional majors must be selected from the following (exclusive of the international course in the declared functional major), with the concurrence of the International Business program coordinator.

ACC 4721	International Accounting
FIN 4611	International Financial Management

MAN 4600	International Management
ECS 3003	Comparative Economic Systems

ECO 4701	World Economy
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## ECO 4733 Multinational Corporation

(See advisor for additional electives)

The IB major is offered only as a second major, but ordinarily would not involve additional course work beyond that required in the single major programs. Accordingly, students seeking the IB option will graduate as dual majors in the functional field of their choice and International Business.

**(For Accounting Majors)**

The Accounting — International Business dual major is essentially that described above with slight modification. In addition to the eight senior level courses required of Accounting majors, the Accounting — IB dual major *must* take ACC 4271 — International Accounting as an elective. He or she must also select two electives from the list of electives noted above. FIN 4611 — International Financial Management is highly recommended as one of these.

**Management Major**Enzo R. Valenzi, *Associate Professor and Chairperson*Steve Altman, *Associate Professor, Provost, and Vice President, Academic Affairs*Elias M. Awad, *Professor*Wesley D. Challacombe, *Instructor*Gary Dessler, *Professor*Herman Dorsett, *Associate Professor*Dana Farrow, *Associate Professor*Ernest Friday, *Assistant Professor*G. Ronald Gilbert, *Associate Professor*Edward L. Hannan, *Associate Professor*Richard M. Hodgetts, *Professor*William T. Jerome, *Distinguished University Professor*Willabeth Jordan, *Instructor*G. Kroeck, *Assistant Professor*Karl O. Magnusen, *Associate Professor and Associate Dean*Joan Mills, *Assistant Professor*Eleanor Polster, *Instructor*Daniel J. Robey, *Associate Professor*Leonardo Rodriguez, *Associate Professor and Dean*Gloria Shapiro, *Assistant Professor*Larry Smith, *Associate Professor*William M. Taggart, *Professor*Efraim Turban, *Professor*Steve H. Zanakis, *Associate Professor*

The Department of Management offers degree programs of study at the Bachelor's level in Organizational Theory, Personnel Management, Behavioral Science, Management Science, and Information Systems. The student is given wide latitude either to specialize in one particular area, or to select from courses on a more general level of professional education. The Management major requires 12 semester hours of courses listed with the Management Department at the 4000 level.

Alternative courses for Management students in specific subject areas:

**1. Personnel Management (Select 4 of 5)**

MAN 4401 Industrial Relations

MAN 4410 Labor, Management, and

## Collective Bargaining

MAN 4301 Personnel Management

MAN 4320 Personnel Recruitment and Selection

MAN 4330 Wage and Salary Administration.

**2. Information Systems:**

MAN 4820 Systems Analysis and Design

MAN 4821 Information Systems Development

MAN 4822 Systems Management

MAN 4201 Organization Theory

**3. Management: Option A.**

MAN 4301 Personnel Management

MAN 4201 Organization Theory

MAN 4151 Behavioral Sciences in Management

MAN 4120 Intergroup Relations in Organizations.

**4. Management: Option B.**

MAN 4151 Behavioral Science in Management

MAN 4600 International Management

MAN 4201 Organization Theory

MAN 4802 Small Business Management

**5. Management: Option C.**

MAN 4142 Managerial Decision Styles

Any three (3) other courses listed with the Management Department

*NOTE:* Elective courses outside SBOS should be taken in the Departments of Economics, Mathematical Sciences, or Psychology. Exceptions may be permitted with the approval of the Department Chairperson.

**Marketing Major**William T. Jerome, *Distinguished University Professor and Acting Chairperson*Yao Apasu, *Assistant Professor*Anne Fiedler, *Instructor*Robert Hogner, *Associate Professor*Jan B. Luytjes, *Professor*J.A.F. Nicholls, *Associate Professor*Marta Ortiz, *Assistant Professor*Lynda Raheem, *Instructor*Sydney Roslow, *Associate Professor*Bruce Seaton, *Associate Professor*Ronald H. Vogel, *Associate Professor*

The Marketing Major requires 15 semester hours of senior (4000 level) marketing course work, of which the following 9 hours are required:

MAR 4503 Consumer Behavior

MAR 4613 Marketing Research

MAR 4713 Cases in Marketing Management

The remaining 6 hours may be selected by the student with his or her advisor from other Marketing course offerings. It is suggested that students concentrate in a specific area and take, for example:

**1. Advertising Concentration**

MAR 4303 Advertising Management

MAR 4344 Advertising Campaign Management

**2. Retailing Concentration**

MAR 4153 Retailing Management

MAR 4154 Cases in Retailing Management

**3. International Concentration**

MAR 4243 International Marketing

## MAR 4244 Export Marketing

**4. Distribution Concentration**

MAR 4203 Marketing Channels

MAR 4213 Transportation Logistics

Marketing majors, however, are not limited to the above concentrations and may choose courses from any other undergraduate marketing offerings or any mix of courses.

*Approved Electives:* Marketing majors may select any 4000-level business course as an elective. With the prior approval of the Counseling Office, certain non-business courses also may be used as electives (depending upon their relevance to the student's academic program and career objectives).

**Real Estate Major**William R. Beaton, *Professor*Jerry Belloit, *Assistant Professor*Vance R. Johnson, *Assistant Professor*

A Real Estate major at the Bachelor's degree level is offered through the Department of Finance and International Business within the School of Business and Organizational Sciences. The Real Estate major is expected to take 15 semester hours within the real estate course offerings or, with the consent of his or her advisor, in an allied field. Under normal circumstances a Real Estate major without previous formal undergraduate work in the area will be expected to take the introductory course (REE 4043 — Advanced Real Estate Fundamentals) as well as four other 3 semester hour courses chosen with the consent of his or her major advisor.

**Transportation Management Major**

A Bachelor's degree program with a major in Transportation Management is offered through the Department of Marketing. The student who wishes to major in Transportation Management is required to take 15 semester hours of Transportation Management courses at the senior (4000) level. The student is required to take TRA 4240 — Transportation Systems and Services for 3 semester hours of major field credit. Besides this course, the student is encouraged to take other courses in Transportation Management (such as TRA 4012 Transportation Logistics; TRA 4380 — Transportation Policy; TRA 4203 — Physical Distribution Management; and TRA 4510 — Mass Transportation and Urban Problems), or three courses in a field such as air transportation (as TRA 4410 — Air Transportation; TRA 4411 — Airport Management; and TRA 4412 — Air Carrier Management).

**Graduate Study: General Information**

The Graduate Programs of the School of Business and Organizational Sciences offer the student advanced professional education for managerial careers in business and government. At the graduate level, the degrees of *Master of Business Administration*, *Master of International Business*, and *Master of Science in Management*, in Accounting, Finance, Man-

agement Information Systems, and Real Estate are offered.

The Master of Business Administration degree is designed to give the MBA student a liberal management education and to assist the student in preparing for his or her chosen career. More specialized preparation is available in the four Master of Science in Management (MSM) programs.

## Admission Requirements

To be eligible for admission to the graduate programs in the School of Business and Organizational Sciences at the University the applicant must:

1. Satisfactorily meet the general University requirements for admission to graduate programs.
2. Hold a Bachelor's degree from a regionally accredited college or university.
3. Meet the minimum standards regarding entrance examination scores and upper division grades as determined by the faculty:
  - a) Admissions to the Master of Business Administration (MBA), Master of International Business (MIB), MSM — Finance, and MSM — Real Estate programs will be based upon a combination of the score on the Graduate Management Admissions Test (GMAT) and the upper-division grade point average (GPA). Specifically, the applicant must have a combined score of at least 1000 points computed as follows:

$$(GPA \times 200) + (GMAT \text{ SCORE}) = 1000, \text{ with a minimum score of } 500 \text{ on the GMAT.}$$

- b) Admission to the MSM — Accounting program requires the applicant to meet the combined GMAT/GPA score of 1000 (with a 500 minimum on the GMAT) as given in (a) above. Additionally, however, each applicant must have an undergraduate major or its equivalent in accounting and must have earned a 3.0 GPA both in the accounting major or its equivalent and in all upper-division coursework.
- c) Admission to the MSM — Management Information Systems program requires a combined score of at least 1000 points computed as follows:
 
$$(GPA \times 200) + (GMAT \text{ SCORE}) = 1000,$$
 WITH A MINIMUM OF 530 ON THE GMAT. A WAIVER OF 10 POINTS ON THE GMAT REQUIREMENT WILL BE ALLOWED FOR EACH YEAR OF RELEVANT DATA PROCESSING EXPERIENCE, UP TO A MAXIMUM OF 80 POINTS.
4. Present, if a foreign student, a minimum score of 500 on the TOEFL, or equivalent on a comparable examination. See General Admission Requirements for Foreign Students (undergraduates and graduates) in the Admission section of the catalog.
5. Be in good standing with previous colleges or universities attended.

## Application Procedures for the Master of Business Administration, Master of International Business, and Master of Science in Management Programs

A student planning to enroll in graduate studies in the School must complete the following steps and meet the stipulated requirements:

1. Submit a Graduate Application for admission to the Admissions Office. Application Forms will be mailed upon request. The admission process may require as long as two months after receipt of the application, depending upon the time involved in the receipt of transcripts and test scores.
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 Admissions Office. (Copies submitted directly by applicants are *not* accepted for application purposes).
3. Submit scores on the *Graduate Management Admissions Test (GMAT)*, administered nationally by the Educational Testing Service (Box 966, Princeton, New Jersey 08540). Registration forms will be mailed upon request.

## Degree Requirements

To be eligible for a Master's degree, a student must:

1. Satisfy all University requirements for a master's degree.
2. Meet the requirements of an approved program of study. This program of study is developed by the student and his or her graduate counselor and must be approved by the appropriate Department Chairperson.
3. (a) Complete a minimum of 36 semester hours (depending on program) of graduate level coursework, for the *Master of Science in Management* programs.
  - (b) Complete a minimum 36 semester hours of graduate level coursework, for the *Master of Business Administration* or *Master of International Business*.
4. Earn a minimum average of "B" (3.0) or the equivalent in all graduate level courses and in all appropriate work completed at FIU.

## Grades and Credits

No courses in which a grade below "C" is earned may be counted toward the MBA, MIB, or MSM degrees. However, all work taken as a graduate student will be counted in computing the grade point average, including courses graded "D" or "F", and any approved undergraduate courses taken while a graduate student.

## Transfer Credit

The student may receive permission to transfer up to a maximum of 6 semester hours of

graduate credit to his or her degree program, provided that: (1) the course(s) were taken at the graduate level at an accredited college or university; (2) the course(s) were not introductory or "survey" in nature; (3) grade(s) of "B" or better were earned; (4) the course(s) are judged by the faculty advisor, Department Chairperson, and Dean to be relevant to the student's graduate program; (5) the credit(s) were not used toward another degree; and (6) the credit(s) were completed within six years immediately preceding the awarding of the degree. Credit is not transferable until the student has earned 15 semester hours in the School of Business and Organizational Sciences graduate program. Students wishing to transfer to the School of Business and Organizational Sciences must be in good standing at their previous school or college.

## Five Thousand-Level Courses

5000-level courses are open to graduate students and seniors. *Master of Science in Management* students may take a maximum of three 5000-level courses. All other courses in the student's program must be at the 6000-level (courses which are only open to graduate students). *Master of Business Administration* students will normally take all work at the 6000 level.

## Time Limit

All work applicable to the Master's degree, including transfer credit, must be completed within six years immediately preceding the awarding of the degree.

## Change of Major

The graduate student who wishes to change his or her program major must submit a Graduate Change of major request to the Admissions Office and meet the admission and program requirements in effect at the time of the change of major.

## Master of Business Administration (MBA)

The objective of the *Master of Business Administration (MBA)* program is to provide the student with a general background in the concepts and processes of administration. The MBA program is aimed at developing a management generalist who has a breadth of knowledge and understanding, and who is oriented toward pragmatic problem solving.

The courses leading to the MBA degree are designed to provide a breadth of experience in the tools and concepts of business administration. The total MBA program is fixed at 36 semester hours of the MBA courses. The courses are categorized by area, with a regular MBA course and substitute(s) for each category. If a student tests-out or is counseled out of the "regular" course(s), he or she must select one of the substitutes in the same category. To be eligible for testing or counseling out of a "regular" course, the student should have previously completed at least three to four courses in that

**functional area** at the upper division level with above-satisfactory grades. The elective may be taken from any of the 6000 level offerings in Business Administration. Students whose background in accounting, statistics, or economics is evaluated to be inadequate will be required to complete ACC 6011 (Financial Accounting Analysis), QMB 6603 (Quantitative Methods in Management), and/or ECP 6704 (Managerial Economics) as prerequisites to the program.

Economics	ECP 6705 Macro-economic Forecasting for Management	FIN 6435 Forecasting Business Conditions
Environment	MAN 6713 International Business Environment	BUL 6124 Survey of Business Law MAN 6635 International Business Policy (No substitutes)
Policy	MAN 6726 Policy Analysis	
	Elective: One 6000 level business administration course (3 semester hours).	

<sup>1</sup> See the guidelines under program description above.

\*For the student without STA 3132 and QMB 3150 (college algebra and statistics) background, QMB 6603 must be taken *prior* to MAN 6721.

\*\*For the student without ACC 3300 and ACC 3303 (financial and managerial accounting) background, ACC 6011 must be taken *prior* to ACC 6313 and FIN 6428. NOTE: The first three categories — information systems, quantitative methods, and accounting — *must* be satisfied *prior* to taking any other MBA courses. The policy course must be scheduled for the *last semester* of MBA study.

## Master of International Business (MIB)

The Master of International Business program is a 36 semester hour program designed to acquaint students with the international environment and provide basic management tools. The courses give the student a conceptual framework of international business, international economics, and international politics, as well as a thorough background in the functional areas of business.

All students will be required to demonstrate competence in quantitative methods and accounting, or will be required to take QMB 6603 and ACC 6011 in addition to the courses listed below. Each candidate will also be required to demonstrate basic reading and speaking competence in one major world commercial language other than English.

### Required Courses:

1. ACC 6313 Accounting for Decision Making
2. MAN 6205 Organizational Behavior
3. FIN 6428 Financial Management
4. MAR 6716 Marketing Management
5. ECO 5701 The World Economy
6. ECP 6704 Managerial Economics
7. INR 6205 World Politics
8. MAN 6713 International Business Environment
9. FIN 6636 International Finance
10. MAN 6715 Corporate Negotiations
11. MAN 6635 International Business Policy
12. MAN 6830 Organizational Information Systems

## Master of Science in Management (MSM)

The *Master of Science in Management* program provides an in-depth educational experience for the student desiring greater specialization in a particular area.

Concentrations within the *Master of Science in Management* program are available in the following areas: Accounting (including taxation), Finance, Management Information Systems, and Real Estate.

The *Master of Science in Management* program is a one to two year sequence, depending upon the specific program and the applicability of the student's undergraduate course work. The type and number of prerequisite courses vary with the area of concentration. Each student will be counseled concerning his individual needs.

## MSM Accounting

The MSM program in Accounting is designed primarily to meet the Florida requirement to sit for the Certified Public Accountant Examination after September 30, 1983. Students with a Bachelor's degree in a field other than accounting will be required to complete the necessary courses in business and accounting and meet other requirements before applying for admission to the MSM program.

Due to varied career opportunities, the MSM program in Accounting is divided into four sub-programs, and many variations are possible. The Managerial Accounting program is designed for the student who aspires to be an officer in a business corporation, a governmental unit, or a not-for-profit organization. The Public Accounting program is designed for the student who aspires to be a Certified Public Accountant and leader in the public accounting profession. The International Accounting program is designed for the student who aspires to a professional career with an international accounting firm, a multinational corporation, an international public organization, or an institution in a developing country. The Taxation program is designed for the student who aspires to a career as a tax professional in public accounting, law, industry, education, or government.

A student who earns an MSM in Accounting and successfully passes the Certified Public Accountant Examination usually will qualify to receive a certificate as a Certified Public Accountant. An explanation of the relevant Florida Statute follows.

## Florida CPA Requirement

Beginning with applications made after July 31, 1983, a student must complete an additional 30 semester hours of accounting and general business above those required for the baccalaureate degree in order to sit for the Certified Public Accountant Examination. (For the law relating to the practice of public accounting in which concentration in accounting and business is defined see Rule 21A-9.02 on page BU S 4).

For those applying to sit for the examination prior to August 1, 1983, Rule 21A-9.03 applies regarding substitution of an additional year of

### MBA PROGRAM

Area	Regular Course	Possible Substitute Courses <sup>1</sup>
Information Systems	MAN 6830 Organization Information Systems	MAN 6833 Information Systems Planning
Quantitative Methods*	MAN 6721 Managerial Decision-making	MAN 6836 Systems Analysis
Accounting**	ACC 6313 Accounting for Decision-making	(None) ACC 6391 Seminar in Managerial Accounting I ACC 6291 Seminar in Financial Accounting Theory ACC 6651 Studies in Auditing ACC 6512 Income Tax Planning and Research
Finance (Corporate)	FIN 6428 Financial Management	FIN 6636 International Finance FIN 6246 Financial Markets FIN 6806 Theory of Finance
Operations	MAN 6501 Operations Management	MAN 6836 Systems Analysis
Marketing	MAR 6716 Marketing Management	MAR 6246 Advanced International Marketing
Management	MAN 6205 Organizational Behavior	MAN 6112 Group Processes in Organizations MAN 6405 Labor Relations MAN 6601 International Management (None)
	MAN 6207 Organization and Management Theory	



accounting courses in lieu of one year of employment in the office of a Florida or out-of-state practitioner before receiving a certificate as a Certified Public Accountant:

If application for examination is made prior to August 2, 1983 for purposes of Section 473, F.S., an additional one year accounting course acceptable in lieu of one year of employment is defined as a minimum of 30 semester hours or 45 quarter hours, or the equivalent, in courses which would qualify for graduate level credit at accredited colleges or universities which shall include at least 12 semester or 18 quarter hours, or the equivalent, in postbaccalaureate accounting education, and at least 15 semester or 22 quarter hours in postbaccalaureate, general business education. For purposes of this rule, courses used to satisfy Rule 21A-9.02 may not be included in the additional one-year accounting course. However, advanced accounting hours above the minimum postbaccalaureate requirement may be substituted for advanced general business courses.

#### PROGRAM OF STUDY

*Required Courses: non-tax emphasis,  
18 semester hours*

ACC 6291	Seminar in Accounting Theory I
ACC 6391	Seminar in Managerial Accounting
ACC 6512	Income Tax Research
ACC 6651	Studies in Auditing
ACC 6807	Accounting Research and Reporting
ACC 6865	Governmental and Institutional Accounting

Additional Courses: 3 courses (9 semester hours) relating to concentration  
Elective: One course (3 semester hours) approved by the Graduate Advisor.

*Required Courses: tax emphasis,  
12 semester hours*

ACC 6512	Income Tax Research
ACC 6531	Taxation of Corporations I
ACC 6553	Estate and Gift Taxation
ACC 6558	Current Developments in Taxation

*Additional Courses: 4 courses (12 semester hours) in tax, 2 non-tax electives, at least one in accounting*

ACC 6275 <sup>4</sup>	International Accounting
ACC 6531 <sup>3</sup>	Taxation of Corporations I
ACC 6553 <sup>3</sup>	Estate and Gift Taxation
ACC 6554 <sup>3</sup>	Tax Accounting Theory and Procedures
ACC 6555 <sup>3</sup>	Taxation of Corporations II
ACC 6556 <sup>3</sup>	Partnership Taxation and Tax Shelters
ACC 6557 <sup>3</sup>	Fiduciary Accounting and Taxation
ACC 6558 <sup>3</sup>	Current Developments in Taxation
ACC 6559 <sup>3</sup>	Seminar in Taxation
ACC 6582 <sup>3,4</sup>	International Taxation
ACC 6735 <sup>1,2</sup>	Seminar in Accounting Information Systems J
ACC 6745 <sup>2</sup>	Seminar in Accounting Information Systems II

ACC 6822 <sup>1,2</sup>	Behavioral Accounting
ACC 6832 <sup>1,2</sup>	Accounting and Quantitative Methods Seminar in Managerial Accounting II
ACC 6845 <sup>2</sup>	Seminar in Managerial Accounting II
ACC 6932 <sup>1</sup>	Seminar in Accounting Theory II
ACC 6514 <sup>3</sup>	Taxation of Deferred Compensation
ACC 6515 <sup>3</sup>	Transactions in Property
ACC 6516 <sup>3</sup>	Estate Planning
<sup>1</sup> Designed primarily for the Public Accounting subprogram.	
<sup>2</sup> Designed primarily for the Managerial Accounting subprogram.	
<sup>3</sup> Designed primarily for the Taxation subprogram.	
<sup>4</sup> Designed primarily for the International Accounting subprogram.	

### MSM Finance

**PURPOSE:** This graduate program leading to the degree of Master of Science in Management (MSM) is offered for students who want to concentrate in Finance. The MSM program in Finance is designed to develop analytical skills and decision-making abilities in the solution of problems related to obtaining and utilizing funds. Graduates will be able to demonstrate a suitable competence in handling complex financial and investment situations. Graduates also will have a good institutional knowledge of financial and capital markets, instruments, and current developments and opportunities available to investors, financial institutions, and corporate enterprise.

**CONTENT AND STRUCTURE:** The program consists of thirty-six semester hours (twelve courses) divided into three groups as follows:

1. Six general core courses: All participating students are required to take these courses. However, eligible students, with counselor's approval, may waive some of these courses based on their previous education. These requirements then become electives. Electives can be selected from the finance specialization courses or accounting, economics, real estate, or computer science. The core courses provide a general background. They cover management, economics, quantitative methods, accounting, information systems, and marketing.
2. Three finance core courses: All MSM Finance students are required to take three general finance courses. These courses give the student a working knowledge of financial management, theory and markets.
3. Three finance specialization courses: Each student will select courses from those finance offerings that are available. A further concentration in a particular subject such as corporate finance, investments, or financial institutions, is possible and encouraged. Individual faculty counseling is available to provide assistance in designing a field of specialization.

The 36 semester hours requirement may be reduced to thirty for students who possess a Master's Degree in Business Administration. Up to two graduate courses may be transferred

in from another accredited school, even if no advanced degree was obtained.

Generally, students with the BBA degree will satisfy some general core course requirements and they may enroll in additional finance specialization courses. The program is thus sufficiently flexible to provide depth in finance and breadth in business and management.

#### COURSES

##### General Core Courses

ECP 6704	Managerial Economics
MAN 6205	Organizational Behavior
QMB 6603	Quantitative Methods in Management
ACC 6011	Financial Accounting Analysis
MAN 6830	Organizational Information Systems
MAR 6716	Marketing Management

##### Finance Core Courses

FIN 6246	Financial Markets and Institutions
FIN 6428	Financial Management
FIN 6806	Theory of Finance

##### Specialization Courses

BAN 5652	Savings and Loans
FIN 5314	Working Capital Management
FIN 5473	Small Business Finance
FIN 5515	Futures Markets
FIN 6315	Commercial Banking
FIN 6316	Management of Non-banking Financial Institutions
FIN 6325	Current Issues in Commercial Banking
FIN 6426	Financial Management Policies
FIN 6436	Capital Budgeting and Long-term Resource Allocation
FIN 6456	Quantitative Methods in Financial Analysis
FIN 6516	Securities Analysis
FIN 6525	Portfolio Analysis
FIN 6625	International Bank Management
FIN 6636	International Finance
FIN 6906	Independent Study in Finance
FIN 6915	Master's Project in Finance
FIN 6936	Special Topics in Finance
REE 5207	Advanced Real Estate Finance
REE 5305	Real Estate Investment

### MSM Management Information Systems

The MSM-Management Information Systems program is designed to prepare students for positions of advanced responsibility in the analysis, design, implementation, and overall management of information systems that use computers. The program is applications-oriented with a major focus on the theoretical bases of business programming languages, systems

analysis and design, and data structure and design for business and systems management. Further, the program is specifically oriented to students who have an undergraduate degree that includes sufficient preparation in business administration and/or information system to permit advanced study in this area.

The program involves 36 credit hours of professional work consisting of 12 courses. Students completing three courses per semester may expect to finish the program in two years. Coursework may be grouped into four general areas:

#### Group A: ANALYSIS OF ORGANIZATIONAL SYSTEMS

MAN 6205	Organizational Behavior
ACC 6011	Financial Accounting Analysis
MAN 6931	Current Economic and Social Implications of Information Systems

#### Group B: THE BASES FOR SYSTEMS DEVELOPMENT

MAN 6721	Managerial Decision-Making
QMB 6845	Simulation of Management Systems
MAN 6305	Computer Administration

#### Group C: COMPUTER AND INFORMATION TECHNOLOGY

MAN 6830	Organization Information Systems
CDA 5163	Data Communication Systems
MAN 6837	Data Structure and File Processing in Business

#### Group D: INFORMATION SYSTEMS DEVELOPMENT

MAN 6834	Information Requirements Analysis
MAN 6835	Information Systems Design
MAN 6932	Seminar in Systems Development

There are four prerequisites that students must complete before being admitted to the program: Elementary COBOL (COP 3120), Elementary Fortran or BASIC (COP 3172), Basic Statistics (QMB 6603), and Economics (ECO 3003).

Because students may come to the program with extensive applied backgrounds or academic training in some areas covered by the curriculum, the Director of the program may allow certain elective courses to be substituted for required courses at the time the student develops his or her program of study. These electives may be taken within the SBOS, the Department of Mathematical Sciences (Computer Science), and the Department of Economics. Possible electives include: MAN 6501, MAN 6836, QMB 6805, and QMB 6855.

### MSM Real Estate and Urban Development

A *Master of Science in Management* with a concentration in Real Estate is available to per-

sons interested in graduate work in Real Estate.

University graduates in Real Estate find employment in: land planning and development; real estate investing and counseling; environmental planning; development of new cities; international real estate; recreational land use development; construction management; corporate real estate divisions; governmental agencies; appraising; marketing of residential, commercial, and industrial properties; property management, such as of large apartment complexes, office buildings, and shopping centers; conventional and creative real estate financing through financial institutions, such as commercial banks, savings and loan associations, life insurance companies, mortgage bankers and mortgage brokers; and teaching, in the rapidly growing field of real estate education. Further, competent real estate talent is being called upon for participation in the field of real estate syndication, limited partnerships and joint ventures.

Following a student's admission to the graduate program in Real Estate and Urban Development, each graduate student will develop an individual program of studies approved by his or her faculty advisor.

## Certificate Programs: General Information

The overall purpose of the Certificate Programs is to provide *practicing managers* with advanced training in the techniques and methods pertinent to their areas. The programs are for both degree and non-degree seeking students, and are available in the areas of Banking, Insurance, Marketing, Personnel Management, Savings and Loan, and Transportation Management. A Certificate is awarded upon successful completion of each program.

Students seeking to enroll in the undergraduate Insurance, Marketing and Transportation Certificate Programs must meet upper division University admission requirements. Students wishing to enter the Banking or Savings and Loan Certificate Programs must meet all prerequisites for courses in those respective programs. Please contact the Business Counseling Office at 554-2781 for application details. (Students seeking to enter the Personnel Certificate Program should contact the Management Department for details).

In all cases, students must apply to, and be accepted into, the various Certificate Programs. Upon successful completion of the appropriate course work, and upon application by the student to the appropriate department, a Certificate of Completion will be awarded.

### Banking Certificate General Description

The CIB (Certificate in Banking) core program consists of four undergraduate or graduate Finance courses. Upon successful completion of the four course sequence, a Certificate signed by the Dean of the School of Business and Organizational Sciences will be awarded.

Participants with the appropriate educational background are expected to complete the Cer-

tificate Program by enrolling in one finance course each semester for four successive semesters.

#### Program Goals:

1. To acquaint the participant with the investment, financing, and other policy decisions within the scope of the corporate finance officer's authority structure.
2. To acquaint the participant with the functioning of the American capital markets and the institutions which service these markets.
3. To survey commercial bank management techniques and methods of operation.
4. To develop in the participant the ability to make sound credit-loan decisions.

#### Requirements:

Participants in the CIB Program must meet certain admission requirements. In general, those intending to take undergraduate level courses must have an Associate of Arts Degree or its equivalent, and must meet the other lower division preparation requirements of the School. Participants planning to take graduate level courses must hold a Bachelor's degree, submit a score on the Graduate Management Admissions Test, provide transcripts of all undergraduate work, and meet all admission requirements of the School's graduate programs.

Specific program requirements for the Certificate in Banking program.

FIN 3404	Intermediate Finance
or	
FIN 6426	Financial Management Policies
FIN 4303	Financial Markets and Institutions
or	
FIN 6246	Financial Markets and Institutions
FIN 4324	Commercial Bank Management
or	
FIN 6315	Commercial Banking
FIN 5345	Credit Analysis and Loan Evaluation

### Insurance Certificate

The Certificate program in Professional Insurance Accomplishment is designed to enable individuals in (or wishing to enter) the insurance industry to obtain recognition for their attainments in insurance education.

Students seeking to enroll in the Insurance Certificate must be admitted to an upper division University program.

The Certificate program requires participants to obtain 18 semester hours, or six three-credit hour classes, in 4000 level insurance courses. The Insurance Certificate requires participants to take five required courses and one elective course. Students must earn a "C" grade or better in each course taken.

#### Those required are:

RMI 4015	Introduction to Insurance
RMI 4212	Property Insurance I
RMI 4213	Property Insurance II
RMI 4220	Casualty Insurance I
RMI 4221	Casualty Insurance II

*The elective should normally be selected from such courses as:*

RMI 4115	Life Insurance
RMI 4135	Employee Fringe Benefit Programs
RMI 4145	Business and Estate Insurance Planning

Inquiries concerning the Certificate in Professional Insurance Accomplishment should be addressed to the Department of Finance and International Business.

## Marketing Certificate

Students seeking to enroll in the Marketing Certificate must be admitted to an upper division University program.

The program is comprised of a set of six three-credit hour undergraduate marketing courses — one introductory course at the junior (3000) level, the prerequisite for all the other courses in the program, and five at the senior (4000) level.

*There are three Required Courses:*

MAR 3023	Marketing Management
MAR 4153	Retailing Management I
MAR 4303	Advertising Management

For electives students are recommended to take three courses from the following regularly offered marketing classes and other selected courses:

MAN 3701	Business and Society
MAR 4154	Cases in Retailing Management
MAR 4713	Cases in Marketing Management
MAR 4243	International Marketing
MAR 4503	Consumer Behavior
MAR 4613	Marketing Research
MAR 4344	Advertising Campaign Management
MAR 4103	Personal Selling
MAR 4203	Marketing Channels
MAR 4723	Marketing of Small Business Enterprises

On satisfactory completion of the program, signified by a "C" grade or better in each course, students will, on application, receive a Certificate in Marketing signed by the Department Chairperson and Dean of the School.

## Personnel Management Certificate

The objective of the Certificate program in Personnel Management is to provide training in personnel management techniques and methods to individuals who do not necessarily wish to seek a degree. The program is aimed at developing immediately applicable skills in individuals who already have some foundation in the concepts and role of the personnel management function.

A Certificate signed by the Department Chairperson and the Dean of the School will be awarded to students who complete one prerequisite statistics course (three semester hours or equivalent) and the program of four three-credit hour courses in the personnel management area of concentration. A "B" average is required for successful completion of the program.

**Course Sequence:** The Certificate program consists of the following four required courses which must be taken in this order:

Fall	Personnel Management
Spring	Personnel Recruitment and Selection
Summer	Term A: Industrial Relations
Summer	Term B: Special Topics in Management

For students who desire to take additional elective courses, the following are recommended:

Wage and Salary Administration
Behavioral Science in Management
Labor, Management, and Collective Bargaining
Small Business Management

Because admission to this program is in the Fall semester only, applications must be received prior to June 30. For additional information regarding admission, contact the Department of Management at 554-2791.

## Savings and Loan Certificate

The Certificate program consists of four undergraduate or graduate finance courses. Upon successful completion of the four-course sequence, a Certificate signed by the Dean of the School of Business and Organizational Sciences will be awarded.

This program should be of interest to persons currently employed at the middle management level in savings and loans who wish to improve their industry knowledge, i.e., branch managers, auditors, data processing people, management track personnel, individuals who sell services, and individuals (although not currently employed in a savings and loans) who desire a career in savings and loans management.

The program qualifies for tuition reimbursement at many of the participating institutions. See your personnel officer or training director for additional information.

### PROGRAM GOALS:

- To acquaint the participant with the functioning of the American capital markets and the institutions which service these markets.
- To survey savings and loan management techniques and methods of operation.
- To develop within the participant the ability to systematize the loan evaluation process such that a sound rational credit-loan decision can be made. With the savings and loan program, emphasis will be placed upon the comprehension of the savings, investment, insurance and annuity goals of the individual.

**ADMISSION TO THE PROGRAM:** Participants in the CIS program must meet the admission requirements listed for the Certificate in Banking Program.

With prior advisor approval, graduate students may transfer three of the Certificate courses toward Master's degree credit while undergraduate students may transfer all of the courses toward Bachelor's degree credit.

The required courses are:

FIN 4303	Financial Intermediaries and Markets
	or
FIN 6246	Financial Markets
BAN 5652	Savings and Loan Management
REE 5105	Valuation of Real Estate
REE 5207	Advanced Real Estate Finance

Applicants with a Bachelor's degree who are interested in pursuing a Master's degree in Finance should take FIN 6246 rather than FIN 4303.

## Transportation Management Certificate

The Department of Marketing offers an undergraduate Certificate program in Transportation Management. The program assists students employed in, or wishing to enter, the transportation industry to obtain recognition for their attainments in transportation education.

Students seeking to enroll in the Transportation Management Certificate must be admitted to an upper division University program.

The Certificate program requires participants to obtain 18 semester hours, or six three-credit hour classes (of which 12 hours are required, 6 hours elective) in 4000-level transportation courses. Students must earn a "C" grade or better in each course taken.

*The required courses are:*

TRA 4240	Transportation Systems and Services
TRA 4410	Air Transportation
TRA 4411	Airport Management
TRA 4412	Air Carrier Management

*The electives should be selected from:*

TRA 4510	Mass Transportation and Urban Problems
TRA 4320	Transportation Regulation
TRA 4101	Transportation Rate Making
TRA 4012	Transportation Logistics
TRA 4380	Transportation Policy

## Course Descriptions

### BUSINESS ADMINISTRATION PRE-CORE AND CORE COURSES

#### Definition of Prefixes

ACC — Accounting; CIS — Computer and Information Systems; FIN — Finance; MAN — Management; MAR — Marketing; QMB — Quantitative Methods in Business.

ACC 3300 Accounting for Decisions (3)  
Accounting concepts and analyses essential to determining the income and financial position of a business enterprise. Prerequisites: Principles of Economics, Calculus I, Introductory Statistics.

ACC 3303 Accounting for Planning and Control (3)  
Use of accounting concepts, analyses and financial data to aid in the evaluation of the business enterprise and to aid management in its planning, organizing, and controlling functions. Prerequisite: ACC 3300 or equivalent as determined by examination.

**CIS 3000 Introduction to Information Systems**

(3)

Survey of the major problems of Information systems and information processing in organizations. Brief study of basic computer concepts; the information systems development cycle; the relation between information systems and decision-making; and the general systems framework for information problems. Prerequisite: Completion of the Computer Programming Proficiency Requirement.

**ECO 3003 Economics, Man and Society —****Micro**

(3)

Relationship of economics to individual action. Identification of economic and non-economic objectives and problems. Analysis of economic behavior of individuals, business firms, public agencies, and interest groups.

**ECO 3011 Economics, Man and Society —****Macro**

(3)

Relationship of economics to aggregate income. Identification of economic and non-economic objectives and problems. Analysis of economic behavior of individuals, business firms, public agencies, and interest groups. Public issue interpretation in the light of economic theory.

**ECO 3432 Applied Macroeconomics**

(3)

Aggregate economic performance and business conditions analysis. Analysis of the nature and causes of business fluctuation. Economic expansions and stagflation; public policies for economic stability; fiscal policy, monetary policy and incomes policy. Sectoral analysis and macroeconomic forecasting. Prerequisite: ECO 3003, or equivalent.

**FIN 3403 Financial Management**

(3)

A study of financial decision making in the corporate form of enterprise. An analysis of the sources and uses of funds. Emphasis is placed on working capital management; capital budgeting techniques; short and long term financing; and capital structure and the value of the firm. Prerequisite: ACC 3300, or equivalent.

**MAN 3010 Organization and Management**

(3)

An analysis of organizations and the management processes of planning, organizing, directing, and controlling in the context of socio-technical systems. Individual, group, intergroup, and organizational responses to various environments and technologies are studied, as are pertinent techniques of manpower management.

**MAN 3503 Managerial Decision Making**

(3)

This course concentrates on practical decision problems for the manager in an organization. Emphasis is placed on the environment and on the definition of and practical approaches to solving managerial problems. Topics to be included are decision-making theory, linear programming, network analysis, inventory models and simulation. Prerequisites: College Algebra, Introductory Statistics, and QMB 3150.

**MAN 3602 International Business**

(3)

Introductory analysis of the business system and management decision-making in the international operation of enterprise. Special emphasis given to international trade and investment; foreign exchange; financial markets; political and

cultural interactions between host societies and multinational enterprise. Prerequisite: ECO 3432.

**MAN 3701 Business & Society**

(3)

An examination of the place and role of business in contemporary society. The interaction between business and its economic, legal, political, social, and international environments is discussed and analyzed in detail. Among topics which may be covered are the development and current structure of social systems, as itemized above, which set forth the parameters in which business operates. That is, government legislation and regulation, constitutional law, political and cultural limitations, and other topics.

**MAN 4521 Operations Management**

(3)

Concepts in design, analysis, and control of operating systems, plant layout and design, materials handling, quality control, forecasting, and decision theory applied to production and service systems. Prerequisites: MAN 3503 and QMB 3150.

**MAN 4722 Policy Analysis**

(3)

The use of cases, guest lecturers, and gaming, to integrate analysis and measurement tools, 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. Prerequisite: Completion of all core requirements. Must be taken in last academic semester of senior year.

**MAR 3023 Marketing Management**

(3)

A descriptive study emphasizing the functions and institutions common to marketing systems.

**QMB 3150 Application of Quantitative****Methods in Business**

(3)

Applications of quantitative techniques to business problems. General topics include the process of quantitative decision making, sampling, and forecasting. The latter part of the course will concentrate on specific techniques applicable to the student's functional major. Prerequisites: College Algebra, Introductory Statistics.

**STA 3132 Quantitative Methods for****Administration**

(3)

The use of statistical tools in management; introduction of probability, descriptive statistics, and statistical inference as included.

**ACCOUNTING****Definition of Prefixes**

ACC — Accounting; BUL — Business Law.

**ACC 4102 Financial Accounting I**

(3)

An exploration of concepts, standards, and principles underlying financial reporting, with emphasis on the measurement, analysis, and interpretation of income and changes in financial position (funds flow). Prerequisite: At least 6 semester hours of introductory financial and managerial accounting, with grades of "C" or better; or ACC 3300 with a grade of "B" or better.

**ACC 4122 Financial Accounting II**

(3)

A continuation of ACC 4102, with emphasis on the accounting concepts, standards, and princi-

ples underlying the measurement and reporting of financial position. Prerequisite: ACC 4102, with grade of "C" or better.

**ACC 4201 Financial Accounting III**

(3)

A continuation of ACC 4122, with emphasis on accounting for partnerships, consolidated financial statements, and financial statement analysis. Prerequisite: ACC 4122, with grade of "C" or better.

**ACC 4248 Topics in Financial Accounting**

(3)

An in-depth study of recent developments in financial accounting. Prerequisite: ACC 4122.

**ACC 4271 International Accounting**

(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 measurement; and the role of accounting in national economic development.

**ACC 4301 Managerial Accounting**

(3)

Determination and control of production costs; job order and process systems; actual and standard costs, budgetary control; cost and profit analyses; and other methods of performance measurement and analysis. Prerequisites: ACC 4102 and MAN 3503 with grades "C" or better.

**ACC 4348 Topics in Managerial****Accounting**

(3)

An in-depth study of selected areas of managerial accounting. Prerequisite: ACC 4301 or equivalent.

**ACC 4501 Income Tax Accounting**

(3)

A survey of federal income taxation with primary emphasis on the taxation of individuals and corporations. Prerequisite: ACC 4122 with grade of "C" or better.

**ACC 4522 Taxation of Corporations and****Partnerships**

(3)

An in-depth study of income taxation of corporations and partnerships, including tax planning. Prerequisite: ACC 4501, or equivalent.

**ACC 4548 Topics in Taxation**

(3)

An in-depth study of recent legislative, administrative, and judicial developments in taxation. Prerequisite: ACC 4501, or equivalent.

**ACC 4601 Auditing**

(3)

Standards and procedures applied by independent public accountants, ethics and responsibilities of auditors, development of audit programs, accumulation of audit evidence, and reporting. Prerequisite: ACC 4122 with grade of "C" or better.

**ACC 4648 Topics in Auditing**

(3)

An in-depth study of recent developments in auditing. Prerequisite: ACC 4601, or equivalent.

**ACC 4731 Accounting Information****Systems**

(3)

Fundamentals of information systems and use of computers in the accounting system of business enterprises. Development of computer technology, techniques of flow charting, and basic design of accounting applications. Student project includes use of computer time-sharing terminal to simulate communications and coordination

between accountants and data sharing personnel. Prerequisites: COP 3172 or equivalent, ACC 4301, and ACC 4601.

**ACC 4905 Independent Study in Accounting** (1-6)  
Individual conferences, supervised readings, and reports on personal investigations. Written permission of the instructor, Department Chairperson, and Dean required.

**ACC 4930 Special Topics in Accounting** (1-6)  
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. Written permission of the instructor, Department Chairperson, and Dean required.

**ACC 6011 Financial Accounting Analysis** (3)  
Introduction to the theory and practice of financial accounting and reporting, with emphasis on understanding and determining income and financial position. (No credit will be given to students who have had undergraduate or graduate equivalents). Prerequisite: QMB 6603 or equivalent.

**ACC 6275 International Accounting** (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. Prerequisite: ACC 4201, or equivalent, or consent of instructor.

**ACC 6291 Seminar in Financial Accounting Theory I** (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. Prerequisite: ACC 4201, or equivalent, or consent of instructor.

**ACC 6391 Seminar in Managerial Accounting I** (3)  
Analysis of transfer pricing; product pricing; incremental profit analysis; decision models; alternative performance measurement techniques; and other advanced topics. Prerequisite: ACC 4301 or ACC 6313, or equivalent.

**ACC 6512 Income Tax Research** (3)  
An in-depth study of the taxation and planning aspects of a variety of business and other transactions. Emphasis will be upon developing an ability to perceive tax issues and to conduct research to resolve them. Prerequisite: ACC 4501 or equivalent.

**ACC 6513 Tax Accounting** (3)  
An exploration of the concepts of federal income taxation and tax planning, from the point of view of the manager.

**ACC 6515 Transactions in Property** (3)  
An in-depth 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.

**ACC 6531 Taxation of Corporations I** (3)  
The study of the federal tax consequences of the formation, operation, reorganization and liquidation of corporations; election of Subchapter S status; distributions and redemptions. Prerequisite: ACC 6512 or permission of the Instructor and the Advisor for the taxation specialization.

**ACC 6552 Taxation of Deferred Compensation** (3)  
The taxation of qualified and nonqualified pension and profit-sharing plans, stock options, annuities, lump-sum distributions, death benefits, rollovers, self-employment plans, employee stock ownership plans, etc.

**ACC 6553 Estate and Gift Taxation** (3)  
The study of the federal estate tax and federal gift tax provisions. Prerequisite: ACC 6512, or permission of the Instructor and the advisor for the taxation specialization.

**ACC 6554 Tax Accounting Theory and Procedures** (3)  
A study of the tax accounting concepts and the judicial doctrines inherent in the federal tax law and in tax planning. Prerequisite: ACC 4501 or equivalent.

**ACC 6555 Taxation of Corporations II** (3)  
An in-depth study of the tax benefits inherent in multiple corporate groups, including consolidated returns and reorganizations. Prerequisites: ACC 6512 and ACC 6531.

**ACC 6556 Partnership Taxation** (3)  
The intensive study of the formation, operation, and dissolution of partnerships (general and limited). Prerequisite: ACC 6531 or permission from the Instructor.

**ACC 6557 Fiduciary Accounting and Taxation** (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: ACC 6512 and ACC 6553.

**ACC 6558 Current Developments in Taxation** (3)  
The study of recent legislative, administrative and judicial developments in taxation. Prerequisites: ACC 6512 and ACC 6554.

**ACC 6559 Seminar in Taxation** (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. Prerequisites: ACC 6512 and ACC 6554.

**ACC 6561 Estate Planning** (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.

**ACC 6582 International Taxation** (3)  
The complex federal income tax provisions applicable to the foreign income of U.S. citizens, residents, and corporations, and to foreign persons with U.S. income is surveyed. The tax policy of developing and developed countries with respect to foreign investment is discussed in the context of international tax planning. Prerequisite: ACC 6512 or permission of the instructor and the advisor for the taxation specialization.

**ACC 6651 Studies in Auditing** (3)  
Professional and technical aspects of auditing practice; ethics and legal responsibilities; review of field work emphasizing materiality, sampling, and working papers, reporting problems including long-form and special purpose reports; study of recent auditing developments. Prerequisite: ACC 4601 or equivalent.

**ACC 6735 Seminar in Accounting Information Systems I** (3)  
Application of general systems concepts to accounting; operational, and related planning and control information requirements. Data base management systems, on-line real-time systems, time-sharing, etc., and applications in accounting. Emphasis on the analysis of computer-based controls, case histories and projects. Prerequisite: ACC 4731 or equivalent.

**ACC 6745 Seminar in Accounting Information Systems II** (3)  
A continuation of ACC 6735, with emphasis on the theories underlying complex information systems. Prerequisite: ACC 6735, or equivalent.

**ACC 6807 Accounting Research and Reporting** (3)  
Investigation of numerous assigned research projects in the area of financial, managerial, and income tax accounting, and the preparation of appropriate reports in both oral and written formats.

**ACC 6822 Behavioral Accounting** (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: ACC 4122 and 4301 or equivalents.

**ACC 6832 Accounting and Quantitative Methods** (3)  
Study of statistical and management science techniques that are or may be utilized in financial and managerial accounting. Prerequisites: MAN 3503, QMB 3150 and ACC 4731, or equivalents.

**ACC 6845 Seminar in Managerial Accounting II** (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. Prerequisite: ACC 4301, or equivalent.

**ACC 6865 Governmental and Institutional Accounting** (3)  
Budgeting, accounting, and reporting standards and practices for government and other not-for-

profit entities. Prerequisite: ACC 4122, or equivalent.

**ACC 6907 Independent Study in Accounting** (1-3)  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty advisor and Department Chairperson required.

**ACC 6932 Seminar in Financial Accounting Theory II** (3)  
A continuation of ACC 6291, with emphasis on the problems of accounting for price-level changes and other current issues. Prerequisite: ACC 6291, or equivalent.

**ACC 6935 Special Topics in Accounting** (1-3)  
Intensive study for groups of students of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty advisor and Department Chairperson required.

**BUL 4100 Legal Environment of Business** (3)  
Legal environment of business; analysis of legal principles affecting management; the role of law in business decisions; the legal tool as a system for order in the business arena; the effectiveness of the legal tool as a planning instrument. This course is a study of the importance of the impact of the law and legal institutions on the field of commerce, with attention to the regulation of competition through analysis of antitrust legislation; the workings of administrative law; the formulation of judicial decisions; the power of constitutional provisions; and various aspects of unemployment legislation, as well as other selected topics.

**BUL 4111 Business Law I** (3)  
Principles of law affecting the legal environment of business; contract law; laws related to sales, torts, agencies and employment; legal relations of government and business.

**BUL 4112 Business Law II** (3)  
Bailments, shipment and sale of goods; suretyship; bankruptcy; commercial paper; real and personal property; insurance; relevant provisions of the uniform commercial code.

**BUL 4650 Special Topics in Business Law** (1-6)  
Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

**BUL 4905 Independent Study in Business Law** (1-6)  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

**BUL 6124 Survey of Business Law** (3)  
Graduate level survey of business law, which examines the social purposes, functions and forms of the law and the courts, particularly as they relate to business organizations.

**BUL 6651 Special Topics in Business Law** (1-6)  
Intensive study for groups of students of a par-

ticular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

**BUL 6906 Independent Study in Business Law** (1-6)  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

**FINANCE**  
**Definition of Prefixes**  
FIN — Finance. BAN — Banking. MAN — International Management.

**BAN 5652 Savings and Loans Management** (3)  
Financial management of savings and loan associations and other mortgage lenders, supply and demand of mortgage funds; state and federal regulatory bodies' legal and institutional characteristics related to mortgage markets. Prerequisite: BAN 5651 or approval of Chairperson.

**FIN 3414 Intermediate Finance** (3)  
Special topics (multinational finance, mergers, bankruptcy and reorganization, leasing, and warrants and convertibles), and case problems in financial management. Prerequisite: FIN 3403, or equivalent.

**FIN 3949 Cooperative Education in Finance** (3)  
Semesters of full-time classroom study are alternated with semesters of full-time remunerated employment which closely relates to the student's area of academic study. Carefully designed and monitored work assignments are intended to develop the student's understanding of the relationship between theory and practice in an authentic work environment. Prerequisite: None.

**FIN 4100 Estate Analysis and Planning** (3)  
A personal financial management approach to estate creation, maintenance, and transfer. Uses financial analysis techniques and portfolio approaches to evaluate alternate strategies. Prerequisite: FIN 3403, or equivalent.

**FIN 4303 Financial Markets and Institutions** (3)  
Financial markets and the role of financial intermediaries in these markets. Emphasis will be upon the objectives and policies of financial intermediaries within the constraints of law and regulatory authorities. Prerequisite: FIN 3403, or equivalent.

**FIN 4313 Financial History of the United States** (3)  
Origins of the American financial system. Early American history of financial intermediaries. Evolution in financial legislation, policy, practice, and role of financial intermediaries. Role of the Federal Reserve System in financial markets and influence on financial policy. Prerequisite: FIN 3403, or equivalent.

**FIN 4324 Commercial Bank Management** (3)  
The management of bank assets and liabilities; specialized banking functions; and the role of

the commercial bank in financing business. Prerequisite: FIN 3403, or equivalent.

**FIN 4404 Policies for Financial Management** (3)  
The process of securing and allocating funds within the organization, with emphasis on the relevant financial decision-making and policy aspects. Prerequisite: FIN 3403, or equivalent.

**FIN 4419 Capital Budgeting Techniques and Applications** (3)  
The application of contemporary theory and techniques to the problem of long term resource allocation. A review of capital budgeting techniques and the implications the investment and management of capital have toward the goal of maximizing the value of the firm. Prerequisite: FIN 3403, or equivalent.

**FIN 4502 Securities Analysis** (3)  
The examination of the determinants of the values of common and preferred stocks, bonds, and warrants. The timing of security purchases and sales and an introduction to portfolio construction techniques. Prerequisite: FIN 3403, or equivalent.

**FIN 4504 Portfolio Analysis and Management** (3)  
Financial theories will be applied to the construction of portfolios. Portfolio management techniques will be analyzed in regard to the goals of individuals, corporations, and various financial institutions. Prerequisite: FIN 4502, or equivalent.

**FIN 4611 International Financial Management** (3)  
Capital budgeting operational analysis, and financial decisions in the multinational context. Working capital management and intrafirm fund transfers. Measurement and evaluation of risk of internationally diversified assets. Prerequisite: FIN 3403, or equivalent.

**FIN 4627 International Banking** (3)  
Introductory survey of issues that deal with international aspects of banking. The course provides an overview of the structure and operation of the international banking function, the services offered, supporting documentation, and measures to improve the efficiency and effectiveness of the international banking organization. The purpose of the course is to acquaint the students with the daily activities in international banking. Prerequisite: Commercial Bank Mgmt. (FIN 4324) or permission of instructor.

**FIN 4713 Financial Policies for Not-For-Profit Organizations** (3)  
Financial processes relevant to governmental and other not-for-profit organizations. Emphasis is on legal, political, and market constraints on securing, managing, and expending funds. Prerequisite: FIN 3403, or equivalent.

**FIN 4904 Independent Study in Finance** (1-6)  
Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

**FIN 4934 Special Topics in Finance** (1-3)  
For groups of students who desire an 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 4949 Cooperative Education in Finance (3)**

Semesters of full-time classroom study are alternated with semesters of full-time remunerated employment which closely relates to the student's area of academic study. Carefully designed and monitored work assignments are intended to develop the student's understanding of the relationship between theory and practice in an authentic work environment.

**FIN 5314 Working Capital Management (3)**  
Intermediate theories and techniques of cash, accounts receivable, inventory, and accounts payable management. Prerequisite: FIN 3403 or FIN 6428, or equivalent.

**FIN 5345 Credit Analysis and Loan Evaluation (3)**

Topics to include: introduction to commercial lending; secured lending; accounts receivable financing and factoring; inventory financing; introduction to lending vehicles; short term lending; domestic taxation; consolidations; forecasting; and intermediate term cash flow lending; term loan agreements/covenants; subordinations and guarantees; foreign exchange; international transactions and leasing.

**FIN 5444 Leasing and Mergers (3)**

Discussion oriented course and 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. Prerequisite: FIN 3403, or FIN 6428, or equivalent.

**FIN 5473 Small Business Finance (3)**

The financial markets, financial instruments, and managerial policies and techniques available to potential and existing entrepreneurs and owner/managers. Emphasis will be upon analysis of areas of opportunity for small business; analysis of financing alternatives; and analysis of profitability. Prerequisite: FIN 3403 or FIN 6428, or equivalent.

**FIN 5515 Futures Trading (3)**

An examination of the risk reward structure of stock options, commodity futures and currency futures. An examination of the structure of the markets for these securities and strategies for their use in portfolio construction. Prerequisite: FIN 4502, or FIN 6516, or equivalent.

**FIN 6246 Financial Markets and Institutions (3)**

Analysis of the characteristics and efficiency of the money markets and capital markets. Types of money market and capital market instruments, and role of financial institutions in these markets.

**FIN 6315 Commercial Banking (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 6246, or equivalent.

**FIN 6316 Management of Nonbank Financial Institutions (3)**

The objectives, constraints, and policies applicable to the management of nonbank financial Inst.; S & L assoc., credit unions, REITs, and insurance, invest. & finance companies.

**FIN 6325 Current Issues in Commercial Banking (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 financial sector. Prerequisite: FIN 6315, or equivalent.

**FIN 6426 Financial Management Policies (3)**

The selection and management of current and permanent assets to achieve corporate objectives. The selection and management of alternative sources of funds to obtain the optimal capital structure. Prerequisite: FIN 6246, or equivalent.

**FIN 6435 Forecasting Business Conditions (3)**

Techniques for forecasting business conditions within local, regional, national, and worldwide contexts. Course covers appropriate methodology of statistics and economics, and techniques of computer utilization useful in achieving forecasts.

**FIN 6436 Capital Budgeting and Long Term Resource Allocation (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 6428, or equivalent.

**FIN 6456 Quantitative Methods in Financial Analysis (3)**

The applications of computer techniques to financial management of manufacturing firms and financial institutions. Prerequisite: FIN 6428, or equivalent.

**FIN 6516 Securities Analysis (3)**

An analysis of contemporary securities markets and their operations. The determinants of the risk reward structure of equity and debt securities. Prerequisite: FIN 6246 or equivalent.

**FIN 6525 Portfolio Management (3)**

Financial theories will be applied to the construction of portfolios. Portfolio management techniques will be analyzed in regard to the goals of individuals, corporations, and various financial institutions. Prerequisite: FIN 6516, or equivalent.

**FIN 6625 International Bank Management (3)**

Growth of U.S. international banking and description of international banking services. Examination of lending practices, types of risk and formulation of international banking policy.

**FIN 6636 International Finance (3)**

A comparative study of the institutional characteristics and internal efficiency of developed and underdeveloped capital markets. The relation-

ships between world and capital markets and prospects for integration. The role of multi-lateral 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 6428, or equivalent.

**FIN 6716 Financial Management of Governmental Organizations (3)**

The budgetary process of identifying, justifying, and allocating funds. The securing of funds in the market and the efficient allocation of funds.

**FIN 6806 The Theory of Finance (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. Prerequisite: FIN 6428, or equivalent.

**FIN 6906 Independent Study in Finance (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 (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. Permission of the faculty advisor is required before registering for the course. 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 (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.

**MAN 4600 International Management (3)**

Introductory survey of management issues that confront the multinational enterprise. At least one class session is devoted to each of the following topics: review of basic trade theory; tariffs and trade barriers; organizational transfer, foreign exchange; institutions affecting the multinational manager (such as IMF, IDB, Ex-Im Bank, EEC, IBRD), international financial management issues in multinational accounting; personnel management, comparative business customs and behavioral issues; export import procedures; conflicts with national interests.

**MAN 4610 International and Comparative Industrial Relations (3)**

Examines selected industrial relations systems of Western Europe, Asia and the Americas, with special emphasis on differences among systems and the reasons such differences exist. The industrial relations significance of the multinational enterprise, and management problems associated with operations in diverse systems, are analyzed.

**MAN 6601 International Management** (3)  
Graduate seminar focusing on management issues confronting the multinational enterprise. Includes basic trade theory; tariffs and trade barriers; organizational transfer, foreign exchange; international financial management; export-import procedures; comparative business customs; personnel management; and institutions affecting the multinational manager.

**MAN 6630 Problems in Comparative Management** (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 6610 International Labor-Management Relations** (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 6635 International Business Policy** (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: ACC 6011, MAN 6205, FIN 6428, and MAR 6716.

## INSURANCE

### Definition of Prefix

**RMI — Risk Management & Insurance**

**RMI 4015 Principles of Insurance** (3)  
Types of risk; methods of handling risk; analysis of insurance as a principal method; organization and operation of insurance companies; bases for decision-making in management of personal and business risks.

**RMI 4016 Management of Insurance Enterprise** (3)  
Analysis of the operations of insurance organizations, underwriting; rate making; regulation; legal organization; management and control financial analysis; marketing systems. Prerequisites: RMI 4015 and consent of instructor.

**RMI 4115 Life Insurance** (3)  
Functions and uses of life insurance; types of policy contracts; calculation of premiums and reserves; investments; legal principles; organization, management, and supervision of companies.

**RMI 4117 Personal Insurance Planning** (3)  
Planning a personal program of insurance; integrating life, health and accident, property, pensions, and governmental programs.

**RMI 4135 Employee Fringe Benefit Programs** (3)  
Coverage of executive compensation; contractual agreements; benefit formulas; financing of

death, disability, and retirement benefits; group life and health insurance; pension and profit sharing plans; taxation and legal aspects underlying pensions; deferred and non-deferred considerations.

**RMI 4145 Business and Estate Insurance Planning** (3)  
Applications of life and health insurance to business and estate planning situations, emphasis on current practices and developments in retirement planning, business continuation, and estate conversions.

**RMI 4212 Property Insurance I** (3)  
Basic principles of fire and allied lines insurance, including standard fire insurance contracts, declarations, agreements, conditions and exclusions; fire insurance forms, clauses, and endorsements; special and allied fire lines; marine and other insurance.

**RMI 4213 Property Insurance II** (3)  
Multiple-line risk and risk management; the multiple-line insurance industry; property and liability hazards and policy contracts; functional aspects of underwriting, rate making, and claims handling.

**RMI 4220 Casualty Insurance I** (3)  
A broad concept of casualty insurance, including a thorough review of basic policies; dailies, underwriting; losses; multiple line and comprehensive forms. Subjects covered include property and personal liability insurance; boiler and machinery insurance; air insurance; inland and ocean marine insurance; workmen's compensation; and surety.

**RMI 4221 Casualty Insurance II** (3)  
A continuation of RMI 4220, but including agency management and company administration.

**RMI 4305 Risk Management** (3)  
Concepts and philosophies of risk management. Application of alternatives to handling risks, including risk retention; loss prevention; corporate insurance programs; self-insurance; insurance surveys and case studies.

**RMI 4405 Insurance Law** (3)  
Legal environment and essentials of the law particularly applicable to the business of insurance. Emphasis on statutory regulation in Florida.

**RMI 4500 Social Insurance** (3)  
Introductory analysis of the rationale for social insurance; structure of current social insurance programs; evaluation of programs; old-age, survivors, health, disability, and unemployment insurance.

**RMI 4740 Insurance Underwriting and Rating** (3)  
Examination of an underwriter's and rater's functions: selection of risks, classification and rating, retention and reinsurance deductions and exclusions, etc. Prerequisite: RMI 4015, or consent of instructor.

**RMI 4910 Independent Study in Insurance** (1-6)  
Individual conferences; supervised readings; reports on personal investigations. Consent of

faculty tutor and Department Chairperson required.

**RMI 4935 Special Topics in Insurance** (1-6)  
Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

**RMI 6055 Graduate Survey of Insurance** (3)  
Graduate examination of current problems in insurance, including theory; uses of insurance in business organizations; property and liability insurance; health insurance; and life insurance.

**RMI 6912 Independent Study in Insurance** (1-6)  
Individual conferences, supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

**RMI 6936 Special Topics in Insurance** (1-6)  
Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

## MANAGEMENT

### Definition of Prefixes

**MAN — Management; QMB — Quantitative Methods in Business.**

**MAN 3949 Cooperative Education—Management I** (1-3)  
A special program enabling management majors to work in jobs significantly related to their major area and career goals. Specific placement must be approved by the Department Chairperson and faculty advisor prior to enrollment. Prerequisite: qualification for Cooperative Education Program.

**MAN 4064 Dilemmas of Responsibility in Business Management** (3)  
The use of interdisciplinary concepts and tools to define and understand the moral and ethical dilemmas involved in business and corporate spheres of activity. Specifically attended to are issues such as pollution, consumer affairs, and quality of public facilities.

**MAN 4120 Intergroup Relations in Organization** (3)  
A study of the psychological and sociological dimensions of intergroup relations. Attention to the problems experienced by subgroups in large and small organizations, with particular reference to ethnic, racial, and subcultural groups. The roles and responsibilities of management in the constructive resolution and utilization of inter-group conflict in organizations.

**MAN 4142 Managerial Decision Styles** (3)  
An experiential, theoretical, and applied investigation of personal decision styles and their relation to management and human effectiveness. Focus upon analytic and intuitive styles of thinking.

**MAN 4151 Behavioral Science in Management** (3)  
An analysis of selected concepts in behavioral science, their interaction and application to



management. Topics include perception, motivation, and group behavior.

**MAN 4201 Organization Theory (3)**  
A comparative analysis of various theories of organization, (including the classical, biological, economic, and Cyert-March models) and their treatment of fundamental structure; conflict, communications; group and individual behavior; and decision-making. Primary emphasis on developing an integrated philosophy of organization and management. Prerequisite: MAN 3010, or equivalent.

**MAN 4301 Personnel Management (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 resource management and development at various organizational levels.

**MAN 4320 Personnel Recruitment and Selection (3)**  
In depth study of the personnel staffing function. Includes an analysis of objectives, techniques, and procedures for forecasting manpower needs, recruiting candidates, and selecting employees.

**MAN 4322 Personnel Information Systems (3)**  
A survey of personnel reporting requirements; assessment of information needs; manpower planning; and development of integrated personnel systems. Prerequisites: CIS 3000 and MAN 4301.

**MAN 4330 Wage and Salary Administration (3)**  
Presents the theories and techniques used by management in the areas of work measurement, wage incentives and job evaluation.

**MAN 4401 Industrial Relations (3)**  
Organizational and economic analysis of the problems and issues arising out of legislative and judicial efforts to define the rights, duties and responsibilities of labor organizations and management in the field of labor relations.

**MAN 4410 Labor, Management and Collective Bargaining (3)**  
The various options for settlement of labor-management disputes. Evaluation of the nature, institutions and processes of collective bargaining; the analysis of labor-management issues and their significance; and the character and procedures of arbitration, mediation, fact-finding, and conciliation. The course deals also with the analysis of the labor market.

**MAN 4523 Production Information Systems (3)**  
A study of the special problems associated with the development of information systems capable of supporting the production function of an organization. Review of information systems approaches to inventory control and work processing management.

**MAN 4781 Women in Management of Business Organizations (3)**  
This course is intended for students interested in the present and future status of female managers. It will focus on the history of women in

professions; the socio-economic status of women in business; educational factors, sex roles and the informal organization; relevant legal requirements; the development of managerial climates for effective performance; and strategies for changing organizations.

**MAN 4802 Small Business Management (3)**  
The organization and operation of the small business: accounting, finance, production and marketing subsystems. The use of analytical approach. Problems of manpower management and information flow. Possible use of EDP, case studies.

**MAN 4820 Systems Analysis and Design (3)**  
Topics include: information systems concepts; the structure, design, and development of the data base; and techniques and procedures used in the analysis and design of systems projects. Prerequisite: CIS 3000.

**MAN 4821 Information Systems Development (3)**  
Advanced topics in the analysis and design of computer-based management information systems. Includes feasibility studies; systems analysis; design; implementation; operation; and the interfacing of a computer-based system within the organization. Cases and field studies will be used as a basis for course projects.

**MAN 4822 Systems Management (3)**  
An in-depth, case-oriented study of the problems encountered in the management of systems projects. Analyst-user conflicts, communication problems within the systems department, computer evaluation and selection techniques, computer negotiations and contracts, and project management are covered in detail. Where appropriate, field study investigating a topical area will be carried out by each student.

**MAN 4905 Independent Study in Management (1-6)**  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required. P/F only.

**MAN 4930 Special Topics in Management (1-6)**  
For students who wish an 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. Grading option.

**MAN 4949 Cooperative Education—Management II (1-3)**  
Continuation of MAN 3949. Prerequisites: MAN 3949, and qualification for Cooperative Education Program.

**MAN 5123 Human Interaction I: Personal Growth Laboratory (3)**  
Experience designed to increase awareness of personal social impact, and sensitivity to the feelings of others; to improve interpersonal communication, and increase understanding of the change-learning process. Study and analysis of class-group participation as well as other functional social groups.

**MAN 5830 Planning for Information Systems (3)**  
An in-depth study of systems concepts as they apply to information systems in organizations. Consideration of planning for an accomplishment of systems development through the phases of the life cycle and the overall management of the information systems function.

**MAN 5831 Analysis of Information Requirements (3)**  
An in-depth study of the problems of determining effective information needs for systems users. Consideration of the development of data element dictionary capability; procedures for eliciting requirement and report content.

**MAN 5832 Design of Information Systems (3)**  
An in-depth study of the problem of determining an efficient information system design to meet the requirements specified by the user. Consideration of the determination of alternative designs, selection of the "best" design, and conversion of the design into programming specifications.

**MAN 5930 Seminar in Personnel Management (3)**  
Overview and examination of the various aspects of the personnel management function. Course is only open to students enrolled in the Personnel Management Certificate Program.

**MAN 6112 Group Processes in Organizations (3)**  
The social and psychological processes of organizational functioning. The roles played by small groups in organizational settings.

**MAN 6121 Interpersonal Behavior and Analysis (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 6124 Human Interaction II Organizational Consultation (3)**  
Theories and approaches to organization development and change, with a particular focus on public schools and organizations. Supervised laboratory on systematic consultation and action skills, including schools and organizations. Supervised laboratory on systematic consultation and action skills, including method of assessment (survey feedback, milling, confrontation meetings, systems analysis); agenda-setting; feedbacks; coaching; third-party consultation for conflict management; and team training. Prerequisite: MAN 5123.

**MAN 6145 Decision Styles and Managerial Effectiveness (3)**  
An experiential, theoretical, and applied investigation of personal decision styles and their relation to management and human effectiveness. Focus upon analytic and intuitive styles of thinking.

**MAN 6213 Conflict in Organizations (3)**  
A critical examination of the role and impact of interpersonal and intergroup conflict in organi-

zations. Models are approaches to utilizing and resolving conflict toward constructive personal and organization ends will be emphasized.

**MAN 6305 Computer Administration (3)**  
The theory and practice of 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.

**MAN 6311 Advanced Personnel Management (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 6321 Personnel Selection and Placement (3)**  
Individual differences and their measurement in personnel selection and job placement. Job design and redesign.

**MAN 6331 Compensation Administration (3)**  
An in depth analysis of wages and salary administration, including such topics as job evaluation; wage incentive systems; and work sampling.

**MAN 6351 Personnel Training and Development (3)**  
Determining training needs. Training methods. The training staff. Supervisor development. Equal Employment Opportunity management.

**MAN 6405 Labor Relations (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 (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 6715 Corporate Negotiations (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: ACC 6011, MAN 6205, FIN 6428, MAR 6716, MAN 6713.

**MAN 6833 Information Systems Planning (3)**  
An in-depth 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.

**MAN 6834 Information Analysis (3)**  
An in depth study of the problem of determining effective information needs for systems users. Consideration of the development of data element dictionary capability; procedures for eliciting requirements; and techniques for documenting requirements and report content. Prerequisite: MAN 6205.

**MAN 6835 Systems Design (3)**  
An in depth study of the problem of determining an efficient design to meet the requirements specified by the user. Consideration of the determination of alternative designs, selection of the "best" design, basis of structure and design, and conversion of the design into programming specifications. Prerequisite: MAN 6834.

**MAN 6836 Systems Analysis (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; marshalling resources for achieving system objectives; analyzing the subcomponents of the system and their respective objectives; and managing the system.

**MAN 6837 Data Structures and File Processing in Business (3)**  
This course deals with major levels of data organization, data base management, hierarchic and associative structures, file maintenance, and privacy and security measures and safeguards.

**MAN 6838 Seminar in Systems Development (3)**  
Student conducts 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: MAN 6835.

**MAN 6895 Seminar in Management Science (3)**  
New topics and new application areas will be explored. Lectures will relate to the latest advances in the theory and application of management science.

**MAN 6905 Independent Study in Management (1-6)**  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty sponsor and Department Chairman required. P/F only.

**MAN 6910 Research Methods in Management (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 (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, sub-

ject to the instructor's approval. Prerequisite: MAN 6835.

**MAN 6930 Master's Seminar in Management (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. The student may make a preliminary selection of his/her master's thesis or project topic.

**MAN 6931 Current Economic and Social Implications for Information Systems (3)**  
The effects and organizational implications for information systems of business and community. The privacy issue, consideration of major trends dealing with electronic funds transfer, the electronic mail, automated teller machines, and the like on business society.

**MAN 6974 Master's Project in Management (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 School.

**QMB 4700 Principles of Operations Research I (3)**  
Application of deterministic operations research models (such as linear and nonlinear programming, networks (CPM), dynamic programming, and branch and bound techniques) to managerial problems of allocation; planning and scheduling investment; control rescheduling. Prerequisite: MAN 3503.

**QMB 6603 Quantitative Methods in Management (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.

**QMB 6805 Deterministic Models for Management Analysis (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 (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.

**QMB 6855 Stochastic Models for Management Analysis (3)**  
Applications of probabilistic models (such as queuing, inventory, and renewal) to their managerial problems.

**QMB 6875 Stochastic Models for Project Management (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/simulate hypothetical project networks, and learn to interpret the results in order to facilitate operational decisions.

## MARKETING

### Definition of Prefixes

MAR — Marketing. MAN — Management Environment.

### MAN 4711 Social Responsibility and Social Accounting (3)

The sources of the conception of corporate social responsibility. An examination of the classical doctrines as well as new approaches to the conception of the corporation as a citizen. A portion of the course will be devoted to a discussion of social accountability and social accounting as a specific problem in corporate input. Prerequisite: MAN 3701 or consent of instructor.

### MAN 4731 Modern Business History (3)

An examination of the history of the corporation in the United States since the Civil War, up to, and including, the development of the multinational corporation. An examination of the social and economic forces operative in the development of the corporate form. A full exploration of the current power of the corporate form — and legal, and other, efforts to limit this power. Prerequisite: MAN 3701 or consent of the instructor.

### MAN 4741 Business Environment and Policy Formation (3)

A course studying the conceptual and environmental forces which establish the framework of business strategy and tactical decision. A critical analysis of conceptual processes which can limit the executive's capacity to respond to change in the total and in the business environment. Prerequisite: MAN 3701 or consent of instructor.

### MAN 4742 Business and the Environment (3)

A course on the effect of industrialization and technological change on the physical environment. An examination of the current legal, economic and political consequences of pollution and environmental damage, and the abatement of these factors. Prerequisite: MAN 3701 or consent of instructor.

### MAR 4054 Marketing for Non-Profit Organizations (3)

Marketing techniques as applied to non-profit organizations, including (but not limited to) the marketing of such governmental programs as housing, educational, health services, transportation, and Social Security.

### MAR 4103 Personal Selling (3)

The development of effective salesmen/customer relationships is emphasized. Selection, training, and motivation of the sales force, and the relationship between personal selling and the other elements of marketing strategy are analyzed.

### MAR 4153 Retailing Management (3)

An examination of the role of retailing in the

marketing system. Attention is concentrated on fundamentals for successful retail management. The course emphasizes basic marketing principles and procedures, including merchandising; markup-markdown; pricing; stock-turn; and sales and stock planning.

### MAR 4154 Cases in Retailing Management (3)

This course treats the retail marketing concentration in terms of up-to-date merchandise management methods. Emphasis is on elements of profit, open-to-buy planning, return on investment, and inventory control. The course delineates the decisions made by retailing managements and reviews their available strategies. Prerequisite: MAR 4153, or consent of instructor.

### MAR 4203 Marketing Channels (3)

The course focuses upon institutions, functions, and flows within channels of distribution; and their integration into channels systems. Wholesale and physical activity are emphasized. Same course as TRA 4203.

### MAR 4243 International Marketing (3)

The course studies the information required by marketing managers to assist in satisfying the needs of consumers internationally. Special emphasis will be given to the constraints of the international environment.

### MAR 4244 Export Marketing (3)

This course emphasizes practical approaches to export marketing, including marketing strategies by individual firms to serve foreign markets. Operational methods of identifying, establishing, and consolidating export markets are discussed, with particular attention to the needs of the smaller business.

### MAR 4303 Advertising Management (3)

The study of advertising in business and society, providing a broad understanding of advertising's social, communicative, and economic purposes. An examination of the types and functions of advertising. Discussion of research, media selection, budget determination, and other elements in the total advertising process.

### MAR 4343 Promotional Strategy (3)

The course deals with problems of decision-making in the areas of marketing communication methods, with primary emphasis on advertising.

### MAR 4344 Advertising Campaign Management (3)

Strategic approaches to managing advertising campaigns, including selection of approaches; market research; consumer target markets; media; advertisements; development and control of budgets. Prerequisite: MAR 4303, or consent of instructor.

### MAR 4503 Consumer Behavior (3)

The course offers an introduction to the analysis of the consumer, as the basis for the development of the marketing mix.

### MAR 4613 Marketing Research (3)

An examination of the marketing research process and its role in aiding decision-making. Emphasis is placed on evaluation and utilization of research information in making marketing decisions.

### MAR 4703 Current Issues in Marketing I (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.

### MAR 4704 Current Issues in Marketing II (3)

Students electing to take this seminar may not take independent study in marketing. Prerequisite: MAR 4703.

### MAR 4713 Cases in Marketing Management (3)

An analytic approach to the performance to marketing management. The elements of marketing mix as the focus of decision-making in marketing are studied, and the case method of instruction is employed.

### MAR 4723 Marketing of Small Business Enterprises (3)

Designed to develop an understanding of the principles and practices which contribute to the successful marketing operation of a small business enterprise, this course deals with marketing policies, techniques, and applications, to aid the entrepreneur in this field.

### MAR 4733 Marketing and the Law (3)

A policy and operational analysis of legislative acts and judicial interpretations of laws influencing organizations engaged in marketing activities.

### MAR 4753 Marketing Game (3)

Focal point of the course is a computerized marketing management simulation. The course provides an opportunity for the student to participate, as a member of the marketing management team of a firm in competition with other firms.

### MAR 4907 Independent Study in Marketing (1-6)

Individual conferences; supervised reading; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

### MAR 4933 Special Topics in Marketing (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 4941 Marketing Internship (1-6)

Full-time supervised work in a selected organization. Prerequisites: At least twenty hours in marketing; consent of instructor and Department Chairperson.

### MAR 4949 Cooperative Education in Marketing (3)

Open to marketing majors who have been admitted to the Cooperative Education Program, with consent of Chairperson. Full-time supervised work with a participating organization in marketing. Report to the organization and a paper to the Chairperson are required.

- MAR 5913 Independent Study in Marketing** (1-6)  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.
- MAR 5935 Special Topics in Marketing** (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 6246 Advanced International Marketing** (3)  
This course discusses the nature and scope of international marketing, and explores multinational problems facing firms and other international marketing organizations, together with strategies for foreign market penetration.
- MAR 6346 Advanced Promotional Strategy** (3)  
The course focuses on planning, problem-solving, and decision-making, as they apply to promotion programs. Primary emphasis is on advertising, with discussion of the role of promotion in relation to other elements of the marketing program.
- MAR 6506 Advanced Consumer Behavior** (3)  
Modern comprehensive models of consumer behavior are utilized as a framework for understanding consumer decision processes.
- MAR 6617 Advanced Marketing Research** (3)  
The role of research in providing information for marketing decision-making, including an examination of the research process and the tools available to the researcher.
- MAR 6706 Current Issues in Marketing I** (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.
- MAR 6707 Current Issues in Marketing II** (3)  
Students electing to take this seminar may not take independent study in marketing. Prerequisite: MAR 6706.
- MAR 6717 Advanced Marketing Management** (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.
- MAR 6915 Independent Study in Marketing** (1-6)  
Individual conferences; supervised reading; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.
- MAR 6936 Special Topics in Marketing** (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.
- REAL ESTATE**  
**Definition of Prefix**  
**REE—Real Estate**
- REE 4043 Advanced Real Estate Fundamentals** (3)  
Decision making processes for development, financing, marketing, and management of real estate within the framework of our governmental, economic, legal, and social systems; does not meet course content requirements of Florida Board of Real Estate for obtaining a real estate license. Prerequisite to all other courses in real estate and regional development.
- REE 4433 Legal Environment of Real Estate** (3)  
Legal environment of real property ownership, transfer and brokerage; estates in land; sales contracts; mortgage transactions; titles; conveyances; landlord and tenant; restrictions; zoning; and eminent domain; does not cover Florida Real Estate license law or licensing regulations of Florida Board of Real Estate; not a license "prep" course. Prerequisite: REE 4043.
- REE 4905 Independent Study in Real Estate** (1-6)  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.
- REE 4930 Special Topics in Real Estate** (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.
- REE 5105 Appraisal of Real Estate** (3)  
Valuation and appraisal framework applied to residential and income producing property; role of computers; valuation theory and process as a guide to business decisions. Prerequisite: ACC 4043, or permission of instructor.
- REE 5115 Income Property Appraisal** (3)  
Valuation and appraisal framework applied to income properties; capitalization; rates and techniques; discounting and compound interest; mortgage-equity analysis. Includes Ellwood analysis; the role of computers; valuation as a guide to business decisions.
- REE 5207 Advanced Real Estate Finance** (3)  
Financial analysis and structuring of real estate projects; traditional and creative concepts and mechanisms for construction and permanent financing; portfolio problems; governmental programs; money and mortgage market analysis; computers and financial models.
- REE 5305 Real Estate Investment** (3)  
Advanced concepts of acquisition, ownership, and disposition of investment property; taxation and tax shelter; cash flow projection; analysis of specific types of investment property; utilization of computers as a decision-making tool; models of real estate investment analysis; case analysis and policy formulation.
- REE 5306 Real Property Analysis** (3)  
A study of the decision making processes of real property asset management. Private and public policy issues regarding the housing process and the regulation of the real property business environment. Legal considerations of real property ownership, financing and transfer of interests. Prerequisite: Consent of instructor.
- REE 5505 Real Estate Management** (3)  
Theories and techniques of professional management of real estate including such topics as creating a management plan; merchandising space; economics of alternates; market analysis; the maintenance process; owner-tenant manager relations; operating budgets; tax consideration; ethics.
- REE 5715 Regional Real Estate Development** (3)  
Operation of real estate markets in land allocation; land use decision making in real estate; real estate feasibility studies, applied to specific real estate projects.
- REE 5734 Real Estate Land Development** (3)  
Real estate development, acquisition of raw land; zoning; subdivision into sites; provision of utilities and services; financing; merchandising of improved sites. Emphasis on design and development of residential communities.
- REE 5736 Real Estate Land Planning** (3)  
Theories of city growth and structure, operations of the real estate market in land allocation; current practices in real estate land planning.
- REE 5755 Real Estate and Regional Development Policy** (3)  
A capstone course in integrating all the aspects of real estate and regional development learned in previous courses, projects, cases, and field trips. Prerequisite: Permission of instructor.
- REE 5816 Real Estate Marketing** (3)  
Techniques of selecting, training, and compensating sales personnel; obtaining and controlling listings; process and methods involved in the selling of real estate; promotion activities; including advertising and public relations; growth-problems; professionalism; ethics.
- REE 6020 Industrial Real Estate I** (3)  
General overview of industrial real estate, focusing on types of activities; locational requirements; financing techniques; brokerage; government influence; current trends; technological change; characteristics of industrial buildings.
- REE 6021 Industrial Real Estate II** (3)  
Introduction to investment and valuation problems in industrial real estate. Topics include: taxation and investment analysis; discounted cash flow techniques; appraisal framework applied to income properties. A computer will be utilized in approaching the above problems.
- REE 6195 Seminar in Real Estate Valuation Theory & Practice** (3)  
A study of the process of property valuation, utilizing cost, market and income approaches. The role of computers and mass appraisal techniques will also be examined. Prerequisites: Graduate standing and permission of Instructor.

**REE 6295 Seminar in Real Estate Finance** (3)  
A study of financial institutions, their methods; and interregional flows of funds in mortgage markets. Further emphasis is placed on national economic policies affecting mortgage markets. Prerequisites: Graduate standing and permission of instructor.

**REE 6395 Seminar in Real Estate Investment and Taxation** (3)  
The techniques of real estate investment analysis, utilizing present value and cash flow approaches. The impact of Federal taxation on real estate investment decisions. Prerequisites: Graduate standing and permission of instructor.

**REE 6795 Seminar in Urban Housing Policy & Problems** (3)  
Examination of national housing policies and their formulation; the role of the public and private sectors in regard to housing problems; effectiveness of various housing policies. Prerequisites: Graduate standing and Permission of instructor.

**REE 6825 Industrial Brokerage** (3)  
Defines distinction between industrial brokerage and general real estate brokerage; role and functions of the industrial broker; industrial brokerage practice. Includes negotiating and leasing; regulations and ethics.

**REE 6906 Independent Study in Real Estate** (1-6)  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

**REE 6932 Special Topics in Real Estate** (1-6)  
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 supervisor 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.

**REE 6946 Industry Project** (3)  
Advanced individual or group study of specialized problems in the real estate field. Guidance of study to be provided by real estate faculty. Prerequisite: Permission of advisor.

#### TRANSPORTATION MANAGEMENT

Definition of Prefix  
TRA—Transportation

**TRA 4012 Transportation Logistics** (3)  
Consideration of transportation logistics and its relationship to production and distribution. Discussion of characteristics, management, legislation, and public regulation of various modes of transportation.

**TRA 4101 Transportation Rate Making** (3)  
Description and analysis of rate making, for both passenger and cargo, in the various modes of transportation — including trucks, railroad, airlines, and ocean transportation. Classes may

concentrate on one particular mode for practical applications.

**TRA 4203 Physical Distribution Management** (3)  
Distribution in overall company operations; organization of the traffic function; determination of classification and rates; integration of transportation with production flow, inventory management, warehousing, marketing policies, and plant location.

**TRA 4240 Transportation Systems and Services** (3)  
Survey and analysis of transportation modes, including rail, motor, air, water, pipeline and mass transit, and their impact on the social and economic systems; discussion of current problems.

**TRA 4320 Transportation Regulation** (3)  
Study of the economic and constitutional basis of transport regulation; the scope of regulation. Discussion of the regulation of industrial traffic and transport modes; the structure and policies of federal and state regulatory agencies.

**TRA 4380 Transportation Policy** (3)  
Consideration of national transportation policy; the principal policy issues currently facing the transportation modes.

**TRA 4410 Air Transportation** (3)  
A comprehensive introduction to the total air transportation environment including general economic characteristics of basic areas; commercial, private, corporate, and airline categories; government promotion and regulation of the industry, including aircraft manufacturing and operation; air traffic control; and airport support and functions.

**TRA 4411 Airport Management** (3)  
Application of management principles to airport operation, with emphasis on unique characteristic of airport finance; government relations and regulations; airline relations and interdependence.

**TRA 4412 Aircarrier Management** (3)  
An introduction to the broad scope of airline management practices and policies. Particular emphasis on problem analysis in financing, marketing, scheduling, fleet planning, facilities planning, maintenance, and general operations.

**TRA 4510 Mass Transportation and Urban Problems** (3)  
Urban and metropolitan transportation development; requirements, benefits and costs of alternative approaches to mass transit; management techniques and operating principles, policy and regulation.

**TRA 4906 Independent Study in Transportation** (1-6)  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

**TRA 4936 Special Topics in Transportation** (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.

**TRA 4941 Transportation Internship** (1-6)  
Full time supervised work in a selected organization. Prerequisites: At least twelve hours in transportation; consent of instructor and Department Chairperson required.

**TRA 5245 Transportation Logistics** (3)  
Quantitative methods applied to solving problems in business logistics; mathematical and statistical models; optimization 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** (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 6035 Graduate Survey of Transportation Management** (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** (1-6)  
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

**TRA 6936 Special Topics in Transportation** (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.

#### MASTER OF BUSINESS ADMINISTRATION PROGRAM Definition of Prefixes

ACC — Accounting; ECP — Economic Problems & Policy; FIN — Finance; MAN — Management; MAR — Marketing; QMB — Quantitative Methods in Business

**ACC 6313 Accounting for Decision Making** (3)  
The uses and limitations of accounting data as sources of information for managerial decisions. Prerequisite: ACC 6601 or equivalent.

**ECP 6705 Macroeconomic Forecasting for Management** (3)  
Business macroeconomic concepts as they apply to decision making within the firm. Traditional models of income determination and forecasting analysis. Prerequisite: ECP 6704.

**FIN 6428 Financial Management** (3)  
In-depth examination of asset, liability and capital structure management, with emphasis on capital budgeting techniques; risk evaluation; working capital management; and methods of short term, intermediate, and long term financing. Prerequisite: ACC 6011, or equivalent.

**MAN 6205 Organizational Behavior** (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 6207 Organization and Management Theory** (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 6501 Operations Management** (3)  
This course covers the analysis of design and operations in 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. Prerequisite: MAN 6721, or equivalent.

**MAN 6713 International Business Environment** (3)  
A macro-examination of economic, political, and cultural variables affecting the organization. Emphasis will be placed on social indications and societal forecasting of change; organizational responses to change; and the nature and rate of change in different societies.

**MAN 6721 Managerial Decision-Making** (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 decision-making experiences for the student. Prerequisite: QMB 6603, or equivalent.

**MAN 6726 Policy Analysis** (3)  
The use of cases, guest lectures, and gaming to integrate the analysis and measurement tools, the functional areas and public policy issued. 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 6830 Organization Information Systems** (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. Prerequisite: COP 3172 or equivalent.

**MAN 6716 Marketing Management** (3)  
A study of analysis and application of theory and problem solving in marketing management. 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.

## School of Business and Organizational Sciences

*Dean*  
*Associate Dean*  
*Assistant Dean*  
*Chairpersons:*  
*Accounting*  
*Finance & International Business*  
*Management*  
*Marketing*  
*Bay Vista Coordinator*

Leonardo Rodriguez  
Karl O. Magnusen  
Donald W. Fair  
Charles Nickerson  
George B. Simmons  
Enzo R. Valenzi  
William T. Jerome  
Larry A. Smith

## Faculty

Altman, Steven, D.B.A. (*University of Southern California*), Associate Professor, Management, Provost, and Vice President for Academic Affairs  
Anyane-Ntow, Kwabena, Ph.D. (*University of Georgia*), Assistant Professor, Accounting  
Apasu, Yao, M.B.A. (*UCLA*), Assistant Professor, Marketing  
Auster, Rolf, Ph.D. (*Northwestern University*), CPA, CMA, Professor, Accounting  
Awad, Elias, D.B.A. (*University of Kentucky*), Professor, Management  
Beaton, William R., Ph.D. (*Ohio State University*), Professor, Finance & International Business  
Belloit, Jerry, Ph.D. (*University of Florida*), Assistant Professor, Finance and International Business  
Byars, Richard B., Ph.D. (*North Texas State University*), CPA, Associate Professor, Accounting  
Campfield, William, Ph.D. (*University of Illinois*), CPA, Visiting Professor, Accounting  
Carter, Jack L., Ph.D. (*University of Cincinnati*), Assistant Professor, Accounting  
Challacombe, Wesley, MBA (*University of Miami*), Instructor, Management  
Chang, Lucia S., Ph.D. (*University of Texas at Austin*), Associate Professor, Accounting  
Dessler, Gary, Ph.D. (*City University of New York*), Professor, Management  
Dieguez, Manuel, MSM (*Florida International University*), CPA, Instructor, Accounting  
Dorsett, Herman W., Ed.D. (*Columbia University*), Associate Professor, Management  
Espahbodi, Hassan, Ph.D. (*University of Alabama*), Assistant Professor, Accounting  
Espahbodi, Reza, Ph.D. (*University of Alabama*), Assistant Professor, Accounting  
Ewedemi, Soga, M.B.A. (*Georgia State University*), Assistant Professor, Finance and International Business  
Fair, Donald W., M.Acc. (*Bowling Green State University*), CPA, Assistant Dean and Instructor, Accounting  
Fantl, Irving L., Ph.D. (*New York University*), CPA, Professor, Accounting  
Farrow, Dana, Ph.D. (*University of Rochester*), Associate Professor, Management  
Fiedler, Anne, M.B.A. (*University of Miami*), Coordinator of Undergraduate programs and Instructor, Marketing  
Friday, Earnest, Ph.D. (*University of Miami*), Assistant Professor, Management  
Gart, Alan, Ph.D. (*University of Pennsylvania*), Professor, Finance and International Business  
Gilbert, G. Ronald, Ph.D. (*University of Southern California*), Associate Professor, Management and Director Management Planning and Development Center  
Hallbauer, Rosalie C., Ph.D. (*University of Florida*), CPA, C.M.A., Associate Professor, Accounting  
Hannan, Edward L., Ph.D. (*University of Massachusetts*), Associate Professor, Management  
Hendrickson, Harvey S., Ph.D. (*University of Minnesota*), CPA, Professor, Accounting  
Hennart, Jean-Francois, Ph.D. (*University of Maryland*), Associate Professor, Finance and International Business  
Hodgett, Richard M., Ph.D. (*University of Oklahoma*), Professor, Management  
Hogner, Robert H., Ph.D. (*University of Pittsburgh*), Associate Professor, Marketing  
Jerome, William T., III, D.C.S. (*Harvard University*), Distinguished University Professor, Management and Acting Chairperson, Marketing  
Johnson, Vance, M.S. (*Georgia State University*), Assistant Professor, Finance & International Business  
Jordan, Willabeth, MPA (*Florida International University*), Instructor, Management and Assistant Director Management Planning and Development Center  
Kroeck, G., Ph.D. (*University of Akron*), Assistant Professor, Management  
Lavin, David, Ph.D. (*University of Illinois*), CPA, Associate Professor, Accounting  
Lubell, Myron, D.B.A. (*University of Maryland*), CPA, Associate Professor, Accounting  
Luytjes, Jan B., Ph.D. (*University of Pennsylvania*), Professor, Marketing  
Magnusen, Karl O., Ph.D. (*University of Wisconsin*), Associate Professor and Associate Dean, School of Business & Organizational Sciences  
Mills, Joan P., Ph.D. (*University of South Carolina*), Assistant Professor, Management  
Most, Kenneth S., Ph.D. (*University of Florida*), CPA, F.C.A., Professor, Accounting  
Nicholls, J.A.F., D.B.A. (*Indiana University*), Associate Professor, Marketing  
Nickerson, Charles A., Ph.D. (*University of Georgia*), CPA, Professor and Chairperson, Accounting  
Nunez, Leandro S., M.B.A. (*Roosevelt University*), CPA, Instructor, Accounting  
Oliva, Robert B., J.D. (*Whittier College*), Assistant Professor, Accounting  
Ortiz, Marta, Ph.D. (*University of Miami*), Assistant Professor, Marketing  
Phillips, Edward P., LL.M. (*New York University*), Assistant Professor, Accounting  
Polster, Eleanor, M.B.A., (*Florida International University*), Instructor, Management  
Prakash, Arun, Ph.D. (*University of California*), Assistant Professor, Finance & International Business  
Raheem, Lynda, M.B.A. (*University of Miami*), Coordinator of Graduate programs and Instructor, Marketing

- Robey, Daniel, D.B.A. (*Kent University*), Associate Professor, Management
- Rodriguez, Leonardo, D.B.A. (*Florida State University*), Associate Professor and Dean, School of Business and Organizational Sciences
- Roslow, Sydney, Ph.D. (*New York University*), Associate Professor, Marketing
- Roussakis, Emmanuel, Ph.D. (*Catholic University of Louvain, Belgium*), Professor, Finance & International Business
- Seaton, Bruce, Ph.D. (*Washington University*), Associate Professor, Marketing
- Shapiro, Gloria, Ph.D. (*University of Miami*), Assistant Professor, Management
- Simmons, George B., D.B.A. (*Indiana University*), Distinguished Service University Professor and Chairperson, Finance & International Business
- Slutsky, Lois, M.S.M. (*Florida International University*), CPA, Instructor, Accounting
- Smith, Larry A., Ph.D. (*State University of New York*), Associate Professor, Management
- Sokolowski, Theodor, M.S.M. (*Florida International University*), M.B.A. (*Florida Atlantic University*), CPA, Instructor, Accounting
- Sutija, George, M.B.A. (*Columbia University*), Associate Professor, Finance & International Business
- Taggart, William M., Ph.D. (*University of Pennsylvania*), Professor, Management
- Turban, Efraim, Ph.D. (*University of California at Berkeley*), Professor, Management
- Valenzi, Enzo R, Ph.D. (*Bowling Green University*), Chairperson and Associate Professor, Management
- Vogel, Ronald H., Ph.D. (*University of Michigan*), Associate Professor, Marketing
- Welch, William W., Ph.D. (*University of Michigan*), Associate Professor, Finance & International Business
- Yeaman, Doria, J.D. (*University of Tennessee*), Lecturer, Accounting
- Zanakis, Steve H. Ph.D. (*Pennsylvania State University*), Associate Professor, Management

# School of Education



## School of Education

The School of Education offers courses of studies and experiences for personnel who are or will be professionally engaged in education or training. Such professional development may lead to degrees at the bachelor, master, specialist, or doctoral level. In addition, it is feasible for experienced educators to pursue non-credit or certificate study and field experience.

Each applicant should review the numerous choices of major concentrations and program objectives. (The School of Education continuously reviews all its degree and certificate programs. Program requirements are published by each Division and are available to students seeking admission into programs. These requirements may not be reflected in the current catalog. Students are advised to contact the Division of the major program for current information.) The range of programs includes childhood education, early childhood education, curriculum and instruction in the various specialties in secondary education, adult education, educational administration and supervision, bilingual and intercultural education, technical and vocational education, psycho-education, urban education, community college education and human resources development, special education, international development education, counselor education, and teacher education.

Advisement services are available by telephone (305) 554-2721, Tamiami Campus or (305) 940-5810, Bay Vista Campus, by correspondence, or by prearranged visit with counselors at the Bay Vista or Tamiami Campus.

The School of Education serves county and state education agencies in in-service staff development, curriculum and materials development, joint research projects and evaluation programs. The Teacher Education Center (TEC) Program has, under formal agreement, committed specialists in the School of Education to program development and technical assistance. Of major concern is the development of urban education and bilingual education in the metropolitan areas of Dade and Broward counties. For this reason, new initiatives include programs in urban administration, urban teacher education, and Teacher Corps, adult and human resources development, and intercultural learning.

The School of Education engages in cooperative programs of study and development with national and international agencies. These include international student programs; national and international exchanges of scholars; technical assistance for the advancement of educational personnel, curriculum, materials, and research in developing nations; graduate degree and certificate programs in international development education with experiences in the major metropolitan and rural areas of Florida and, optionally, the national and international educational agencies in Washington, D.C.; global education curriculum development in schools; overseas American schooling; and study, research, and management in federal education agencies and national professional associations.

The three major purposes of the School of

Education—teaching, service, and research—are realized in its commitment in local, national, and international educational endeavors.

### General Program Design

#### Undergraduate Studies

Undergraduate courses offered by the School of Education are designed to be performance or competency-based, as well as field-based for professional service in education and training.

Typically, undergraduate students will complete 60 semester hours of study at Florida International University, including a residency requirement of 30 semester hours prior to graduation. Prior to formal admission to the University, a student may elect to take 15 credits as a Special Student which, if applicable to the major field of study, may be applied to the degree program.

**Foundations of Education Requirement.** Teacher education regulations in Florida require completion of one course each in the social and psychological foundations of education. These must be completed at the University.

**Reading Competence Requirement.** Florida Department of Education regulations require that teacher certification applicants show evidence of preparation in specific skills for teaching reading. All programs in the School are designed to meet this requirement.

**Professional Education Core.** Every teacher education student, during the junior year, must enroll in the following three common courses:

- EDF 3827 Schooling in America (3)
- EDG 3321 General Teaching Lab I: Basic Teaching Skills (3)
- EDG 3322 General Teaching Lab II: Human Relations Skills (3)

Subsequent special teaching laboratories and courses build on these core courses to extend and refine understandings and skills. All programs include one full semester of student teaching.

Bachelor degree programs typically require coursework in the College of Arts and Sciences or in one of the other Schools. These courses provide necessary subject matter preparation consonant with professional preparation.

Upon completion of program requirements, the Bachelor of Science degree is awarded and qualifies the student for a Florida Teacher Certification in the field of specialization.

### Florida State Teacher Certification Examination

Under current Florida legislation, teacher education graduates are required to take and pass the Florida State Teacher Certification Examination which covers the areas of reading, writing, mathematics and professional education. Students must successfully complete each of the four sections of the examination to qualify for teacher certification. School of Education students in the final six months of their programs are required to present an affidavit signed by the Dean to register for the Teacher Certification Examination prior to graduation.

### Graduate Studies

Graduate studies offered by the School provide specialization in degree programs developed to reflect individual student interests. A typical program will include courses, seminars, and appropriate field experiences.

Graduate students will complete at least 30 semester hours of study at the University to earn a Master of Science in Education degree. The programs in Counselor Education and School Psychology require 60 semester hours. As a general rule, a student may transfer 6 semester hours taken at another accredited college or university toward a 30 semester hour master's degree program, and 9 hours toward a 60 hour program at Florida International University. Also, prior to formal admission to the University, a student may elect to take 12 semester hours as a Special Student which, if applicable to the major field of study, may be applied to the degree program.

Doctoral students pursue courses in cooperative programs offered by Florida International University, Florida State University, the University of Florida, and Florida Atlantic University.

**Reading Competencies Requirement.** Florida Department of Education regulations require all teacher education applicants to show evidence of preparation in specific skills for teaching reading. This may be waived in graduate programs for students who can verify this training at the undergraduate level or in an approved in-service education program. Otherwise, and according to the student's major, either RED 6147 or RED 6336 will be required as part of the degree program.

### Admission Qualification

To ensure quality program standards as part of its responsibility in providing teachers to school systems, the School of Education has instituted program modifications and more rigorous admission qualifications. Effective January 1982, these include:

- A. Testing
  1. Satisfactory completion of a battery of tests (reading, arithmetic and English structure) administered at the following intervals: (a) during the admission process (b) prior to admission to student teaching and (c) after student teaching as a condition of candidacy for graduation.
  2. Should a student not meet the criterion level for any component of the tests, at any of the three checkpoints, remedial action recommended by the test examiner must be completed. Additionally, enrollment in professional education courses will be denied.
- B. Lower Division prerequisites: All freshman and sophomore prerequisites for admission into an academic program must be satisfied with a minimum grade of "C" before admission is completed.
- C. Grade Point Average
  - All applicants to the School of Education must have at least a 2.5 grade point average in all previous college level studies.

#### D. Distribution of Lower Division coursework (effective 1983-84):

Students must have completed a minimum of 60 semester hours in general education requirements, with the following distribution:

- (1) English 12 semester credits
  - (2) Mathematics\* 9 semester credits
  - (3) Humanities 6 semester credits
  - (4) Natural Science 6 semester credits
  - (5) Social Science 12 semester credits
  - (6) Public Speaking 3 semester credits
- \*Includes one course in computer/awareness/computer application

#### E. Transfer Credits

1. Only grades of "C" or better can be considered acceptable as transfer credits to Florida International University.
2. Transfer students who have been dismissed from another college or university must appear for an interview before the admission can be processed.

#### F. SAT (ACT) requirements

All teacher education candidates entering at the junior level must present a minimum score of 835 on the SAT, or 17 on the ACT

## Undergraduate Studies

The School of Education will accept as an undergraduate any person who has completed a minimum of 60 semester hours of general education undergraduate study, with a minimum of 835 on the SAT examination or an ACT score of 17. Beginning July 1, 1982, applicants for the regular certificate must have completed three (3) years of satisfactory teaching or a year-long internship program which has been approved by the Department of Education.

## Graduate Studies

### Master's Degree Programs

An applicant for admission to graduate study must meet the existing criteria set forth by the Board of Regents of the State University System of Florida. Presently, these are a Grade Point Average of 3.0 (B) in the third and fourth year of an undergraduate program, or a combined score of 1000 on the Graduate Record Examination (verbal and quantitative sections), or completion of a master's degree program at an accredited university. A special CLEP examination may be used in lieu of the GRE by certain students seeking admission to the master's degree program in Vocational Education. All applicants *must* submit a GRE test score.

### Cooperative Doctoral Programs Cooperative Specialist and Doctoral Programs

The School of Education currently engages in several cooperative doctoral programs with other universities in the state university system. In all cases, these programs lead to the Ed.D. (Doctor of Education) degree. Programs in Educational Administration and Curriculum and Instruction: Instructional Leadership are offered

with the University of Florida, while a program in Adult Education is offered with Florida State University. (The University of Florida programs provide an Educational Specialist degree option.) A working agreement is in effect with Florida Atlantic University, whereby FAU offers its Educational Specialist and doctoral programs in Community College Instruction on the campuses of FIU.

Further information regarding these programs appears in the description of programs within the Division of Educational Leadership and Human Resource Development.

## Bay Vista Campus

The School of Education has programs of studies at Bay Vista which is located in North Miami. The Bay Vista Campus specifically serves undergraduate and graduate students of North Dade County and the southern half of Broward County. In addition to courses offered at the Bay Vista Campus, courses are also offered in conjunction and cooperation with Broward County Community College. Broward residents interested in information regarding the Bay Vista or Broward County course offerings should call the School of Education (305) 523-4422. All Dade County residents should call (305) 940-5820.

The following degree programs are offered at Bay Vista:

1. Elementary Education — bachelor's and master's degrees
2. Early Childhood Education — area of concentration
3. Reading Education — master's degree
4. Administration/Supervision — master's degree
5. School Administration and Curriculum & Instruction: Instructional Leadership — Education Specialist and Doctor of Education degree (offered cooperatively with the University of Florida)
6. Psycho — Educational Services

As the enrollment increases, additional programs will be instituted at Bay Vista.

In addition to the above programs, courses are regularly offered in the following program areas:

1. Courses common to all education undergraduate majors (core courses: EDF 3827 — Schooling in America; EDG 3321 — Special Teaching Laboratory I — Basic Teaching Skills; EDG 3322 — Special Teaching Laboratory II — Human Relations Skills; and reading courses required by the State at elementary and secondary levels)
2. Physical Education
3. Bilingual Education
4. Vocational Education
5. Guidance and Counseling
6. Teaching English to Speakers of Other Languages (TESOL)

Through the School of Education, additional services are available at the Bay Vista Campus. The following research projects and activities are based at the Bay Vista Campus:

1. Center for Urban and Minority Affairs
2. South Atlantic Bilingual Educational Service Center (SABES)

3. Bureau of Education of the Handicapped grant for the Severely/Profoundly Handicapped

4. Educational Education Specialist and Doctor of Education program in School Administration and Curriculum and Instruction: Instructional Leadership (with the University of Florida)

5. Cooperative doctoral program in Adult Education (with Florida State University)

6. Cooperative doctoral program in Community College Instruction with Florida Atlantic University (pending)

7. The American Association of Schools in South America

A diagnostic reading clinic is available to children who are in need of assessment. Graduate students are provided experience in the diagnosis and prescription of children who are referred to the clinic.

## Division of Educational Leadership and Human Resource Development

Stephen M. Fain, *Professor and Chairperson*  
Richard Alterman, *Visiting Assistant Professor*

Barbara Bader, *Visiting Instructor*

John A. Carpenter, *Professor*

Charles Divita, Jr., *Professor*

Miguel Escotet, *Visiting Professor, (Courtesy)*

Robert V. Farrell, *Associate Professor*

Allen Fisher, *Associate Professor*

Paul D. Gallagher, *Associate Professor*

Daniel Gardner, *Assistant Professor*

Lorraine R. Gay, *Professor*

Barry Greenberg, *Associate Professor*

E. Joseph Kaplan, *Assistant Professor, (Courtesy)*

Sarah W.J. Pell, *Associate Professor*

Ronald Perry, *Associate Professor*

G. Wesley Sowards, *Distinguished Professor*

James D. Wells, *Associate Professor*

Sandra Woods, *Assistant Professor*

William Younkin, *Instructor, (Courtesy)*

The Division offers graduate programs in Administration and Supervision, Adult Education, and Parks and Recreation Administration. It also offers the undergraduate "core" courses required for every teacher education student and a Bachelor's Degree in Parks and Recreation Administration.

In addition, the Division offers a number of advanced general courses, some of which are requirements of various master's degree programs offered by the School. Among these offerings are courses in Instructional Technology, Instructional Media, Analysis of Teaching, Educational Research, and Comparative and International Education.

## Undergraduate Core Courses

The Division offers the three "core" courses required for every teacher education student: EDF—3827, EDG—3321, and EDG—3322. The three "core" courses are offered for 3 hours

credit every semester on the Tamiami Campus and on a rotating basis on the Bay Vista Campus. A student must earn a "C" or better in each of the "core" courses before internship.

## Parks and Recreation— Undergraduate

DEGREE: Bachelor of Science

The Parks and Recreation undergraduate curriculum offers professional preparation programs designed to prepare students for employment in a variety of work settings which have as their goals and objectives a leisure service delivery system. The program is oriented towards supervisory, lower management employment opportunities.

A student may elect to gain competencies in Park Management, Recreation Management, or Parks and Recreation Management.

### LOWER DIVISION PREPARATION:

*Required Courses:* Introductory sociology and mathematics.

*Recommended Courses:* It is recommended that the student desiring to enter the Parks and Recreation curriculum be a graduate of a two-year program in Recreation Leadership or its equivalent, or have completed the Lower Division Program at FIU.

### UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<i>Required Core Classes:</i>	<b>39</b>
HFT 3403 Management Accounting for the Hospitality Industry	3
LEI 3542 Principles of Parks and Recreation Management	3
LEI 3630 Care and Maintenance of Grounds	3
LEI 3524 Personnel Management in Parks and Recreation	3
LEI 4590 Seminar in Parks and Recreation	3
LEI 4940 Internship I	9
LEI 4941 Internship II	12
MAN 3010 Organization and Management	3

<i>Parks Management Emphasis:</i>	<b>14</b>
ARC 4354 Construction and Design of Natural Recreation Areas	3
BOT 3823 Horticulture	3
LEI 3624 Turf Grass Management	3
PCB 3043 Fundamentals of Ecology	3
PCB 3043L Fundamentals of Ecology Laboratory	2

<i>Advised Electives:</i>	<b>7</b>
Behavioral Science (1)	3
Communication Skills (2)	4
<b>Total 60</b>	

<i>Recreation Management Emphasis:</i>	<b>9</b>
LEI 3437 Program Development in Parks and Recreation Management	3
LEI 4700 Programming for Special Populations	3
POS 3153 Urban Politics	3

<i>Advised Electives:</i>	<b>12</b>
Behavioral Science (1)	6
Communication Skills (2)	6
<b>Total 60</b>	

### *Parks and Recreation Management Emphasis:*

Students selecting this emphasis would take required core classes and any combination from the above concentrations.

**Total 60**

## Graduate Programs Administration and Supervision

### Master's Degrees

The Division offers master's degrees in Elementary School Administration and Supervision; Secondary School Administration and Supervision; and General School Administration and Supervision (combined Elementary and Secondary). The Master of Science degree is awarded on successful completion of all requirements; the program qualifies graduates for Rank II certification in Administration and Supervision in Florida. As soon as students are admitted to the master's degree program, they should see their assigned advisors to plan a program of studies.

Requirements for each of the three programs are outlined below. In addition to the requirements shown below, each student must satisfy, prior to obtaining the degree, a state requirement of competency in the teaching of reading. The reading requirement may be satisfied by successful completion of one of the following alternatives: (1) an appropriate course or courses taken as part of the undergraduate program, (2) RED 6656, Instruction in Reading, or RED 6334, Teaching of Reading in Secondary School, at Florida International University, (3) an approved course taken at another accredited institution, or (4) an approved in-service course.

An applicant to the program in School Administration and Supervision must meet the Board of Regents criteria for admission to graduate study, possess or be qualified for a Florida Rank III graduate certificate, and have completed at least one year of successful teaching as a fulltime teacher in an elementary or secondary school. (Service as an aide or substitute does not meet the experience requirement.)

To be certified in School Administration and Supervision in Florida, a person must have at least three years of successful teaching experience in an elementary or secondary school. While one year of successful teaching will meet the experience requirement for admission to the master's degree program, the three-year teaching experience requirement must have been completed either before or at the same time as degree requirements are completed.

## Certification Program

Persons who possess a master's degree in a field other than Administration and Supervision may enroll as special non-degree seeking students to work toward certification in Administration and Supervision.

## Specialist and Doctoral Programs

FIU offers, in cooperation with the University of Florida, specialist and doctoral programs in School Administration and in Curriculum and Instruction: Instructional Leadership. General requirements for admission to these programs are (1) 1000 score on the Verbal and Quantitative portions of the Graduate Record Examination for the doctoral program, 1000 for the specialist program, (2) 3.5 grade point average on previous graduate work, (3) 3.0 grade point average in the last two years of undergraduate study, (4) at least two years of successful experience in the field of education, and (5) at least three letters of reference. Details about these programs may be obtained from the Chairperson, Division of Educational Leadership and Human Resources Development.

## Master's Program Requirements Elementary School Administration and Supervision

DEGREE: Master of Science

	<i>Semester Hours</i>
<i>Required Courses:</i>	<b>33</b>
EDA 6061 The Organization and Operation of Public School Systems	3
EDA 6223 Emerging Designs for School Organization and Staff Utilization	3
EDA 6232 School Law (3) or	
EDA 6242 School Finance (3)	
EDA 6510 The Administration of an Elementary School	3
EDA 6930 Seminar in Administration and Supervision	3
EDA 6943 Supervised Field Experience	2-3
EDE 6205 Curriculum Design for Childhood Education	3
EDF 5481 Analysis and Application of Educational Research	3
EDS 6050 Supervision in Education	3
EDS 6115 Staff Development Programs in Urban School Systems	3
EDG 6250 Curriculum Development and Improvement	3

*Electives:* from Education, School of Business and Organizational Sciences, or College of Arts and Sciences

**1-3**

**Total 33**

## Secondary School Administration and Supervision

DEGREE: Master of Science		Semester Hours
<b>Required Courses:</b>		
EDA 6061	The Organization and Operation of Public Schools Systems	3
EDA 6223	Emerging Designs for School Organization and Staff Utilization	3
EDA 6530	The Administration of a Secondary School	3
EDA 6930	Seminar in School Administration/Supervision	3
EDA 6943	Supervised Field Experience	2-3
EDF 5481	Analysis and Application of Educational Research	3
EDG 6250	Curriculum Development and Improvement	3
EDA 6232	School Law	3
EDA 6242	School Finance	3
EDS 6050	Supervision in Education	3
EDS 6115	Staff Development Programs in Urban School Systems	3
ESE 6215	Secondary School Curriculum	3
		<b>Total 33</b>

## General School Administration and Supervision

DEGREE: Master of Science		Semester Hours
<b>Required Courses:</b>		
EDA 6061	The Organization and Operation of Public School Systems	3
EDA 6223	Emerging Designs for School Organization and Staff Utilization	3
EDA 6232	School Law	3
EDA 6242	School Finance	3
EDA 6510	The Administration of an Elementary School	3
EDA 6530	The Administration of a Secondary School	3
EDA 6930	Seminar in School Administration/Supervision	3
EDA 6943	Supervised Field Experience	2-3
EDE 6205	Curriculum Design for Childhood Education	3
EDF 5481	Analysis and Application of Educational Research	3
EDG 6250	Curriculum Development and Improvement	3

EDS 6050	Supervision in Education	3
EDS 6115	Staff Development Programs in Urban School Systems	3
ESE 6215	Secondary School Curriculum	3
		<b>Total 39</b>

ADE 6930	Seminar in Adult Education Research, Evaluation, and Problem Solving in Adult Education	1-3
		<b>Total 20</b>

## Masters Degree Program in Adult Education

The Graduate Program in Adult Education is designed for the individual who is serving, or chooses to serve as learning facilitator, training director, counselor, administrator, curriculum developer and/or researcher in adult and continuing education programs in business and industry, public schools, hospitals, governmental agencies, community colleges, universities, civic organizations, military service or other agencies. Graduate programs of study are designed in relation to an individual's specific interests, needs and career goals.

The Division offers two master's degree programs in Adult Education—Adult Education: Administration and Supervision, and Adult Education: Curriculum and Instruction. Two options are possible in the Administration and Supervision program: (1) Public School Administration (which leads to Florida Rank II certificate), or (2) General Administration/Non-Public School Administration (not a certification program).

## Professional Certificate in Adult Learning Systems

The professional certificate in adult learning systems is a comprehensive and integrated university-based option to provide professionals with skills and training for adult education programmers. The non-degree certificate program may be pursued (1) in conjunction with a bachelors or masters degree; or (2) beyond the bachelors or masters degree; or (3) independent of the pursuit of a degree. The latter option is for persons having special responsibilities and experiences in the field of Adult/Continuing Education.

The required course of study and required sequence is as follows:

Required Courses:		Semester Hours
ADE 5925	Workshop in Adult Education	1-6
ADE 5385	Adult Teaching and Learning	3
ADE 5180	Program Development in Adult Education Community Level	3
ADE 5383	Program Development in Adult Education Instructional Level	3
ADE 5935	Special Topics in Adult Education Advised Electives	3

### Admission:

To be admitted to the program the student must:

- Hold or be seeking a bachelor's or master's degree from an accredited institution;
- Have submitted three letters of endorsement describing ability to engage in and profit from such a program of studies;
- Submit a personal statement of interests and goals which relate to adult/continuing education.

Applicants will develop a project or problem-oriented learning contract during the initial workshop to be pursued throughout the program. Contracts will be refined as the student progresses through the first part of the program of studies. The culminating activity, the Seminar, ADE 6930, will require the student to complete, share and evaluate the tasks and activities within the individual learning contract.

## Cooperative Doctoral Degree Program in Adult Education

A Miami-based cooperative FIU/FSU program leading to the Doctor of Education (Ed.D) with a major in Adult Education is available to qualified and interested persons. This program is directed toward a broad spectrum of personnel from business and industry, government, public school, community colleges and universities, health agencies, libraries, religious and civic organizations, etc., whose major responsibilities call for leadership in designing, providing and evaluating education and training programs for adult learners.

Students making application to the program should consult with the academic advisors for the FIU/FSU cooperative doctoral program in order to ensure proper guidance.

## Adult Education: Administration and Supervision (Only for public school Adult Educators)

DEGREE: Master of Science		Semester Hours
<b>Required Core:</b> to be selected with an advisor from the following:		
ADE 5081	Principles and Practices of Adult Education	3
ADE 5180	Program Development in Adult Education: Community/Institutional Level	3
ADE 5260	Organization and Administration of Adult Education	3
ADE 5385	Adult Teaching and Learning	3

EDF 5481	Analysis and Application of Education Research	3	LEI 5605	Physical and Social Bases of Parks and Recreation Planning	3
RED 6337	Teaching Reading in the Secondary School	3	EDS 5481	Educational Research	3
ADE	Course as an elective	3	LEI 5440	Program Development in Parks and Recreation	3
<i>Area of Professional Emphasis:</i>		9	PAD 6417	Public Personnel Administration	3
EDA 6061	The Organization and Operation of Public School Systems	3	LEI 5595	Seminar in Parks, Recreation, and Athletic Management	3
EDG 6250	Curriculum Development and Improvement	3	<i>Area of Professional Emphasis:</i>		3-12
EDS 6050	Supervision in Education	3	LEI 5907	Individual Study	3
			LEI 6922*	Supervised Field Experiences in Parks and Recreation	3-9
		<b>Total 30</b>			

## Adult Education: Curriculum and Instruction

DEGREE: Master of Science

	Semester Hours	
Required Core:	21	
ADE 5081	Principles and Practices of Adult Education	3
ADE 5180	Program Development in Adult Education: Community/Institutional Level	3
ADE 5383	Program Development in Adult Education: Instructional/Activity Level	3
ADE 5385	Adult Teaching and Learning	3
ADE 6930	Seminar in Adult Education	3
EDF 5481	Analysis and Application of Education Research	3
ADE	Course as an elective	3

### Electives:

The candidate will be encouraged to select courses that will increase competence in a teaching specialty or a supportive social/behavioral science. **Total 30**

## Parks and Recreation Administration

The graduate program in Parks and Recreation Administration is planned to provide advanced preparation for administrative and supervisory level positions within a leisure services delivery system. The program includes electives which give flexibility regarding an individual's specific career goals as a future practitioner in Parks and Recreation Administration. To enter the program in Parks and Recreation Administration, a student must: (1) have a 3.0 GPA in upper division work or score 1000 or more on the Graduate Record Examination, and (2) possess a bachelor's degree, and have appropriate undergraduate preparation in recreation.

	Semester Hours	
DEGREE: Master of Science	30-39	
Required Core:	21	
LEI 5510	Program Administration in Parks and Recreation	3
PAD 6106	Organization Theory and Administrative Behavior	3

### Advised Electives:

\*A student who did not complete an Internship/Field Experience during his or her undergraduate degree curriculum will be required to take LEI 6922. Students with field experience may select advised electives (6 hrs.)

## Course Descriptions

### Definition of Prefixes

ADE — Adult Education; EDA — Education: Administration; EDE — Education: Elementary; EDF — Education: Foundations; EDG — Education: General; EDS — Education: Supervision; EME — Education: Technology and Media; ESE — Education: Secondary; LEI — Leisure.

## General Professional Education

EDF 3827 **Schooling in America** 3  
Systematic analysis and examination of critical educational issues in terms of their influence and impact on curriculum and instruction in contemporary schooling.

EDF 4881 **The Teacher and the Law** (3)  
For advanced undergraduates and beginning teachers. Analysis of legal rights and responsibilities in the classroom, laws related to liability, contract, records, discipline, due process, handicapped, and schools.

EDF 5216 **Affective Learning in the Classroom** 3  
A behavioral approach to affective teaching techniques, including theoretical background, behavioral definitions, writing affective objectives, and evaluation of affective learning in the classroom. A field experience will be included.

EDF 5287 **Instructional Technology: Systems Approach** 3  
Development of instructional competencies, with an emphasis on the use of a systems approach in the design, implementation, and evaluation of programs.

EDF 5430 **Measurement and Evaluation in Education** 3  
Competencies required for the design, construction or selection, and evaluation of measuring instruments.

EDF 5481 **Analysis and Application of Educational Research** 3  
Competencies required for the design, implementation, and evaluation of educational research, including: problem formulation and analysis; sample selection; instrument selection; formulation of research design and procedure; and data analysis.

EDF 5710 **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 the responses of national educational systems to common educational issues.

EDF 5720 **Latin American Education: An Historical and Contemporary Overview** 3  
Historical and current development of Latin American education, and analysis of the principal forces shaping this development.

EDF 5724 **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.

EDF 5780 **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.

EDF 5905 **Individual Study** 1-3 (ARR)  
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.

EDF 5955 **Field Study Abroad** 3-6 (ARR)  
Development of international and cross-cultural understandings of educational philosophies and systems through planned travel and study abroad.

EDF 6215 **Application of Learning Theory to Instruction** 3  
Competencies required for analysis of selected learning theories and application of these theories to an instructional system.

EDF 6486 **Research Methods in Education: Experimental Design and Analysis** 3  
Competencies required for the design and analysis of complex educational problems, including: formulation of pre-experimental, true experimental, quasi-experimental, and factorial designs; and related analyses. Prerequisite: EDF 5481.

EDG 3321 **General Teaching Laboratory I: Basic Teaching Skills** 3  
Practice in generic teaching skills, techniques and strategies basic to all age levels and subject matter areas. Lecture, seminar, and laboratory.

- EDG 3322 General Teaching Laboratory II: Human Relations Skills** 3  
Development of human relations and classroom management skills to facilitate interaction and prepare students to deal in multi-ethnic urban classrooms.
- 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.
- EDG 6925 Workshop 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.
- 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.
- ADMINISTRATION AND SUPERVISION**
- EDA 6061 The Organization and Operation of Public School Systems** 3  
Examines the public school system as a complex formal organization; the dynamics of community-school interactions; goal clarification and program evaluation; procurement and allocation of resources; and the legal context within which the school system operates.
- EDA 6223 Emerging Designs for School Organization and Staff Utilization** 3  
Critical analysis of alternatives to traditional school organization and staffing and possible future alternatives in public education.
- EDA 6232 School Law** 3  
A basic course in school law. Students will understand: the law library and its relationship to the school; demonstrate a knowledge about our legal system; will function in a legal framework; and will identify basic concepts of the law as applied to education.
- EDA 6242 School Finance** 3  
Describes and analyzes current and emerging school finance plans; the influence of the courts and federal and state legislation on those plans; special focus on the Florida Education Finance Plan in relation to the development and administration of school system budgets; and the budget responsibilities of the school principal at the school center.
- EDA 6510 The Administration of an Elementary School** 3  
Development of competencies required to function as the principal of an elementary school, with particular attention to the urban setting.
- EDA 6530 The Administration of a Secondary School** 3  
Development of competencies required to function as the principal of a secondary school, with particular attention to the urban setting.
- EDA 6905 Individual Study in School Administration/Supervision** 1-3  
For advanced students wishing to undertake an individual project directly related to school administration or supervision. May not substitute for regular course offerings. Prerequisites: (1) The student must be in a master's degree program in educational administration and supervision at this university, and (2) written permission of the chairman of the Division and then approval of the instructor is required.
- EDA 6928 Workshop in School Administration/Supervision** 1-3  
Offers an opportunity for experienced school administrators and supervisors to participate in a problem-oriented workshop.
- EDA 6930 Seminar in School Administration/Supervision** 3  
In-depth study of selected issues and developments in school administration and supervision, including an examination of related research.
- EDA 6943 Supervised Field Experience** 1-5 (ARR)  
Development of supervisory skills by undertaking an arranged field-based assignment. Prerequisites: The student must be in a master's degree program in educational administration and supervision at this university, and must have completed most of the required program courses. Also offered each semester for students in the FIU/UF Cooperative Specialist and Doctoral Programs.
- EDG 6250 Curriculum Development** 3  
Development of basic technical constructs of curriculum. Planning of reality-based educational programs at all levels of schooling.
- EDG 6285 Curriculum Evaluation and Improvement in Urban School Systems** 3  
Development of skills in curriculum evaluation and strategies for improvement of on-going curriculum.
- EDS 6050 Supervision in Education** 3  
Examines supervision as a process and supervisory role in an educational setting, with particular attention to the development of supervision skills necessary to facilitate both individual and group change.
- EDS 6115 Staff Development Programs in Urban School Systems** 3  
Identification and analysis of various staff training strategies and techniques used in an educational setting, with an emphasis on defining staff problems and the processes by which such problems are solved.
- ADULT EDUCATION**
- ADE 5081 Principles and Practices of Adult Education** 3  
Developing a rationale for and philosophy of adult education; contrasting agencies, programs, and curricula; evaluating adults' educational pursuits; analyzing factors affecting adult education; differentiating adults and youths as learners; planning and appraising programs for adults.
- ADE 5180 Program Development in Adult Education: Community/Institutional Level** 3  
Analyzing variables central to program and community development; analyzing principles and roles requisite for effective group functioning; developing a consensus group philosophy; designing, conducting and interpreting studies of community objectives; mobilizing and integrating resources; planning, conducting and interpreting evaluation studies.
- ADE 5195 Designing Educational Programs for Disadvantaged Adults** 3  
Distinguishing various forms of disadvantage; analyzing these problems and forces which inhibit their solution; critiquing responses to these problems; developing training programs, curricula and materials, recruitment strategies, and evaluation designs.
- ADE 5260 Organization and Administration of Adult Education** 3  
Analyzing regulations affecting adult education; selecting and training staff; selecting organization patterns appropriate for given programs; executing managerial responsibilities; arranging for community involvement; and administering supportive services.
- ADE 5383 Program Development in Adult Education: Activity/Instructional Level** 3  
Analyzing models for instructional design; identifying and evaluating variables related to such models; developing designs unique for adult learners.
- ADE 5385 Adult Teaching and Learning** 3  
Differentiating theories of learning in relation to teaching adults; contrasting characteristics of adults as opposed to youth; evaluating the implications of such distinctions in relation to learning situations appropriate for adults.
- ADE 5906 Individual Study in Adult Education** 1-3(ARR)  
Specialized intensive study in areas of interest to the student. Subject to approval of program adviser.
- ADE 5925 Workshop in Adult Education** 1-6  
Short-term intensive development of selected operational competencies related to instructional, curricular and/or administrative skills, practices, and procedures of special interest to students in adult education.
- ADE 5935 Special Topics in Adult Education** 1(ARR)  
"Mini-courses" which provide for an examination of special facets of adult education.
- ADE 5945 Supervised Field Experiences in Adult Education** 1-6(ARR)  
Internship placements in various on-going adult education programs, according to students' needs and interests. On-site supervisory visits are made by program advisor. Joint conferences and seminars involving the student, the program advisor, and an appropriate representative of the cooperating agency are also conducted intermittently.
- ADE 6930 Seminar in Adult Education** 1-3  
Provides intensive study of instructional, curricular, and/or administrative principles and practices, for the solution of problems of special interest to students in adult education.

## PARKS AND RECREATION

LEI 3437 Program Development in Parks  
and Recreation Management 3

Students will attain competencies in developing objectives, planning a program, and implementing and administering the program.

LEI 3524 Personnel Management in  
Parks and Recreation 3

After a study of human interaction in a management setting, students will demonstrate competencies necessary for hiring staff, conducting group dynamics and communicating to the public.

LEI 3542 Principles of Park and  
Recreation Management 3

An exploration of the field of recreation and parks, including career areas. Students will be expected to demonstrate an understanding of management responsibilities and supervisory level principles and theory.

## LEI 3624 Turf Grass Management 3

A practical approach to the care and maintenance of special grasses such as those found on golf courses and other recreational facilities.

LEI 3630 Care and Maintenance  
of Grounds 3

A study of procedures for maintaining outdoor facilities. Students will be expected to display competence in proper maintenance of areas normally found in parks and recreation centers.

LEI 4590 Seminar in Parks and  
Recreation Management 3

A discussion of current problems, issues and trends in parks and recreation management, which will help the student develop those competencies necessary to deal with everyday aspects of particular programs.

LEI 4700 Programming for Special  
Populations 3

Principles and practices in planning and implementing programs in special community-group settings. Special emphasis will be placed on a systematic approach through problem-solving techniques.

## LEI 4940 Internship I 9(ARR)

An on-the-job training program designed to enable students to develop those competencies which can only be gained from practical experience.

## LEI 4941 Internship II 12(ARR)

A continuation of LEI 4940 above.

LEI 5440 Program Development in  
Parks and Recreation 3

The development of specific programs in parks and recreation with emphasis on special programs for young children, retardates, handicapped persons, and the elderly.

LEI 5510 Program Administration in  
Parks and Recreation 3

A detailed analysis of administrative procedures and responsibilities in connection with parks and recreation facilities and personnel.

LEI 5595 Seminar in Parks and  
Recreation Administration 3

A discussion of current problems, issues, and

trends in administration of parks and recreation programs.

LEI 5605 Physical and Social Bases of  
Parks and Recreation Planning 3

Concentration on major phases of predesign, design, development, actualization of park and recreation facilities. Course will explore funding, budget, site selection, layout and maintenance.

LEI 5907 Individual Study in Parks and  
Recreation Administration 3(ARR)

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 and Department Chairperson required.

LEI 6922 Supervised Field Experiences  
in Parks and Recreation  
Administration 3(ARR)

A practical experience for individuals interested in administrative responsibilities. Permission of the instructor and Department Chairperson required.

Division of Childhood  
Education

Richard L. Campbell, *Professor and Chairperson*

Edythe Margolin, *Professor*

George S. Morrison, *Professor*

Nicholas J. Vigilante, *Professor and Acting Dean, School of Education*

Arthur D. Dempsey, *Associate Professor*

Sharon W. Kossack, *Associate Professor*

Grover C. Mathewson, *Associate Professor*

Edward M. Reichbach, *Associate Professor*

Emma W. Rembert, *Associate Professor*

Zola J. Sullivan, *Associate Professor*

Nancy Marshall, *Assistant Professor*

Alicia Mendoza, *Assistant Professor*

John Stinson, Jr., *Assistant Professor*

Elementary Education,  
Grades 1-6

DEGREE: Bachelor of Science

## LOWER DIVISION PREPARATION:

Required: An Associate of Arts degree or equivalent preparation in basic general education. If a student has not completed equivalents of the courses noted below, these courses must be completed prior to enrollment in requisite courses at the University with a grade of "C" or better.

PROGRAM PREREQUISITES: Semester  
Hours

Overall GPA of at least 2.0, and SAT of 835 or ACT of 17

Psych. Foundations of Education 3  
DEP 3000 or EDP 3004

Social Foundations of Education 3  
SOC 3281 or EDF 3542 or EDF 3521

Mathematics 6  
MAE 4810 and MAE 4811

Physical Science 3  
GLY 3106 or PSC 3001 or BOT 3800

Biological Science 3  
BSC 1010 or BSC 3033 or BSC 3023

Art course 3  
Music course 3

## UPPER DIVISION PROGRAM:

Elementary Education:

*Tasks Observation and Participation (TOP)*

A student must complete TOP experiences in an elementary public school concurrent with all special methods or program courses.

*Internship I*

Students are required to spend a minimum of two hours per week in an assigned elementary public school for each of the internship courses.

*Internship II*

This is a full time commitment for one semester after all other program courses have been completed successfully with a grade of "C" or better. Student must make an application and register for this course. Internship II is not offered in the summer term.

## Semester Hours

Core Courses		
EDF 3827	Schooling in America	3
EDG 3321	General Teaching Laboratory I	3
EDG 3322	General Teaching Laboratory II	3
		9

## Program Courses

HLP 3013	Health and Physical Education for Children	3
RED 4310	Communication Skills I	3
LAE 4314	Communication Skills II	3
RED 4311	Communication Skills III	3
SSE 4312	Inquiry in Social Studies in the Elementary School	3
MAE 4312	Inquiry in Mathematics in the Elementary School	3
SCE 4310	Inquiry in Science in the Elementary School	3
EDE 4451C	Evaluation in Elementary School	3
ARE 3313	Experiencing Art in the Elementary School	3
or		
MUE 3313	Experiencing Music in the Elementary School	3
		27

Internship I-A, I-B and I-C (to be taken with Program Courses above):

EDE 4940	Internship I-A	1
EDE 4941	Internship I-B	1
EDE 4942	Internship I-C	1

Area of Concentration\* 3

\*Students desiring certification in Early Childhood Education and using early childhood as an area of concentration must complete 11 semester hours in the courses outlined below:

EEC 4203	Curriculum and Instruction in Early Childhood Education	3
EEC 4301	Early Childhood Education Programs	3
EEC 4611	Trends in Early Childhood Education	3
EEC 4940	Internship I-A	1
EEC 4941	Internship I-B	1
		<b>11</b>

Student Teaching Block: All lower division, prerequisites, and program requirements must be completed *before* taking this Block:

EDE 4943	Internship II	12
EDE 4936	Senior Seminar in Elementary Education	3
		<b>15</b>

TOTAL SEMESTER HOURS FOR ELEMENTARY EDUCATION MAJORS **36**

TOTAL SEMESTER HOURS FOR EARLY CHILDHOOD EDUCATION CERTIFICATION STUDENTS **65**

## Graduate Programs

The Division of Childhood Education offers masters programs in: Elementary Education, Early Childhood Education and Reading Education. Completion of the Master's degree qualifies a person for instruction and/or curriculum leadership positions. The programs are designed to acquaint teachers with contemporary research and programs, and to refine the teaching skills of persons employed in elementary and middle schools.

A student must file a program of study with the advisor. The program of study must comply with the general master's degree requirements and reflect the career goals of the student. A typical program of study consists of 36 semester hours of course work. Six (6) semester hours of graduate study from another accredited college or university may be transferred if applicable to the student's program.

GRADUATE COURSES TAKEN SEVEN YEARS PRIOR TO THE YEAR OF ADMISSION TO THE UNIVERSITY CANNOT BE APPLIED TOWARD THE GRADUATE DEGREE.

ALL GRADUATE STUDENTS MUST ATTEND AT LEAST ONE OF THE RESEARCH SEMINARS EACH SEMESTER PRESENTED BY THE SCHOOL OF EDUCATION RESEARCH SEMINAR SERIES.

## Elementary Education

Applicants for admission to the Master's program in Elementary Education must: (1) hold or qualify for Florida certification or equivalent in elementary education, and (2) satisfy requirements for scholastic aptitude as determined by the graduate admissions standards: Grade Point Average (GPA) of 3.0 or 1000 on Graduate Record Examination (GRE). The applicants must submit GRE scores.

DEGREE: Master of Science

### Semester Hours

#### Required Courses:

EDE 6205	Curriculum Design for Childhood Education	3
EDF 5481	Analysis and Application of Educational Research	3
EDF 5430	Measurement and Evaluation in Education	3
Psychology (consult advisor)		3
RED 6155	Instruction in Reading	3
EDE 6225	Educational Programs for Older Children	3

#### Specialization Courses:

Courses to be selected from among Elementary course listings, in consultation and with approval of advisor.

**18**  
**Total 36**

## Early Childhood Education

Applicants for admission to the Master's program in Early Childhood Education must: (1) hold or qualify for Florida certification or equivalent in elementary education, and (2) satisfy requirements for scholastic aptitude as determined by the graduate admissions standards: Grade Point Average (GPA) of 3.0 or 1000 on Graduate Record Examination (GRE). The applications must submit GRE scores.

DEGREE: Master of Science

### Semester Hours

#### Required Courses:

EDE 6205	Curriculum Design for Childhood Education	3
EDF 5481	Analysis and Application of Educational Research	3
EDF 5430	Measurement and Evaluation in Education	3
Psychology (consult advisor)		3
RED 6305	Instruction in Reading	3
EEC 6205	Education Programs for Younger Children	3

#### Specialization Courses:

Courses to be selected from among Early Childhood course listings, in consultation and with approval of advisor

**18**  
**Total 36**

## Reading

The Master of Science in Reading develops competencies in diagnosis and remediation, production and evaluation of reading materials, teaching of reading K to 12, and administration and supervision of remedial, corrective, development, and content area reading programs. The graduate is competent to take leadership in improving reading instruction and preventing reading failure in the schools.

Requirements for admission to the Master's program in Reading Education are: (1) completion of an appropriate undergraduate teacher education program, (2) satisfactory scholastic aptitude, as determined by the graduate admis-

sion standards: Grade Point Average (GPA) of 3.0 or 1000 on Graduate Record Examination (GRE); the applicants must submit GRE scores, and, (3) three years of teaching experience after completion of the undergraduate degree.

DEGREE: Master of Science

### Semester Hours

#### Required Courses:

EDE 6205	Curriculum Design for Childhood Education	3
EDF 5481	Analysis and Application of Educational Research	3
EDF 5430	Measurement and Evaluation in Education	3
Psychology (consult advisor)		3
RED 6155/RED 6305	Instruction in Reading	3
RED 6515	Programs of Remediation in Reading	3
RED 6546	Diagnosis of Reading Difficulty	3

#### Specialization Courses:

Courses to be selected from among Reading course listings, in consultation and with approval of advisor

**15**  
**Total 36**

## Specialty: Socioeducational Development of Infants and Young Children Under Five

This program is planned for personnel in Child Care Centers and for those working with parents, infants and young children in an educational aspect of social service agencies. Child Care agencies, Infant Centers, Day Care, and Nursery Schools for children below the age of five are the emphasis in this program.

It is intended to serve people who work with educational programs in agencies other than public schools.

Applicants for admission to the Master's program in Early Childhood Education must: (1) complete an appropriate undergraduate degree program and (2) satisfy requirements for scholastic aptitude as determined by the graduate admissions standards: Grade Point Average (GPA) of 3.0 or 1000 on Graduate Record Examination (GRE). The applicants must submit GRE scores.

\*This program does not qualify students for a teaching credential

\*DEGREE: Master of Science

### Semester Hours

A. Core Courses in Education	15
B. Development of Infants and Young Children	6
C. Education of Parents on Concepts of Childrearing	6
D. Community Services for Parents, Infants and Young Children (Social Work, Health Services, Sociology, Community Health Systems)	9
<b>Total 36</b>	

Students should consult with advisor and select courses from various disciplines as designated above.



## Thesis Track

(Elementary Education/Early Childhood Education/Reading Education)

This master's thesis track provides a special foundation for doctoral degree program entrance. Admission requirements for this program will be higher than those for the other master's programs described above. Planned for implementation beginning Fall, 1982.

### Semester Hours

#### Required Courses:

EDE 6205	Curriculum Design for Childhood Education	3
EDF 5430	Measurement and Evaluation in Education	3
EDF 5481	Analysis and Application of Educational Research	3
Research	(EDE 6488 or EEC 6678 or RED 6747)	3
Seminar	(EDE 6930 or EEC 6932 or RED 6931)	3
RED 6155/ RED 6305	Instruction in Reading Psychology (consult advisor)	3
Thesis: (EDE 6971 or EEC 6971 or RED 6971)		6

#### Specialization Courses:

Courses to be selected from among course listings in either early childhood education, elementary education, or reading education, depending upon major		
		9
<b>Total 36</b>		

## Graduate Professional Certificate Program in Reading and Language Arts

The Reading/Language Arts Certificate Program enables teachers to extend their competence in reading and language arts instruction. Completion of the Certificate Program qualifies the teacher to receive Florida State Certification in Reading, grades K-12. Entrance requirements are an introductory reading course, a 2.75 grade point average in the last two years of college work, and two years of full-time teaching. Applicants should apply directly to the Chairperson of the Reading Program.

### Semester Hours

#### Required Courses:

EDF 5430	Measurement and Evaluation in Education	3
LAE 5414	Children's Literature	3
LAE 6355	Instruction in Language Arts	3
RED 6546	Diagnosis of Reading Difficulty	3
RED 6515	Programs of Remediation in Reading	3

#### Electives\*

Two chosen from language-related courses offered outside of the School of Education		
		6
<b>Total 21</b>		

\*Elective courses are chosen from an approved list in consultation with a Reading Program advisor.

## Doctoral Programs:

Doctoral programs are presently being planned in: (1) Reading and Language Development, (2) Early Childhood Education, and (3) Elementary Education.

## Course Descriptions

### Definition of Prefixes

ARE — Art Education; EDE — Education: Elementary; EEC — Education: Early Childhood; FLE — Foreign Language Education; HLP — Health, Leisure, and Physical Education; LAE — Language Arts and English Education; MAE — Mathematics Education; MUE — Music Education; RED — Reading Education; SCE — Science Education; SSE — Social Studies Education.

**ARE 3313 Experiencing Art in The Elementary School** (3)  
Designed to provide the student with competencies necessary for the development and implementation of art experiences in the elementary curriculum. Prerequisite: Art Courses.

**ARE 6304 Instruction in Art (Early Childhood)** (3)  
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

**ARE 6315 Instruction in Art (Elementary)** (3)  
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

**EDE 4451C Evaluation in Elementary Education** (3)  
Designed to provide the Childhood Education pre-service teacher with knowledge and practical approaches to evaluation in the Elementary School.

**EDE 4925 Workshop in Elementary Education** (1-3)  
An opportunity for students to continue to develop competency in a specified area of elementary education. No prerequisites.

**EDE 4936 Senior Seminar in Elementary Education** (3)  
A seminar designed for student teachers covering topics related to classroom management, discipline, school community relations, professional problems and issues. Corerequisite: EDE 4943.

**EDE 4940 Internship I-A: Elementary Education** (1)  
A first introductory experience in observing and performing tasks in a public school elementary classroom. Corequisites: EDF 3827, EDG 3321, EDG 3322.

**EDE 4941 Internship I-B: Elementary Education** (1)  
A second introductory experience in observing and performing tasks in a public school elemen-

tary classroom. Prerequisites: EDF 3827, EDG 3321, EDG 3322, EDE 4940.

**EDE 4942 Internship I-C: Elementary Education** (1)  
A third introductory experience in observing and performing tasks in a public school elementary classroom. Prerequisites: EDF 3827, EDG 3321, EDG 3322, EDE 4940, EDE 4941.

**EDE 4943 Internship II** (12)  
A field experience in an elementary school where the student serves as a teacher associate, demonstrating competencies acquired throughout the program. Prerequisites: ARE 3313 or MUE 3313, EDE 4451C, EDE 4936, HLP 3013, LAE 4314, MAE 4312, RED 4310, RED 4311, SCE 4310, SSE 4312. Corequisite: EDE 4936.

**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 3827, EDG 3321, EDG 3322.

**EDE 5905 Individual Study in Elementary Education** (1-3)  
Individual investigation in the area of instruction, in elementary education. Permission of instructor required.

**EDE 6205 Curriculum Design for Childhood Education** (3)  
A study of curriculum theory, construction and evaluation.

**EDE 6225 Education Programs for Older Children** (3)  
Program developed for older children; curriculum trends based on contemporary psychological, educational and sociological research.

**EDE 6678 Research in Elementary Education** (3)  
Expose students to research in elementary education and the paradigms associated with this research. Teach students to be critical readers of this research. Prepare students for thesis. Prerequisite: EDF 5481.

**EDE 6925 Workshop in Elementary Education** (1-3)  
An opportunity for teachers to continue to develop competency in a specified area under the guidance of a specialist in selected fields in elementary education.

**EDE 6930 Seminar in Elementary Education** (3)  
Advanced study of critical issues and problems in elementary education.

**EDE 6948 Supervised Field Experience in Elementary Education** (3-9)  
Field work in education institutions and organizations in elementary education.

**EDE 6971 Thesis in Elementary Education** (6)  
Design and preparation of an original scholarly investigation in elementary education. Prerequisites: EDF 5481, EDF 5430, EDE 6488, and consent of instructor. Corequisites: EDE 6930.

**EEC 4203 Curriculum and Instruction in Early Childhood Education** (3)  
Practical considerations of basic principles, experiments, research and trends related to early

childhood education. Examination of materials and techniques of teaching and working with parents. Observation and participation are required. Senior class status required.

**EEC 4301 Early Childhood Education Programs** (3)

Philosophy and theories of early childhood education; physical, emotional, social and mental development. Observation and participation are required. Senior class status required.

**EEC 4611 Trends in Early Childhood Education** (3)

Understanding and dealing with critical issues; assessing the progress of contemporary programs locally and nationally; and recommending solutions for current problems.

**EEC 4925 Workshop in Early Childhood Education** (1-3)

An opportunity for students to continue to develop competency in a specified area of early childhood education. No prerequisites.

**EEC 4940 Internship I-A: Early Childhood Education** (1)

A first introductory experience in observing and performing tasks in a public school early childhood classroom.

**EEC 4941 Internship I-B: Early Childhood Education** (1)

A second introductory experience in observing and performing tasks in a public school early childhood classroom.

**EEC 5906 Individual Study in Early Childhood Education** (1-3)

Individual investigation in the area of in-preschool and early childhood education. Permission of instructor required.

**EEC 6205 Education Programs for Younger Children** (3)

Programs developed for young children; curriculum trends based on contemporary psychological, educational and sociological research.

**EEC 6612 Screening and Assessing for Assignment of Preventative, Developmental and Enrichment Strategies for Primary Children**

Designed to assist the primary teacher and primary specialist to understand the processes of and methods for screening, assessing and assignment of preventative, developmental and enrichment strategies for primary children.

**EEC 6678 Research in Early Childhood Education** (3)

Expose students to research in early childhood education and the paradigms associated with this research. Teach students to be critical readers of this research. Prepare students for thesis. Prerequisite: EDF 5481.

**EEC 6926 Workshop in Early Childhood Education** (1-3)

An opportunity for teachers to continue to develop competency in a specified area under the guidance of a specialist in selected fields in preschool and early childhood education.

**EEC 6932 Seminar in Early Childhood Education** (3)

Advanced study of critical issues and problems in preschool and early childhood education.

**EEC 6948 Supervised Experience in Early Childhood Education** (3-9)

Field work in educational institutions and organizations in preschool and early childhood education.

**EEC 6971 Thesis in Early Childhood Education** (6)

Design and preparation of an original scholarly investigation in early childhood education. Prerequisites: EDF 5481, EDF 5430, EEC 6678, and consent of instructor. Corequisites: EEC 6932.

**FLE 4151 Bilingual School Curriculum and Organization** (3)

Development of a theoretical understanding of the nature of bilingualism, a rationale for bilingual education, and a set of principles and skills for organizing, bilingual/bicultural curriculum experiences in the elementary school. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

**FLE 4870 Teaching Spanish as a Second Language** (3)

Development of instructional skills, techniques, and strategies for teaching Spanish to non-native speakers of Spanish in the elementary school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, & Spanish proficiency.

**FLE 4871 Teaching Spanish to Speakers of Spanish** (3)

Development of understandings and teaching skills needed in presenting integrated non-official language/language arts programs which would consider factors of languages and cultures in contrast. Prerequisites: EDF 3827, EDG 3321, EDG 3322, & Spanish proficiency.

**HLP 3013 Health and Physical Education for Children** (3)

Designed to provide competencies necessary for the development and implementation of programs concerning use of leisure time and maintenance of personal health and family life. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

**LAE 4314 Communication Skills II** (3)

Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children, using language arts activities to enhance communication skills. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4310.

**LAE 4851 Teaching English as a Second Language** (3)

Development of instructional skills, techniques, and strategies for teaching English as a second language in the elementary school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, and English proficiency.

**LAE 5414 Children's Literature** (3)

Designed to develop a critical analysis of the purposes, strategies for teaching, and evaluation of literature for children. Prerequisites: RED 4310 and LAE 4314, or their equivalent.

**LAE 6305 Instruction in Language Arts (Early Childhood)** (3)

Refinement of skills related to program development, methods of teaching, selection of materials and review of research in preschool and early childhood education.

**LAE 6355 Instruction in Language Arts (Elementary)** (3)

Refinement of skills related to program development, methods of teaching, selection of materials and review of research in elementary education.

**MAE 4312 Inquiry in Mathematics in the Elementary School** (3)

Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children, using mathematics as a mode of inquiry. Prerequisites: EDF 3827, EDG 3321, EDG 3322, MAE 4810 and MAE 4811, or equivalent.

**MAE 5555 Diagnosis and Remediation in Mathematics** (3)

Strategies for studying symptoms, causes and consequences of difficulties experienced by children in elementary school mathematics. Includes supervised case study and theoretical models. Prerequisite: MAE 4312.

**MAE 6305 Instruction in Mathematics (Early Childhood)** (3)

Refinement of skills related to program development, methods of teaching, selection of materials and review of research, in preschool and early childhood education.

**MAE 6318 Instruction in Mathematics (Elementary)** (3)

Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

**MAE 6645 Workshop on Metric Education** (1-3)

A workshop on Metric Education: trends, teaching strategies, programs and materials.

**MAE 6923 Workshop: Elementary School Mathematics** (3)

Production and application of materials and strategies for teaching mathematics in elementary and middle schools.

**MUE 3313 Experiencing Music in the Elementary School** (3)

Designed to provide the student with competencies necessary for the development and implementation of music experiences in the elementary curriculum. Prerequisite: Music course.

**MUE 6305 Instruction in Music (Early Childhood)** (3)

Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

**MUE 6316 Instruction in Music (Elementary)** (3)

Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

**RED 4310 Communication Skills I** (3)  
Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of reading. Prerequisite: Permission of instructor required.

**RED 4311 Communication Skills III** (3)  
Designed to implement and expand upon the teaching competencies developed in LAE 4314 and RED 4310, in a classroom management practicum. Prerequisites: EDF 3827, EDG 3321, EDG 3322, LAE 4341.

**RED 4925 Workshop in Reading Education** (1-3)  
An opportunity for students to continue to develop competency in a specified area of reading education. No prerequisites.

**RED 5447 Analysis and Production Reading Materials** (3)  
Exploration, creation and evaluation of basic reading materials, commercial and non-commercial. Prerequisite: RED 4310, or equivalent.

**RED 5911 Individual Study in Reading** (1-3)  
Individual investigation in the area of instruction. Permission of instructor required.

**RED 6155 Instruction in Reading (Elementary)** (3)  
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

**RED 6247 Organization and Supervision of Reading Program** (3)  
The organization and supervision of reading programs; problems of organization and supervision; continuity of school-wide programs, emphasis on leadership responsibilities. Prerequisites: EDF 5481, EDF 5430

**RED 6305 Instruction in Reading (Early Childhood)** (3)  
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

**RED 6336 Reading in the Content Areas** (3)  
Strategies for developing the reading abilities of students in specific subject areas. Stresses vocabulary and comprehension development, study skills, library usage, reasoning, and motivating reading. Prerequisites: None.

**RED 6338 High School Reading Programs** (3)  
Designed to provide competencies for identifying, organizing, teaching, and evaluating secondary reading programs. Corrective and accelerated reading are emphasized. Prerequisite: RED 6155 or RED 6305.

**RED 6515 Programs of Remediation in Reading** (3)  
A course demonstrating corrective and remedial procedures; application of specific psychological, pedagogical, and psychotherapeutic techniques. Prerequisites: RED 6155 or 6305, RED 6546, or their equivalents.

**RED 6546 Diagnosis of Reading Difficulty** (3)  
Technique for analyzing and clarifying reading difficulties. Prerequisite: RED 6155 or 6305, or its equivalent.

**RED 6747 Research in Reading** (3)  
A course to study significant research in reading, and research methodology. Involves planning and research in reading. Permission of instructor required. Prerequisites: EDF 5430, EDF 5481.

**RED 6805 Practicum in Reading** (3)  
An analysis of reading difficulties, through various teaching techniques and programs.

**RED 6845 Clinical Procedures in Reading** (3)  
Supervised experience, resulting in diagnosis, prescription and evaluation of particular children in a clinical setting. Prerequisites: RED 6515, RED 6546.

**RED 6925 Workshop in Reading** (1-3)  
An opportunity for teachers to continue to develop competency in a specified area under the guidance of a specialist in selected fields in reading education.

**RED 6926 Workshop in Reading and Language Arts** (3)  
Offers opportunities for elementary school teachers to increase their understanding of reading/language arts instruction, K-6. Emphasis on integrating language arts into reading.

**RED 6931 Seminar in Reading Education** (3)  
Advanced study of critical issues and problems in reading education.

**RED 6971 Thesis in Reading Education** (6)  
Design, implementation, and written report of an original research investigation in reading education. Prerequisites: Advanced graduate standing and consent of instructor.

**SCE 4310 Inquiry in Science in the Elementary School** (3)  
Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children, using science as a mode of inquiry. Prerequisites: EDF 3827, EDG 3321, EDG 3322, one Physical Science, one Biological Science.

**SCE 6306 Instruction in Science (Early Childhood)** (3)  
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

**SCE 6315 Instruction in Science (Elementary)** (3)  
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

**SCE 6930 Workshop in Content, Methods, and Materials of Teaching Elementary Science** (1-3)  
Focus on content, methods, and materials needed for teaching science in the elementary school, K-6.

**SSE 4312 Inquiry in Social Studies in the Elementary School** (3)  
Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children, using social studies as a mode of inquiry. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

**SSE 6305 Instruction in Social Learning (Early Childhood)** (3)  
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

**SSE 6355 Instruction in Social Learning (Elementary)** (3)  
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

## Division of Psycho-Educational Services

*George J. Mouly, Acting Chairperson and Professor*

*Carlos M. Alvarez, Associate Professor*  
*Judith Amster, Visiting Associate Professor*  
*Wendy Cheyney, Associate Professor*  
*Marisal Gavilan, Associate Professor*  
*Deborah Goldstein, Visiting Assistant Professor*

*Daniel A. Kennedy, Associate Professor*  
*Philip J. Lazarus, Assistant Professor*  
*Luretha F. Lucky, Assistant Professor*  
*David E. Nathanson, Professor*  
*Howard Rosenberg, Associate Professor*  
*Vicki Roulhac, Visiting Assistant Professor*  
*Colleen A. Ryan, Associate Professor*  
*Donald C. Smith, Professor*  
*Barbara Spector, Visiting Assistant Professor*  
*Stephen S. Strichart, Professor*  
*Jethro W. Toomer, Professor*

Programs within the Division of Psycho-Educational Services are designed to train professionals to meet the needs of individuals who experience cognitive, academic, and/or social-emotional difficulties that interfere with their progress in school and in the community. Specific competencies are delineated for classroom and resource room teachers of exceptional students, diagnostic and consultant teachers, school and community counselors, and school psychologists.

Division programs emphasize the blending of research and theory with practical applied experience. They consider the urban, multicultural nature of the community, as well as more general national trends within specific fields. All programs involve extensive fieldwork with accompanying seminars. Independent study courses are available to allow students to pursue specialized interests and needs.

In addition to its regular programs, the Division of Psycho-Educational Services offers experiences through federally funded programs designed to provide specialized skills in vocational education for the handicapped and to develop competencies for personnel working with the severely/profoundly handicapped, and culturally and linguistically different exceptional individuals.

### UNDERGRADUATE PROGRAM:

The undergraduate special education programs utilize a competency-based and field-centered training model and lead to Florida

Certification in Specific Learning Disabilities, Emotional Handicapped, and Mental Retardation. A student may elect a major in any one of the three areas.

Current philosophies in special education in a service delivery systems are reflected in the programs stress that all handicapped children are entitled to a free and appropriate public education. Furthermore, it is mandated that, all handicapped children be educated in the least restrictive environment and mainstreamed to the greatest extent possible. And that special educators provide services to pre-school children and adults as well as those who reflect multi-cultural and multi-lingual backgrounds. All professional services to exceptional students occur in the context of statutory case law requirements.

Given this context undergraduate special education programs emphasize the development of the following competencies to be demonstrated in both the University and field settings:

1. Identifying and diagnosing students with learning and behavior problems.
2. Prescribing and implementing appropriate individual educational plans to meet these problems.
3. Effecting appropriate instruction for children with learning and behavior problems.

Effectively planning for transfer of learning evidence in planning for mainstreaming and parent conferencing.

Diagnostic-prescriptive and management skills are to be demonstrated with students who range from pre-school through adulthood, are mild, moderate, severe, and profoundly handicapped, and represent multi-cultural, multi-lingual urban backgrounds.

DEGREE: Bachelor of Science

**LOWER DIVISION PREPARATION:**

*Required Courses: An Associate of Arts degree or equivalent preparation in basic general education. General Education Requirements: As approved by the faculty of the SOE.*

**UPPER DIVISION UNDERGRADUATE SPECIAL EDUCATION PROGRAM**

<i>Required Courses</i>	<i>Semester Hours</i>	
EDF 3827	Schooling in America	3
EDG 3321	General Teaching Lab I	3
EEX 3010C*	Introduction to Exceptional Children & Youth	3
SPA 3000	Introduction to Language Development & Communication Disorders	3
EEX 3221	Assessment of Exceptional Children & Youth	3
EEX 3228	Educational Assessment Lab	2
EEX 3202*	Foundations of Exceptionality	3
EEX 4241*	Academic Skills for Exceptional Children	3
EMR 4360*	Educational Planning for the Mentally Retarded	3
ELD 4322C*	Educational Planning for Specific Learning Disabilities	3

EED 4227C*	Educational Planning for Emotional Handicaps	3
EEX 4242*	Academic Skills II	3
EEX 4601*	Behavioral Approaches to Classroom Learning I	3
EEX 4611*	Behavioral Approaches to Classroom Learning II	3
RED 4310	Communication Skills I	3
MAE 4312*	Inquiry in Mathematics in the Elementary School	3
EEX 4861	Student Teaching	12
<i>Elective Course</i>		
	with advisor's consultation	6
		<hr/> 65

\*Field Work Required.

Note: Courses within the undergraduate training program require field placement during school hours. In addition to a twelve-week full-time student teaching placement during the final semester of training, students engage in a senior BLOCK experience the first semester of their senior year. This experience requires fifteen to twenty-five hours a week of placement in an educational setting for twelve weeks and class attendance in the university. Permission to student teach is contingent upon advisor's approval and/or in completion of all requirements specified in the program.

**GRADUATE PROGRAMS:**

The Division of Psycho-Educational Services offers master's degree programs that prepare individuals to teach exceptional children and youth, and that train school and community counselors and school psychologists. Emphasis is given to the development of assessment prescriptive programming skills, behavior management and consultant and group leadership skills.

Program applicants are required to file an application with the Office of Admissions. All applicants must present GRE scores for the Verbal and Quantitative sections, 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 Division's Graduate Admissions Committee. Criteria for program acceptance include GRE scores, undergraduate grade point average during the junior and senior years, work and volunteer experience, quality and source of letters of recommendation, and the candidate's career aspirations and goals. A combined Verbal-Quantitative GRE score of 1000 and/or GPA of "B" or better during the undergraduate junior and senior years is required for a candidate to be admitted via regular procedures. Where these criteria are not met, candidates may be admitted by special action of the Division's Graduate Admissions Committee and the Dean's Office.

Programs are offered in Diagnostic Teaching (Mental Retardation, Emotional Handicaps, Specific Learning Disabilities), Education of the Culturally and Linguistically Different Exceptional Individual, Counselor Education (School Counseling and Community Counseling) and School Psychology. 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.

Applicants to the diagnostic teaching program are required to hold a valid Florida Teaching Certificate in any rank area of instruction. Individuals who do not hold Florida certification can become eligible for admission if they complete all coursework required for a teaching certificate in any area of education, after completing these courses, such individuals would fulfill an internship in a setting related to this program when their advisor felt they had completed sufficient coursework and experiences in the education of exceptional students.

**DIAGNOSTIC TEACHING**

The major competencies of the diagnostic teacher are an extension and refinement of those developed by the student in the undergraduate special education curriculum: a) Assessment of learning styles through observation and ongoing monitoring techniques; b) application of behavioral approaches to the building, monitoring and remediation of classroom behavior; c) communication of information concerning children to others within the school and to parents, consultation skills; d) curriculum planning and innovation including staffings and IEP; e) supervision of special education units including skill in program evaluation.

The program of study is 30-57 semester hours, depending upon the student's background. Areas of specialization include: Mental Retardation, Emotional Handicaps, and Specific Learning Disabilities.

The program leads to certification in the state of Florida in either Mental Retardation, Emotional Disturbance, or Specific Learning Disabilities.

DEGREE: Master of Science

**IN-FIELD MAJORS**

The following program of study is for the student who holds an undergraduate degree in Special Education from Florida International University. A student with an undergraduate major in Special Education from another institution must plan a program with an academic advisor to insure having the entry skills for this program.

		<i>Semester Hours</i>
EDF 5481	Analysis and Application of Educational Research	3
EEX 6846	Diagnostic Teaching: Advanced Practicum	3
ECC 6616	Program Evaluation in Pupil Personnel Services	3
EEX 6020	Professional Problems: Special Education	3
EEX 6211	Assessment of Behavior I	3
ECC 6255	Assessment of Behavior II	3
EMR 6852	Advanced Theory & Practice: Mental Retardation	3
ELD 6323	Advanced Theory & Practice: Specific Learning Disabilities	3

EED 6226	Advanced Theory & Practice: Emotional Handicaps	3
EEX 6106	Diagnostic Teaching: Acquisition of Language & Reading Skills	3
EEX 6863	Supervised Field Experience in Special Education	3
<i>Electives (with consultation of advisor)</i>		6
Semester Hours		39

**OUT-OF-FIELD MAJORS**

A student eligible for or holding a Teaching certificate in other areas of education should consult with an academic advisor for evaluation of entry competencies to the program. If entry competencies cannot be demonstrated either on the basis of course equivalents or work experience, the student will be asked to complete one or more of the following courses in addition to those listed above for In Field Majors.

*Semester Hours*

EMR 4360	Educational Planning for the Mentally Retarded	3
ELD 4322	Educational Planning for Specific Learning Disabilities	3
EED 4227	Educational Planning for Emotional Handicaps	3
EEX 6051	Exceptional Children and Youth	3
EGC 6707	Applied Behavioral Analysis in Education	3
EEX 6612	Diagnostic Teaching: Systems & Behavioral Models	3
EEX 6227	Diagnostic Teaching: Educational Assessment	3
EEX 4861	Student Teaching	12
EEX 6106	Diagnostic Teaching: Acquisition of Language & Reading Skills	3

**EDUCATION OF THE CULTURALLY AND LINGUISTICALLY DIFFERENT EXCEPTIONAL INDIVIDUAL**

This is a competency based multidisciplinary Master's Degree Program in Special Education with emphasis in Bilingual Education. The purpose of this program is to train teachers to meet the needs of the linguistic minority individuals who exhibit discrepancies in growth and development due to one or more handicapping conditions. Federal stipends are available.

The entrance requirements are:

- a. A Bachelor or Master's Degree in an area of education.
- b. Teaching Certification in the State of Florida or its equivalent.
- c. Recommendations from any County Board of Education (appropriate supervisor).
- d. Evaluation by the Florida International University faculty, preference will be given to candidates who have demonstrated in the past superior scholastic and practical performance.

- e. A commitment to intensive practicum experience.
- f. Residence and employment in the University geographic area.
- g. Working in a bilingual setting (a class with 50% or more bilingual students.)

**Coursework:**

The proposed coursework for this program will follow the In Field and Out of Field models described for the program in Diagnostic Teaching. In addition, coursework in the following areas will be programmed individually according to the student's needs and experiences in the area of bilingual education.

- Psychology of Language — Bilingualism
- Bilingual Curriculum Development
- Counseling the Hispanic Student
- Teaching Reading to Bilingual Students

Immersion (Non-Hispanic Individuals).

**COUNSELOR EDUCATION:**

*General Description*

The program in counselor education requires 60 semester hours, or the equivalent of four academic semesters, and leads to the Master of Science in Education degree. The program follows a competency based model, the early part of which 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, educational-vocational development, client appraisal, systems intervention, and model program organization and evaluation. The latter part of the program is either differentiated, and enables a specialization in either community or school counseling. Both areas of specialization meet the standards recommended by the American Personnel and Guidance Association, and specialization in school counseling qualifies the program graduate for the Florida School Guidance Certificate.

The prospective student should be advised that during the latter part of the program a substantial amount of time is spent in field work to meet practicum and internship requirements. The practicum requirement is the equivalent of one work day per week spent in a field placement during one academic semester followed by an internship consisting of a forty hour work week in a field placement for the duration of one academic semester. The student should plan for this field work to be during the day, rather than during evening hours.

All students entering the graduate program with an undergraduate degree in an area other than education must enroll for courses in general professional education as well as a course in reading required by the Florida State Department of Education in order to meet state certification requirements in Florida.

The student should consult his/her advisor with reference to these course selections.

**DEGREE: Master of Science**

**\*\*General Professional Education:**

<i>Semester Hours</i>	
EDF 5481	Analysis and Application of Educational Research
	3

**Area of Specialization:**

EGC 5305	Educational and Vocational Guidance	3
EGC 5405	Introduction to Counseling	3
EGC 6707	Applied Behavior Analysis in Education	3
EGC 6708	Advanced Counseling and Consultation: Theory and Practice	3
EGC 6725	Human Interaction Laboratory	3
EGC 6726	Human Interaction Laboratory II	3
***EGC 6709	Human Interaction III	3
EGC 6616	Program Evaluation in Pupil Personnel Services	3
EGC 6203	Measurement and Appraisal in Counseling	3
EGC 6822	Advanced Practica in Counseling & Consultation	3
EGC 6605	Professional Problems: Counselor Education	3
EGC 6676	Supervised Experience in Counselor Education	10
***EEX 6051	Exceptional Children and Youth	3

\*\*The student should consult with the advisor to establish whether additional requirements must be met in general professional education (Foundations of Education, General Methods).

\*\*\*Required only in community counseling.

\*\*\*\*Required only in school counseling.

<i>Electives:</i>	17
<b>TOTAL</b>	<b>63</b>

The student should consult with the academic advisor for guidance in selecting electives appropriate for specialization in school or community counseling.

**SCHOOL PSYCHOLOGY:**

The program in School psychology requires 60 semester hours. In general, the competencies to be demonstrated by the student completing this program are derived from the following: behavioral/educational assessment and planning; counseling and child-centered consultation with teachers, parents and agency representatives; staffing, liaison, referral and case management; program development and evaluation; inservice education; administrative consultation; and community development.

**DEGREE: Master of Science**

*Semester Hours*

EDF 5481	Analysis and Application of Educational Research	3
EGC 5405	Introduction to Counseling	3
EGC 6725	Human Interaction I	3
EGC 6726	Human Interaction II	3
EGC 6707	Applied Behavioral Analysis in Education	3

EGC 6708	Advanced Counseling and Consultation: Theory and Practice	3
EGC 6255	Assessment of Behavior II	3
EGC 6709	Human Interaction III: Organizational Consultation	3
EEX 6227	Diagnostic Teaching: Educational Assessment	3
EEX 6211	Assessment of Behavior I	3
SPS 6805	Professional Problems and Issues in School Psychology	3
EGC 6616	Program Evaluation in Pupil Personnel Services	3
EGC 6678	Supervised Field Experience — School Psychology	10
Semester Credits		46

EEX 6227	Diagnostic Teaching: Educational Assessment	3
EGC 6707	Applied Behavior Analysis in Education	3
EEX 6211	Assessment of Behavior I	3
ELD 6323	Advanced Theory and Practice; Specific Learning Disabilities	3
ELD 4322C	Educational Planning for Specific Learning Disabilities	3
Emotional Disturbance:		
EEX 6051	Exceptional Children and Youth	3
EEX 6106	Diagnostic Teaching: Acquisition of Language and Reading Skills	3
EEX 6227	Diagnostic Teaching: Educational Assessment	3
EGC 6707	Applied Behavior Analysis in Education	3
EEX 6211	Assessment of Behavior I	3
EEX 6612	Diagnostic Teaching: Systems & Behavior Models	3
EED 4227C	Educational Planning for Emotional Handicaps	3

**PROFESSIONAL CERTIFICATE PROGRAM IN SEVERELY/PROFOUNDLY HANDICAPPED.**

Under development and implementation.

**GUIDANCE CERTIFICATE PROGRAM**

Purpose:

To provide a means of obtaining the Florida Guidance Certificate (K-12) for those who already possess a Master's degree in Education and do not wish to pursue a second Master's degree.

Entrance Requirements:

- A. Master's degree in Education.
- B. Current employment as a counselor or a minimum of three years teaching experience.
- C. Status as a special graduate student.

**Course Requirements Semester Hours**

EGC 5405	Introduction to Counseling	3
EGC 5305	Educational and Vocational Guidance	3
EGC 6708	Advanced Counseling and Consultation: Theory and Practice	3
EGC 6605	Professional Problems: Counselor Education	3
EGC 6203	Measurement and Appraisal in Counseling	3
EGC 6822	Advanced Practica in Counseling & Consultation	3
EEX 6051	Exceptional Children & Youth	3
EDF 5430	Measurement and Evaluation in Education	3
EXP 5406	Theories of Learning	3
CLP 5175	Personality Dynamics	3
SOP 4015	Social and Personality Development	3

**TOTAL CREDIT HOURS REQUIRED: 27**

Note: Not more than 6 semester hours from another institution may be used to satisfy these requirements.

**INSTITUTE IN THE CREATIVE AND PERFORMING ART FOR THE EXCEPTIONAL**

The Institute in the Creative and Performing Arts for the Exceptional provides significant arts experiences for exceptional children and adults working with community arts organizations. Research in the arts are an integral part of the institute's activities.

**Course Descriptions**

**Definition of Prefixes:**

EED — Education: Emotional Disorders; EEX — Education: Exceptional Child, Core Competencies; EGC — Education: Guidance and Counseling; ELD — Education: Specific Learning Disabilities; EMR — Education: Mental Retardation; SPA — Speech Pathology and Audiology; SPS — School Psychology.

A Professional Certificate Program is under development in the area of Mental Retardation.

**VOCATIONAL EDUCATION FOR THE HANDICAPPED PROFESSIONAL CERTIFICATE PROGRAM**

Purpose:

Vocational Education for the Handicapped is a non-degree Professional Certificate Program offered through the School of Education. The project represents a unique cooperative effort between the Divisions of Vocational Education and Psycho-Educational Services. Instruction in the program focuses on training professionals in vocational skill areas to more appropriately serve the needs of handicapped adolescents and young adults.

Students who are pursuing, or have completed, either Florida Teacher Competency and Certification, or the bachelor's or master's degree in vocational education or special education are encouraged to enroll in this professional certificate program. Program competencies were selected to enhance professionals' knowledge, skills, and attitudes in the following roles: instructional, diagnostic-prescriptive, behavior manager, advocacy, referral agent, and counselor. These professional roles are represented by 124 competencies which are contained in 6 courses or 18 semester hours of instruction. Four of these six courses are required courses and two are electives.

The Division of Personnel Preparation in the Office of Special Education has financially supported this program with a Federal Grant for the past five years. Subsequently, it has been possible to provide financial assistance in the form of a Federal stipend to selected applicants. Students interested in applying for financial assistance should seek further information between January 15 and March 15 of any calendar year.

Electives are required depending on the students background (minimum of 14 elective semester hours)

Semester Hours 60

A student with an undergraduate major in education is encouraged to select electives in the social and behavioral sciences. Other students must meet requirements in general professional education.

**CERTIFICATE PROGRAMS**

In addition to academic degree programs, the Division of Psycho-Educational Services offers certificate programs which lead to either state teaching certification or a University issued professional certificate.

The Division currently offers the following certificates:

**PROFESSIONAL CERTIFICATE PROGRAM IN SPECIFIC LEARNING DISABILITIES AND EMOTIONAL DISTURBANCE**

**Entrance Requirements:**

In order to meet the needs of those teachers not wishing to enter a Master's degree program, but who wish to complete state certification in a sequential and planned program of study, the University has established two Professional Certificate Programs: 1) Specific Learning Disabilities, and 2) Emotional Disturbance (Handicapped). The entrance requirement is a certificate in Elementary Education. The program consists of up to 25 semester hours depending on prior coursework.

In the event a student enrolled in the Professional Certificate Program elects to apply coursework taken towards meeting the requirements for a Master of Science degree, the student will need to follow the regular entrance procedures for the Master's degree program.

**SPECIFIC COURSES REQUIRED:**

Specific Learning Disabilities:

EEX 6051	Exceptional Children and Youth
EEX 6106	Diagnostic Teaching: Acquisition of Language and Reading Skills

**SPECIAL EDUCATION:****EED 4227C Educational Planning for Emotional Handicaps** (3)

Concepts and skills with various models of curriculum, instruction, and classroom design for individuals with social and emotional adjustment problems. Laboratory experiences required. Prerequisites: EEX 4241, EEX 4601. Corequisite: EEX 4242.

**EED 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. Prerequisite: EED 4227C or permission of instructor.

**EED 6937 Seminars in Special Education** (3, repeatable to 9)

A. Topics in Mental Retardation. B. Topics in Specific Learning Disabilities C. Topics in Behavior Disorders.

**EEX 3010 Introduction to Exceptional Children and Youth** (3)

Significant concepts in relation to the learning and adjustment problems of exceptional children and youth. Field experiences required.

**EEX 3202 Foundations of Exceptionality** (3)

Basic concepts in relation to the biological, genetic, psychological and social foundations of handicapping conditions, as they apply to classroom behavior.

**EEX 3221 Assessment of Exceptional Children and Youth** (3)

Competencies in assessment of the basic modalities of learning (visual, auditory, haptic and perceptual motor processes), and the language areas of reading, writing, spelling and arithmetic. Corequisite: EEX 3228.

**EEX 3228 Educational Assessment Lab** (3)

Practical application experiences with educational, process, and informal assessment instruments and procedures. Prerequisite: RED 4310.

**EEX 4040 Exceptional Children in the Mainstream of Education** (3)

Characteristics of mildly handicapped children and techniques of identifying, assessing, managing and instructing them in the regular classroom.

**EEX 4241 Academic Skills for Exceptional Children** (3)

Competencies in the selection, adaptation and preparation of appropriate instructional materials in arithmetic, art, music, science and social studies, including skill with audio-visual equipment and other multi-media approaches. Prerequisites: EEX 3010C, SPA 3000, EEX 3221, RED 4310.

**EEX 4242 Academic Skills for Exceptional Children** (3)

A field-based course where competencies are demonstrated in the areas of assessment, prescriptive teaching, IEP development, lesson planning, and curriculum scope and sequence. Prerequisite EEX 4241.

**EEX 4248 Educational Programs for the Handicapped at the Secondary Level** (3)

Analysis and application of instruction methodology and service delivery models for handicapped students in secondary school programs.

**EEX 4601 Behavioral Approaches to Classroom Learning** (3)

Concepts and skills for building and modifying social and academic behaviors. Skills in precision teaching, behavior modification, and the functional analysis of behavior. Prerequisites: EEX 3010, 3202, SPA 3000, EEX 3221.

**EEX 4611 Behavioral Approaches to Classroom Learning II** (3)

Concepts and skills necessary for the management and maintenance of classroom behavior, including token economies, current development planning, and parent/teacher consultation. Field experience required. Prerequisite: EEX 4601.

**EEX 4861 Student Teaching** (12)

A field experience in a program for exceptional children, demonstrating competencies learned throughout the program.

**EEX 4905 Individual Study in Special Education** (1-6)

Concepts or competencies contracted for between an undergraduate student and an instructor in accordance with the student's individual needs.

**EEX 6020 Professional Issues in Special Education** (3)

Current issues in the special education profession, with focus on changing trends, delivery of service, legislation, and role diversification. Emphasis is placed on articulation of a personal professional role model.

**EEX 6045 Mainstreaming Exceptional Childreg: Issues and Techniques** (3)

Awareness of issues underlying the movement to mainstream mildly handicapped students. Techniques and procedures for effective mainstreaming of these students.

**EEX 6051 Exceptional Children and Youth** (3)

Significant concepts in relation to the learning and adjustment problems of exceptional children and youth. Field experience and graduate project required.

**EEX 6065 Educational Programs for Secondary Level Exceptional Students** (3)

Development of Curriculum, methodology, and program designs for the education of exceptional students in secondary school settings.

**EEX 6106 Diagnostic Teaching: Acquisition of Language and Reading Skills** (3)

Concepts in acquisition and development of language and reading skills. Prerequisite: SPA 3000.

**EEX 6211 Assessment of Behavior I** (3)

Basic concepts in assessment theory. Competencies in using a variety of standardized tests in assessing and writing educational prescriptions

for children with disorders in visual, auditory and haptic processing, in language or integrative systems.

**EEX 6227 Diagnostic Teaching: Educational Assessment** (3)

Skill in application of assessment theory to classroom diagnosis and to the development of instructional objectives.

**EEX 6612 Diagnostic Teaching: Systems and Behavioral Models** (3)

Skills in the application of diagnostic data to various instructional strategies and behavioral models.

**EEX 6846 Diagnostic Teaching: Advanced Practicum** (3)

Application of diagnostic teaching models to individualized, remedial and compensatory instructional programs.

**EEX 6863 Supervised Field Experience in Special Education** (3-9)

Demonstration of the full range of competencies in diagnostic teaching learned throughout the program. Internship placements include a variety of field settings.

**EEX 6906 Individual Study in Special Education** (1-6)

Concepts or competencies contracted for by graduate students with an instructor.

**EEX 6927 Workshop in Special Education** (1-6)

Selected competencies in special education, developed in short-term, intensive workshops.

**ELD 4322C Educational Planning for Specific Learning Disabilities** (3)

Concepts and skills with various models of curriculum, instruction, and classroom designs for individuals with specific learning disabilities. Laboratory experiences required. Prerequisites: EEX 4241, EEX 4601.

**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. Prerequisite: ELD 4322 or permission of instructor.

**EMR 4011 Introduction to the Mentally Retarded** (3)

Significant concepts related to learning, adjustment, and characteristics of the mentally retarded citizen. Prerequisites: EEX 3010C, EEX 3202.

**EMR 4360 Educational Planning for the Mentally Retarded** (3)

Concepts and skills used in planning educational, prevocational and vocational programs for the mentally retarded. Laboratory experiences required. Prerequisites: EEX 4241, EEX 4601.

**EMR 6852 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. Prerequisite: EMR 4360 or permission of instructor.

**SPA 3000 Introduction to Language Development and Communication Disorders** (3)  
Skills in assessing and classroom programming for language development and for various speech and language disorders of children.

#### **PUPIL PERSONNEL SERVICES**

**EGC 5305 Educational and Vocational Guidance** (3)  
Concepts and skills pertaining to vocational development, information systems, career education programs, educational-vocational counseling, and socio-psychological influences on career development.

**EGC 5405 Introduction to Counseling** (3)  
Major theoretical concepts in counseling, competencies in relationship-building, interviewing, role-playing, simulation and micro-counseling.

**EGC 6203 Measurement and Appraisal in Counseling** (3)  
Concepts and skills related to the use of tests and other appraisal procedures in counseling. Particular emphasis on career and vocational choice processes. Laboratory experiences included.

**EGC 6248 Advanced Practical: Psycho-Educational Assessment and Consultation** (3)  
Advanced competencies in psycho-educational assessment.

**EGC 6255 Assessment of Behavior II** (3)  
Concepts and skills in the assessment of intelligence, with a particular emphasis on the problems of assessing the mentally retarded, the gifted, and members of minority groups. Prerequisite: EEX 6211.

**EGC 6510 Theories in Group Dynamics** (3)  
Systematic examination of various theories and relevant research used in study of small group phenomena. Prerequisites: EGC 6725, EGC 6726, EGC 6709.

**EGC 6540 Group Counseling** (3)  
Exploration of roles and function of group counseling in meeting client needs in a variety of settings. Prerequisites: EGC 5405, EGC 6725, EGC 6726.

**EGC 6560 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. Prerequisites: EGC 6725, EGC 6726.

**EGC 6569 Group Process in Organization** (3)  
In-depth analysis of planned change and the social psychological phenomena effecting organizational functioning. Prerequisites: EGC 6725, EGC 6726, EGC 6709.

**EGC 6605 Professional Problems — Counselor Education** (3)  
Competencies in regard to the development of major role and service models and the application of budgeting systems, legal and ethical standards in a psycho-educational setting.

**EGC 6616 Program Evaluation in Pupil Personnel Services** (3)  
Evaluation skills in the student's area of specialization, including competencies in designing evaluation proposals and conducting an actual program evaluation. Prerequisite: EDF 5481.

**EGC 6676 Supervised Field Experience in Counselor Education** (10)  
Demonstration of the full range of competencies learned throughout the program in Counseling. Internship placements include a variety of field settings.

**EGC 6678 Supervised Field Experience in School Psychology** (10)  
Demonstration of the full range of competencies learned throughout the program in School Psychology. Internship placements include a variety of field settings.

**EGC 6705 Principles of Design in Group Intervention: Role of the Consultant** (3)  
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: EGC 6725, EGC 6726, EGC 6510, EGC 6509.

**EGC 6707 Applied Behavior Analysis in Education** (3)  
Concepts and skills in using behavior modification: functional analysis of behavior, precision teaching, token economies, contingency contracting, parent and/or teacher consultation.

**EGC 6708 Advanced Counseling and Consultation: Theory and Practice** (3)  
Extended laboratory experiences stressing the development of skills in behavioral approaches to individual and group counseling, consultation, parent education, and in-service training. Prerequisite: EGC 6707, or equivalent.

**EGC 6709 Human Interaction III: Organizational Consultation** (3)  
Theoretical concepts and skills in organizational development and change. Competencies in systems diagnosis and assessment, consultation, agenda setting, team building, decision-making and feedback. Prerequisite: EGC 6726.

**EGC 6725 Human Interaction I: Group Process Laboratory** (3)  
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.

**EGC 6726 Human Interaction II: Analysis of Group Participation** (3)  
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. Prerequisite: EGC 6725.

**EGC 6822 Advanced Practica in Counseling and Consultation** (3)  
Advanced competencies in counseling and consultation.

**EGC 6905 Individual Study in Pupil Personnel Services** (1-6)  
Competencies contracted for between a student and an instructor in accordance with the student's individual needs.

**EGC 6925 Workshop in Psycho-Educational Services** (1-6)  
Selected competencies in counselor education or school psychology, developed in short-term, intensive workshops.

**EGC 6936 Seminars in Pupil Personnel Services** (3, repeatable to 9)  
Special topics in relation to counseling or school psychology.

**SPS 6805 Professional Problems in School Psychology** (3)  
Competencies in regard to the development, role and function of school psychologists. General orientation and legal and ethical issues included.

## **Division of Subject Specializations**

*George B. Pearson, Chairperson and Professor, Physical Education*

*Judy A. Blucker, Associate Professor, Physical Education*

*Ida F. Chadwick, Associate Professor, Physical Education*

*Jack Llewellyn, Associate Professor, Physical Education*

*Richard Lopez, Associate Professor, Physical Education*

*C. Edwin McClintock, Associate Professor, Mathematics Education*

*Luis A. Martinez-Perez, Associate Professor, Science Education*

*Clement Pennington, Associate Professor, Art Education*

*Robert Shostak, Professor, English Education*

*John J. Staczek, Associate Professor, Modern Language Education/TESOL*

*Robert F. Testa, Associate Professor, Music Education*

*Jan L. Tucker, Professor, Social Studies Education*

*Michael J. Wagner, Associate Professor, Music Education*

The Division offers bachelor's degree programs for the preparation of teachers in secondary subject areas and teachers of art, music, and physical education in grades 1-12. It also offers master's degree programs designed for the continued professional development of teachers.

Unlike traditional programs in secondary education, which emphasize course completion as a sufficient condition for awarding a degree, the programs of the Division emphasize demonstrated performance in specific teaching skills as the main criterion for awarding a degree.

## **Undergraduate Programs**

**LOCATION:** Tamiami Campus Only

A student enrolled in the Division may pursue the following programs:



**General: Grades 1-12**

Art Education  
 Music Education  
 Physical Education

**Secondary Education: Grades 7-12**

Biology	Mathematics
Education	Education
Chemistry	Modern Language
Education	Education
English	Physics Education
Education	
History	Social Studies
Education	Education

Each student major in the Division, after being admitted to the University, is assigned an advisor in the teaching field who will assist the student in constructing a program of study. The program of study must comply with the University's degree requirements and will reflect the career goals of the student. Upon completion of the work specified in the program of study, the student is awarded a *Bachelor of Science* degree with a major in a specific subject matter area, and qualifies for the appropriate Rank III certification in the State of Florida.

All courses taken in the College of Arts and Sciences which are to be applied to an Education major must be evaluated using the letter grade system.

Students wishing to obtain a second major or second degree in the College of Arts and Sciences should consult an advisor in the field of study they wish to pursue.

## Student Teaching and Laboratory Experiences

Most courses offered by this Division require observation and participation in selected schools. The course descriptions will identify those courses which require such in-school experiences.

The student teaching assignments are fulfilled in designated field centers under the direction of classroom teachers and University faculty. This experience is on a full-time basis for a complete semester. Permission to student teach will be contingent upon completion of all other requirements specified in the program of study. Students may be assigned to student teaching during the Fall or Spring semester of the senior year. There is no student teaching in the Summer semester.

Application for student teaching is the responsibility of the student. Necessary forms may be obtained from the Office of Student Personnel Services in the School of Education, and should be returned to that office early in the semester following completion of 90 semester hours of credit and no later than 1 semester prior to the time of registration for student teaching. Programs Revisions

The Division of Subject Specializations is currently going through curricular changes and all students entering the program after August 1982 will be required to complete the new programs before graduating.

## Art Education: Grades 1-12

DEGREE: Bachelor of Science

**LOWER DIVISION PREPARATION:**

*Required Courses:* 1) An Associate of Arts degree in art, or (a) Art History Survey (6 semester hours) and (b) Basic and Figure Drawing (6 semester hours) and (c) Two and Three Dimensional Design (6 semester hours); and 2) Foundations of Education (6 semester hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 60 semester hours required in the student's upper division program.

**UPPER DIVISION PROGRAM:**

*Semester Hours*

*Subject Matter Specialization:* 27

ARH 4470	Contemporary Art, Art History Elective	6
ART 3510C	Painting	3
ART 3702C	Sculpture	3
ART 3150C	Jewelry and Metals	3
ART 3401C	Printmaking	3
ART 3601C	Photography	3
ART 3111C	Ceramics	3
Art Electives:		6

*Professional Education:* 30

EDF 3827	Schooling in America	3
EDG 3321	General Teaching Laboratory I	3
EDG 3322	General Teaching Laboratory II	3

*Reading Requirement:*

RED 4325	Special Teaching Laboratory: Reading	3
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*Special Methods and Student Teaching:* A student must complete the 6 semester hours of foundations courses, and all core courses before enrolling in 4000 level special methods courses.

ARE 4316 and ARE 4341 must be taken in sequence before ARE 4940.

ARE 4316	Special Teaching Laboratory: Art in Grades K-6	3
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(minimum prerequisite or corequisite of 18 hours required in subject matter specialization)

ARE 4341	Special Teaching Laboratory: Art in Grades 7-12	3
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(minimum prerequisite or corequisite of 30 hours required in subject matter specialization)

ARE 4940	Student Teaching in Art	9
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*Advisor Approved Electives* 3  
 60

## Music Education: Grades 1-12

DEGREE: Bachelor of Science

**LOWER DIVISION PREPARATION:**

*Required Courses:* An Associate of Arts degree in Music or the following recommended courses: applied, 8 semester hours; history, 4 semester hours; organizations, 4 semester hours; techniques secondary instruments, 4 semester hours; theory, 12 semester hours; sight-singing, 4 semester hours; Foundations in Education, 6 semester hours. If Foundations in Education requirements are not met at the lower division, they must be taken in addition to the

60 semester hours required in the student's upper division program.

**UPPER DIVISION PROGRAM:**

*Semester Hours*

*Subject Matter Specialization:* 23  
 Applied Music (Four semesters; ½ hour lessons on major instrument each semester)

Basic Conducting	4
Beginning Instrumental or Choral	1
Form and Analysis	3
Counterpoint	3
Guitar	1
Twentieth Century Music History	3
Orchestration or Choral Techniques	3
Organizations (4 semesters)	4

*Professional Education:* 30

EDF 3827	Schooling in America	3
EDG 3321	General Teaching Laboratory I	3
EDG 3322	General Teaching Laboratory II	3

*Reading Requirement:*

RED 4325	Special Teaching Laboratory: Reading	3
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*Special Methods and Student Teaching:* A student must complete the 6 semester hours of foundations courses and all core courses before enrolling in 4000 level special methods courses.

MUE 3332	Special Teaching Laboratory I: Music	3
MUE 4341	Special Teaching Laboratory II: Music (K-12)	3

(Minimum prerequisite or corequisite of 20 hours required in subject matter specialization)

MUE 4940	Student Teaching (Elementary & Secondary)	9
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*Advisor Approved Electives:* 10  
 Sufficient number of hours to accrue to a total of 60 semester hours at the University.

## Biology Education: Grades 7-12

DEGREE: Bachelor of Science

**LOWER DIVISION PREPARATION:**

*Required Courses:* 8 semester hours of biology; 8 semester hours of general chemistry; 8 semester hours of general physics; mathematics through analytical geometry; and Foundations of Education (6 semester hours). If foundations requirements are not met at the lower division they must be taken in addition to the 60 semester hours required in the student's upper division program.

**UPPER DIVISION PROGRAM:**

*Semester Hours*

*Subject Matter Specialization:* 32

Genetics	3
Biochemistry	5
Molecular Biology	5
Developmental Biology	3
Electives in Biology*	6

Organic Chemistry	5
Quantitative Analysis	5
<b>Professional Education:</b>	24
EDF 3827 Schooling in America	3
EDG 3321 General Teaching Laboratory I	3
EDG 3322 General Teaching Laboratory II	3

**Reading Requirement:**

RED 4325 Special Teaching Laboratory: Reading	3
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**Special Methods and Student Teaching:**

A student must complete six (6 semester) hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for SCE 4330 and SCE 4944 in consecutive semesters.

SCE 4330 Special Teaching Laboratory:	
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Science (minimum prerequisite or corequisite of 20 hours required in subject matter specialization)

SCE 4944 Student Teaching	9
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**Advisor Approved Electives:**

Sufficient number of hours to accrue to a total of 60 semester hours at the University.

hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for SCE 4330 and 4944 in consecutive semesters.

SCE 4330 Special Teaching Laboratory:	
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Science (minimum prerequisite or corequisite of 20 hours required in subject matter specialization)

SCE 4944 Student Teaching	9
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**Advisor Approved Electives:**

Sufficient number of hours to accrue to a total of 60 semester hours at the University.

**English Education:  
Grades 7-12**

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

**Required Courses:** Two courses in freshman English; two courses beyond freshman English in literature; one course in oral interpretation; one course in advanced composition; and Foundations of Education (6 semester hours). If the required courses beyond freshman composition are not completed they will be included in the student's program in addition to regular upper division requirements. If foundations requirements are not met at the lower division, they must be taken in addition to the 60 semester hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

Semester Hours

<b>Subject Matter Specialization:</b>	27
ENG 3500 Introductory Linguistics	3
ENG 4555 Modern Grammars (prerequisite ENG 3500)	3
LAE 4464 Adolescent Literature	3
Literary Criticism	3
Shakespeare	3
Communications electives	6
Literature electives	6

**Professional Education:** 24

EDF 3827 Schooling in America	3
EDG 3321 General Teaching Laboratory I	3
EDG 3322 General Teaching Laboratory II	3

**Reading Requirement:**

RED 4325 Special Teaching Laboratory: Reading	3
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A student must complete six (6) semester hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for LAE 4335 and LAE 4942 in consecutive semesters.

LAE 4335 Special Teaching Laboratory:	
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English (minimum prerequisite or corequisite of 20 hours required in subject matter specialization)

LAE 4942 Student Teaching	9
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**Advisor Approved Electives:**

Sufficient number of hours to accrue to a total of 60 semester hours at the University.

9

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**History Education:  
Grades 7-12**

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

**Required Courses:** 1) Two courses in history. 2) One course in the social sciences beyond freshman social science core (select from anthropology, economics, geography, political science or sociology). 3) Foundations of Education (6 semester hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 60 semester hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

Semester Hours

<b>Subject Matter Specialization:</b>	24
1. History 3001 Introduction to History	3
2. U.S. History at 3000, 4000 or 5000	6
3. History other than U.S.	12
4. U.S. Government (POS 3044)	3

**Professional Education:**

EDF 3827 Schooling in America	3
EDG 3321 General Teaching Laboratory I	3
EDG 3322 General Teaching Laboratory II	3

**Reading Requirement:**

RED 4325 Special Teaching Laboratory: Reading	3
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**Special Methods and Student Teaching:**

A student must complete 6 semester hours of foundations courses and all core courses before enrolling in 4000 level methods courses. A student must enroll for SSE 4384C and SSE 4942 in consecutive semesters.

SSE 4384C Special Teaching Laboratory: Social Studies	3
SSE 4942 Student Teaching	9

**Advisor Approved Electives:**

Sufficient number of hours to accrue to a total of 60 semester hours at the University.

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It is recommended that the student consider a double major which combines a major in history education with a major in social studies, international relations, political science, economics, anthropology, sociology or history. The student must consult with the history education advisor about these requirements.

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**Mathematics Education:  
Grades 7-12**

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

**Required Courses:** Trigonometry. Analytic geometry. Calculus. Foundations of Education (6

semester hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 60 semester hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

*Semester Hours*

**Subject Matter Specialization:** 27  
27 semester hours beyond calculus, including at least 6 semester hours in probability and statistics, and 3 semester hours in computer science and geometry.

**Professional Education:** 24

EDF 3827	Schooling in America	3
EDG 3321	General Teaching Laboratory I	3
EDG 3322	General Teaching Laboratory II	3

**Reading Requirement:**

RED 4325	Special Teaching Laboratory: Reading	3
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**Special Methods and Student Teaching:**

A student must complete six (6) semester hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for MAE 4333C and MAE 4942 in consecutive semesters.

MAE 4333C	Special Teaching Laboratory:	3
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Mathematics (minimum prerequisite or corequisite of 20 hours required in subject matter specialization)

MAE 4942	Student Teaching	9
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**Advisor Approved Electives:** 9

Sufficient number of hours to accrue to a total of 60 semester hours at the University.

60

**Modern Language Education: Grades 7-12**

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

Four semesters of elementary and intermediate modern language (may be waived, at the discretion of the advisor, for native speakers of the target language); and Foundations of Education (6 semester hours). If foundations, requirements are not met at the lower division, they must be taken in addition to the 60 semester hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

*Semester Hours*

**Subject Matter Specialization:** 27

Phonetics or Contrastive Phonology	3
Intro. Linguistics or Linguistics in Target Language	3
Civilization	3
Syntax/Composition	3
Literature in Target Language	6
MOL Electives	9

**Professional Education:** 24

EDF 3827	Schooling in America	3
EDG 3321	General Teaching Laboratory I	3
EDG 3322	General Teaching Laboratory II	3

**Reading Requirement:**

RED 4325	Special Teaching Laboratory: Reading	3
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**Special Methods and Student Teaching:**

A student must complete the 6 semester hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for FLE 4375 and FLE 4942 in consecutive semesters.

FLE 4375	Special Teaching Laboratory: Modern Languages	3
FLE 4942	Student Teaching	9

(minimum prerequisite or corequisite of 20 hours required in subject matter specialization).

**Advisor Approved Electives:** 9

Sufficient number of hours to accrue to a total of 60 semester hours at the University.

	for Intermediate Grades	3
PEO 4014C	Coaching Sports	3
PET 4622C	Athletic Injuries	3
<b>Professional Education:</b> 24		
EDF 3827	Schooling in America	3
EDG 3321	General Teaching Lab I	3
EDG 3322	General Teaching Lab II	3
RED 4335	Special Teaching Lab: Reading	3
PET 4450	Special Teaching Lab: Physical Education	3
PET 4945L	Student Teaching	9

Advisor Approved Courses: 60

**Physics Education: Grades 7-12**

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

**Required Courses:** 8 semester hours of general physics; 8 semester hours of general chemistry; mathematics through Calculus II; and Foundations of Education (6 semester hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 60 semester hours required in the student's upper division program.

**Remarks:** Linear algebra, a prerequisite for multi-variable calculus (section 1 below) may be taken at the lower division or at the University.

UPPER DIVISION PROGRAM:

*Quarter Hours*

**Subject Matter Specialization:** 26

PHY 3048, 3049,	10
PHY 3048L, 3049L	2
Modern Physics	6
Electives in Physics	5
Multivariate Calculus	3

**Professional Education:** 24

EDF 3827	Schooling in America	3
EDG 3321	General Teaching Laboratory I	3
EDG 3322	General Teaching Laboratory II	3

**Reading Requirement:**

RED 4325	Special Teaching Laboratory: Reading	3
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**Special Methods and Student Teaching:**

A student must complete six (6) semester hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for SCE 4330 and SCE 4944 in consecutive semesters.

SCE 4330	Special Teaching Laboratory: Science	3
SCE 4944	Student Teaching	9

(minimum prerequisite or corequisite of 20 hours required in subject matter specialization)

**Advisor Approved Electives:** 10

Sufficient number of hours to accrue to a total of 60 semester hours at the University.

**Physical Education: Grades 1-12**

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

**Required Courses:** Foundations of education; first aid or personal health or health education; physical education major courses in dance, aquatics, gymnastics, plus a minimum of two individual sports and two team sports. If the foundations requirements are not met at the lower division, they must be taken in addition to the requirements of the upper division program. All required courses must be completed with a grade of "C" or better.

**Remarks:** All physical education majors are expected to be proficient in the following activities: Football, soccer, volleyball, basketball, folk, social and square dance, track and field, tennis, golf, gymnastics and badminton. At the lower division, students should enroll in those courses in which they are least proficient. Students who have not completed the required courses may apply for admission if the deficiency is not greater than twelve (12) semester hours. However, all program prerequisites must be completed prior to entry into the senior year.

UPPER DIVISION PROGRAM:

*Semester Hours*

**Subject Matter Specialization** 18

PET 3310	Kinesiology	3
PET 3360	Exercise Physiology	3
PET 3430	Physical Education in the Elementary School	3
PET 3640C	Adapted Physical Education	3
PCB 3701	Foundations of Human Physiology	3
PET 4230C	Motor Learning	3
PET 4510	Evaluation in Physical Education	3

The student must select 9 semester hours from the courses listed below.

PET 4432	Physical Education for Primary Grades	3
PET 4433	Physical Education	3

## Social Studies Education: Grades 7-12

DEGREE: Bachelor of Science  
LOWER DIVISION PREPARATION:

*Required Courses:* 1) Two courses in history. 2) One course in the social sciences beyond freshman social science core (select from anthropology, economics, geography, political science or sociology). 3) Foundations of Education (6 semester hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 60 semester hours required in the student's upper division program.

### UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<i>Subject Matter Specialization:</i>	21
History	9
Political Science (POS 3044)	3
Geography (GEA 3000)	3
Economics	3
Anthropology or Sociology	3

<i>Professional Education:</i>	24
EDF 3827 Schooling in America	3
EDG 3321 General Teaching Laboratory I	3
EDG 3322 General Teaching Laboratory II	3

<i>Reading Requirement:</i>	
RED 4325 Special Teaching Laboratory: Reading	3

*Special Methods and Student Teaching:*  
A student must complete six (6) semester hours of foundation courses, and all core courses before enrolling in 4000 level special methods courses. A student must enroll for SSE 4384C and SSE 4942 in consecutive semesters.

SSE 4384C Special Teaching Laboratory: Social Studies	3
SSE 4942 Student Teaching	9

### *Advisor Approved Electives:*

\*A minimum of 40 semester hours at the lower and upper divisions combined must be completed in the social studies subject matter specialization for certification. Electives must include sufficient semester hours in United States history (6), history other than United States (10), political science (6), geography (6), economics (6), anthropology (3) and sociology (3) to meet social studies certification requirements. It is recommended that the student consider a double major which combines a major in social studies with a major in history, history education, international relations, political science, economics, anthropology or sociology. The student must consult with the social studies advisor about these requirements.

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## Graduate Programs

LOCATION: Tamiami Campus Only  
Master's programs are offered by the Division in the following specialized area:  
Art Education      Music Education

English Education	Physical Education
Mathematics Education	Science Education
Modern Language Education	Social Studies Education
	TESOL (Teaching English to Speakers of Other Languages)

A student must file a program of study with the advisor. The program of study must comply with the general master's degree requirements and reflect the career goals of the student.

Upon completion of the program, the student is awarded the Master of Science degree.

Requirements for admission to all of these programs except TESOL are: (1) possession of a certificate or equivalent in the area selected, (2) satisfactory scholastic aptitude as determined by the Graduate Admission standards, (3) evidence of satisfactory record in the teaching field.

Requirements for admission to the TESOL master's program are: (1) satisfactory scholastic aptitude as determined by the Graduate Admissions standards and (2) evidence of a satisfactory record in a teaching or professional field.

A typical program of study consists of 30 semester hours of course work. Generally, 6 semester hours of graduate study from another accredited college or university may be transferred if applicable to the student's program.

All courses taken in the College of Arts and Sciences which are to be applied to an Education Major must be evaluated using the letter grade system.

*Note:* If students have not met the reading requirement for certification, they will be required to take RED 6337.

## Art Education

DEGREE: Master of Science

	<i>Semester Hours</i>
<i>Education, including Art Education:</i>	15
EDF 5481 Analysis and Application of Educational Research	3
ARE 6140 Curriculum and Instruction in Art	3

### *Select one of the following:*

ARE 5251 Art for Exceptional Children and Youth	3
EDE 6205 Curriculum Design for Childhood Educ.	3
ESE 6215 Secondary School Organization and Coordination of School and Community Art Programs	3
ARE 6262 Seminar in Art Education: Contemporary Issues and Research	3

<i>Teaching Field:</i>	15
Five graduate art courses, including one art history:	
Art History	(3)
Studio Art	(12)

(3 semester hours credit for each studio course)  
*Advisor Approved Electives:*

6

36

## English Education

DEGREE: Master of Science

	<i>Semester Hours</i>
<i>Education:</i>	12
EDF 5481 Analysis and Application of Educational Research	3
LAE 6339* Teaching English in the Secondary School	3
ESE 6215 Secondary School Curriculum Seminar in English Education	3

\*Prerequisite: Undergraduate methods course  
*Teaching Field:* English

15

*Advisor Approved Electives:*

3

30

## Mathematics Education

DEGREE: Master of Science

	<i>Semester Hours</i>
<i>Education:</i>	12
EDF 5481 Analysis and Application of Educational Research	3
MAE 6336 Teaching Mathematics in the Secondary School	3
MAE 6899 Seminar in Mathematics Education	3
ESE 6215 Secondary School Curriculum	3

*Teaching Field:* Mathematics  
*Electives:* In Education and/or Mathematics

12

9

33

## Music Education

DEGREE: Master of Science

	<i>Semester Hours</i>
<i>Education:</i>	12
ESE 6215 Secondary School Curriculum	3
or	
EDE 6205 Curriculum Design for Childhood Education	3
EDF 5481 Analysis and Application of Educational Research	3
MUE 6349 Methodology of Music Teaching	3
MUE 6938 Seminar in Music Education	3

*Teaching Field:* Courses in music  
*including:*

7

3

3

MUT 5325	Arranging	3
MUG 5105	Advanced Conducting	1
<i>Advisor Approved Electives:</i>		11
		30

## Science Education

DEGREE: Master of Science

		Semester Hours
Education:		12
EDF 5481	Analysis and Application of Educational Research	3
ESE 6215	Secondary School Curriculum	3
SCE 6635	Teaching Science in the Secondary School	3
SCE 6933	Seminar in Science Education	3

### Teaching Field

Biology or Chemistry or Physics  
orOne course in each of the following areas:  
Biology, Chemistry, Physics (For Junior High Science Teachers)

<i>Electives:</i>	6
	30

## Social Studies Education

DEGREE: Master of Science

		Semester Hours
Education:		12
SSE 6633	Teaching Social Studies in the Secondary School	3
ESE 6215	Secondary School Curriculum	3
EDF 5481	Analysis and Application of Educational Research	3
SSE 6939	Seminar in Social Studies Education	3

*Teaching Field:* Social Studies, Social Science, History

*Advisor Approved Electives:*

9
33

## Modern Language Education

DEGREE: Master of Science

		Semester Hours
Professional Education:		12
EDF 5481	Analysis and Application of Educational Research	3
ESE 6215	Secondary School Curriculum	3
FLE 6336	Teaching Second Language in the Secondary School	3
FLE 6938	Seminar in Second Language Education	3

## Areas of Specialization:

Students will choose, in consultation with the advisor, a total of 15 hours from among the following courses in the Departments of English, Modern Languages, and Psychology:

ENG 5907	Independent Study	15
LIN 3400	Applied Linguistics (or graduate equivalent)	
LIN 4400	Applied Linguistics (or graduate equivalent)	
LIN 4710	Language Acquisition (or graduate equivalent)	
LIN 5701	Psychology of Language (or graduate equivalent)	
LIN 5625	Studies in Bilingualism	
LIN 5934	Special Topics in Linguistics	
FRW 4934	Special Topics in Language/Literature	
FRW 5150	Comparative Studies	
FRW 5395	Genre Studies	
SPW 5155	Comparative Studies	
SPW 5391	Genre Studies	
SPW 5934	Special Topics in Language/Literature	
SPW 5936	Graduate Seminar	
FRW 5938	Graduate Seminar	

*Field Component* 3  
The remaining three (3) semester hours will consist of a supervised field experience in the teaching of one of the modern languages. The field experience may be arranged according to one of the following options:

- Dade County Public Schools;
- Private schools;
- adult or community college education;
- adjunct teaching at Florida International University

All arrangements for field experience must be approved by the advisor. 30

## Physical Education

DEGREE: Master of Science

		Semester Hours
Professional Education		6
EDF 5481	Analysis and Application of Educational Research	3
RED 6337	Reading in the Secondary School	3

### \*Area of Specialization:

PET 5216	Sports Psychology	3
PET 5238C	Perceptual Motor Learning	3
PET 5256C	Sociology of Sport	3
PET 5366C	Sports Medicine	3
PET 5438	Physical Education Curriculum in Elementary School	3
PET 6535	Survey of Research in Physical Education	3
PET 6932	Seminar in Physical Education	3

*\*\*Electives:* 3  
PET 5426 Curriculum Development

PET 5925	Workshop in Physical Education	1-3
PET 6925-27	Workshop in Physical Education	1-3
***PET 4510	Evaluation in Physical Education	3
PET 5906	Individual Study	1-3

30  
\*Any changes in required program must be approved in advance by advisor  
\*All electives must be approved in advance by advisor  
\*\*\*Required of all graduate students if they have not taken an undergraduate evaluation class.

## Teaching English to Speakers of Other Languages (TESOL)

DEGREE: Master of Science

		Semester Hours
Professional Education:		12
EDF 5481	Analysis and Application of Educational Research	3
ESE 6215	Secondary School Curriculum	3
EDE 6205	Curriculum Design for Childhood Education	3
TSL 6371	Special Methods of TESOL	3
FLE 6938	Seminar in Second Language Education	3

### Area of Specialization:

Students in the M.S. in TESOL will choose, in consultation with the advisor, a total of 15 hours from among the following courses in the Departments of English, Modern Languages, and Psychology:

ENG 4555	Modern English Grammar	15
LIN 5701	Psychology of Language	
LIN 5990	Child Language Acquisition	
ENG 5556	Advanced Syntax	
LIN 5934	Special Topics in Linguistics	
ENG 5517	History of the English Language	
LIN 5626	Studies in Bilingualism	
LIN 5221	Phonology	
LIN 5993	Morphology	
SPN 4800	Contrastive Morphology	
SPN 5930	Special Topics in Linguistics	

### Field Component:

The remaining three (3) semester hours will consist of a supervised field experience in the teaching of English to speakers of other languages. The field experience may be arranged according to one of the following options:

- ESOL in Dade County Public Schools;
- ESOL in adult and/or community college education;
- ESOL in private enterprise;
- Intensive English at Florida

## International University

All arrangements for field experience must be approved by the advisor

30

## Course Descriptions

### Definition of Prefixes

ARE — Art Education; ESE — Education Secondary; FLE — Foreign Language Education; LAE — Language Arts & English Education; MAE — Mathematics Education; MUE — Music Education; SCE — Science Education; SSE — Social Studies Education; PET — Physical Education.

### ART EDUCATION

#### ARE 4316 Special Teaching Laboratory:

Art in Grades K-6

(3)

Development of instructional skills, techniques, and strategies for teaching art in the elementary school. Laboratory and field participation required. Prerequisites: EDF 3827, EDG 3321, EDG 3322. Minimum prerequisite or corequisite of 20 hours required in subject matter specialization.

#### ARE 4341 Special Teaching Laboratory:

Art in Grades 7-12

(3)

Development of instructional skills, techniques and strategies for teaching art in the junior and senior high school. Laboratory and field participation required. Prerequisites: EDF 3827, EDG 3321, EDG 3322; ARE 4316. Minimum prerequisite or corequisite of 20 hours required in subject matter specialization.

#### ARE 4940 Student Teaching in Art

(9)

Supervised teaching in an elementary and secondary school. Prerequisites: EDG 3321, 3322; ARE 4316, 4341; RED 4325, and 18 semester hours of the course work required in art.

#### ARE 5251 Art for the Exceptional Child

(3)

Development of instructional art skills, techniques, and strategies as related to the exceptional child. Observation and field participation required.

#### ARE 5905 Directed Study in Art

Education

(1-3)

Individual investigation and research in one or more areas of art education. Prerequisite: consent of professor.

#### 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. Prerequisite: EDF 5287.

#### ARE 6262 Organization and Coordination of School and Community Art

(3)

Procedures for the organization, coordination and evaluation of school, community, and in-service art programs, with particular attention to the urban multi-cultural setting.

#### ARE 6706 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.

**ARE 6925-29 Workshop in Art Education** (3)  
Production and application of materials and techniques in art education, in a laboratory or field setting.

### MUSIC EDUCATION

#### MUE 3332 Special Teaching Laboratory I

(3)

Development of instructional skills, techniques, and strategies for school music performance organizations through laboratory and field experiences. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

#### MUE 4341 Special Teaching Laboratory II

(3)

Field-based methods, materials and instructional skills course, which prepares students for internship in an elementary and secondary school setting. Prerequisites: EDF 3827, EDG 3321, EDG 3322, MUE 3332.

#### MUE 4940 Student Teaching

(9)

Supervised teaching in an elementary school (5 weeks) and a secondary school (5 weeks). Prerequisites: EDF 3827, EDG 3321, EDG 3322; MUE 3332, MUE 4341; RED 4325, and 20 semester hours of the coursework required in music.

#### MUE 5907 Directed Study in Music

Education

(1-3)

Individual investigation in one or more areas of music education.

#### MUE 5928 Workshop in Music

(1-3)

Applications of materials and techniques in music in a laboratory or field setting.

#### MUE 6349 Methodology of Music Teaching

(3)

Analysis of methods, programs and materials for teaching music in the public schools, and development of music pedagogy skills.

#### MUE 6925-26 Workshop in Music Education

(1-3)

Applications of materials and techniques in music education in a laboratory or field setting.

#### MUE 6938 Seminar in Music Education

(3)

Seminar in music programs in the United States and other countries, and current issues and problems facing the music educator.

### SECONDARY EDUCATION: GRADES 7-12

#### ESE 5908 Individual Study

(1-3)

The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.

#### 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.

#### ESE 6425 Research in Secondary

Education

(1-3)

Examination and evaluation of research studies

in secondary education. Prerequisite: At least one course in research methods or equivalent competency. (Determination of equivalent competency will be made by the instructor.)

#### 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.

#### ESE 6935 Seminar in Secondary Education

(1-3)

Analysis of selected problems in secondary education.

#### ESE 6947 Supervised Field Experience

(3-9)

Field work in an educational institution or organization. Prerequisite: consent of Chairperson of the Division.

#### FLE 4375 Special Teaching Laboratory: Modern Languages

(3)

Development of instructional skills, techniques, and strategies for teaching modern languages in the junior and senior high school. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 14 hours in subject matter specialization.

#### FLE 4942 Student Teaching

(9)

Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4325, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.

#### FLE 5908 Individual Study

(1-3)

The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.

#### FLE 6336 Secondary Second Language in the Secondary School

(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. Prerequisite: LIN 3010 or ENG 3500 or equivalent.

#### TSL 6371 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. Prerequisite: LIN 3010 or ENG 3500 or equivalent.

#### FLE 6925 Workshop in Second Language Education

(1-3)

Production and application of materials and techniques in second language education in a laboratory or field setting.

#### FLE 6938 Seminar in Second Language Education

(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.

- LAE 4335 Special Teaching Laboratory: English** (3)  
Development of instructional skills, techniques, and strategies for teaching English in the junior and senior high school. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 16-20 hours in subject matter specialization.
- LAE 4464 Experiencing Adolescent Literature in the Junior-Senior High School** (3)  
An examination of the most familiar types of literature found in the secondary school English curriculum today; and the development of strategies for organizing and providing a variety of literary experiences of students who differ in intellectual abilities and literary tastes.
- LAE 4942 Student Teaching** (9)  
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4325, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.
- LAE 5908 Individual Study** (1-3)(ARR)  
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.
- LAE 6339 Teaching English in the Secondary School** (3)  
Analysis of methods, programs, and materials for teaching English in the junior and senior high school, and development of teaching skills.
- LAE 6925-26 Workshop in English Education** (1-3)(ARR)  
Production and application of materials and techniques in English education in a laboratory or field setting.
- 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.
- MAE 4333C Special Teaching Laboratory: Mathematics** (3)  
Development of instructional skills, techniques, and strategies for teaching mathematics in the junior and senior high school. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 16 hours in subject matter specialization.
- MAE 4942 Student Teaching** (9)  
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4325, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.
- MAE 5908 Individual Study** (1-3)(ARR)  
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.
- MAE 6336 Teaching Mathematics in the Secondary School** (3)  
Analysis of methods, programs and materials for teaching mathematics in the junior and senior high school, and development of teaching skills.
- MAE 6899 Seminar in Mathematics Education** (3)  
Designed to provide the advanced student with deeper understanding of the current state of mathematics education. Major emphasis is on current trends and curriculum projects on the national and international levels, as well as evaluation and research related to these trends.
- MAE 6925-28 Workshop in Mathematics Education** (1-3)(ARR)  
Production and application of materials and techniques in math education in a laboratory or field setting.
- RED 4325 Special Teaching Laboratory: Reading** (3)  
Development of instructional skills, techniques, and strategies for teaching reading in the junior and senior high school. Attention to attaining competence in subject-matter related reading skills.
- SCE 4330 Special Teaching Laboratory: Science** (3)  
Development of instructional skills, techniques and strategies for teaching biological and physical sciences in the junior and senior high schools. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 16-20 hours in subject matter specialization.
- SCE 4944 Student Teaching** (9)  
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4325, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.
- SCE 5905 Individual Study** (1-3)(ARR)  
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.
- SCE 6635 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 6925-26 Workshop in Science Education** (1-3)(ARR)  
Production and application of materials and techniques in science education in a laboratory or field setting.
- 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.
- SSE 4380 Developing a Global Perspective** (3)  
Introduction and utilization of learning materials and teaching strategies in Global Education for K-12.
- SSE 4384C Special Teaching Laboratory: Social Studies** (3)  
Development of instructional skills, techniques, and strategies for teaching history and social science in the junior and senior high school. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required.
- SSE 4942 Student Teaching** (12)  
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4325, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.
- SSE 5908 Individual Study** (1-3)(ARR)  
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.
- SSE 6633 Teaching Social Studies in the Secondary School** (3)  
Analysis of methods, programs, and materials for teaching social studies in the junior and senior high school, and development of teaching skills.
- 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.
- 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.

## PHYSICAL EDUCATION

- PET 3202 Physical Education in the Secondary School** (3)  
Students will study methods, philosophy, and curriculum for physical education in secondary schools, grades 6-12. Field experiences will be required in addition to class work.
- PET 3310 Kinesiology** (3)  
Students study the anatomical and mechanical principles of movement and apply this knowledge in the analysis of physical education and athletic sport activities. (Includes laboratory class periods.)
- PET 3360 Exercise Physiology** (3)  
Students study the factors in exercise physiology and make application of this knowledge in laboratory situations.
- PET 3430 Physical Education in the Elementary School** (3)  
Students will study methods, philosophy and curriculum for modern physical education in elementary schools. K-6 Field Experiences will be required in addition to class work.
- PET 3640C Adapted Physical Education** (3)  
Students gain knowledge of scientific factors and develop and implement physical education programs for special populations. Laboratory and Field Experience required.

**PET 4230C Motor Learning** (3)  
Students will demonstrate knowledge and application of the physiological and psychological factors affecting motor skill acquisition and performance.

**PET 4430 Physical Education for Primary Grades** (3)  
Designed to provide students with competencies necessary for the development and implementation of physical education programs in grades K-3. A three-hour per week field experience in an elementary school is required. Prerequisite PET 3430.

**PET 4433 Physical Education for Intermediate Grades** (3)  
Designed to provide students with competencies necessary for the development and implementation of physical education programs in grades 4-6. A three-hour per week field experience in an elementary school is required. Prerequisite PET 3430.

**PET 4450L Special Teaching Laboratory: Physical Education** (3)  
Students will develop the instructional skills and strategies in the teaching of physical education.

**PEO 4014C Coaching Sports** (3)  
Students will examine the philosophy, organization, and skills necessary for coaching interscholastic sports in an educational environment.

**PET 4510 Evaluation in Physical Education** (3)  
Students will demonstrate competencies in motor skill testing, grading, and analysis of written test scores necessary for successful teaching in physical education.

**PET 4622C Athletic Injuries** (3)  
Students will demonstrate knowledge of the proper care and prevention of athletic injuries through the application of acceptable training techniques.

**PET 4945L Student Teaching** (12)(F,S)  
During the student's internship, the student will complete written assignments and demonstrate those competencies which are characteristic of a competent physical education teacher.

**PET 5125 History of Physical Education and Sport** (3)  
Students will study the history of sport and will take part in writing their own review of sport from a chosen time in history.

**PET 5216 Sports Psychology** (3)  
Course will include an analysis of psychological variables which might influence physical performance. Topics to be discussed include personality development, motivation, anxiety, tension, stress, aggression, attribution theory, and social facilitation. The course is intended for prospective physical educators and others interested in motor performance. No prerequisites.

**PET 5238C Perceptual Motor Learning** (3)  
Students will demonstrate knowledge and understanding of various approaches to, and theories of, perceptual motor learning, with spe-

cial emphasis in physical education. Perceptual motor tasks will be performed as well as taught by the students.

**PET 5256C Sociology of Sport** (3)  
Students will demonstrate a thorough understanding of the sociological bases of sport and will actively engage in a field study involving a particular phase of sport and society.

**PET 5366C Sports Medicine** (3)  
The class will focus on the application of medical knowledge to sport with the aim of preserving the health of an athlete, while improving performance.

**PET 5426 Curriculum Development in Physical Education** (3)  
Students will develop their own curricula after examining and discussing modern curriculum theory. A problem-solving approach will be employed as students test their programs at various grade levels in the public schools.

**PET 5438 Physical Education Curriculum in the Elementary School** (3)  
Examination of objectives, content, methods of teaching, and evaluative techniques in elementary school physical education. Emphasis on curriculum development and refinement of teaching skills.

**PET 5906 Individual Study** (1-3)(ARR)  
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.

**PET 5925 Workshop in Physical Education** (1-3)  
Production and/or application of materials and techniques for physical education in a classroom and/or field setting.

**PET 6535 Survey of Research in Physical Education** (3)  
Following a survey of research in physical education, students will demonstrate competencies in applying this knowledge to teaching situations in the public schools.

**PET 6925-27 Workshop in Physical Education** (1-3)  
Production and/or application of materials and techniques for physical education in a classroom and/or field setting.

**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.

**PET 6944 Supervised Field Experience** (3-9)(F,W,S)  
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.

## International Institute for the Study of Sport (IISS)

Florida International University began to conduct significant research in national and international sport in September, 1980, in the newly established International Institute for the

Study of Sport (IISS). The primary purpose of the Institute is to examine sports as an object of liberal inquiry, investigating its biological, psychological, and sociological dimensions. All students, both undergraduate and graduate, who are interested in participating in the institute should contact Dr. Jack H. Llewellyn, Director; Dr. Richard Lopez, Associate Director of Operations; or Dr. Donald Smith, Associate Director of Research.

## Division of Vocational Education

*George W. Vanover, Chairperson and Associate Professor, Program Leader Business Teacher Education*

*Rosemere Baum, Assistant Professor, Home Economics Education*

*Curtis Bradley, Professor, Program Leader Vocational Industrial Education*

*Myrna P. Crabtree, Professor, Program Leader Home Economics Education*

*A. Dean Hauenstein, Professor, Industrial Arts Education*

*Dominic A. Mohamed, Associate Professor, Vocational Industrial Education*

*Robert O. Pryor, Assistant Professor, Vocational Industrial Education*

*Janice R. Sandiford, Assistant Professor, Program Leader Health Occupations Education*

*Dennis G. Tesolowski, Assistant Professor, Vocational Special Needs*

*Robert Vos, Assistant Professor, Program Leader Technical Education*

The Division prepares and services professional personnel whose major functions are to teach, coordinate, supervise, and administer vocational education programs in schools and other public and private agencies. Programs of preparation utilize a multi-school approach across academic disciplines within the University. The Division utilizes performance-based curricula to develop competencies at the undergraduate and graduate levels. In addition to formal degree programs, the Division offers courses for specific areas of certification in vocational teacher/administration certification.

## Undergraduate Programs

The Division offers undergraduate preparation leading to the degree of *Bachelor of Science in Education* with specialized majors in the following areas: Industrial Arts Education, Technical Education, Vocational Business Teacher Education, Vocational Health Occupations Education, Vocational Home Economics Education, Vocational Industrial Education. Although the programs are designed for entry into the field of public education, a candidate may seek employment in business, industry, or other private agencies.

Applicants for admission are required to have an associate degree or equivalent course work. For specific entrance requirements, consult the general admission statement for undergraduate



students in this catalog. Because of the wide range of entry level competencies and career goals, each student in consultation with his or her advisor plans a program of study during the first semester of enrollment.

## Business Teacher Education

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

*Required Courses:* Foundations of Education (6 semester hours).

*Required Technical Preparation:* Business Machines, *advanced* courses in typewriting and shorthand, office practice or secretarial procedures. Students should complete as much of the following as possible at the community college or its equivalent course work from another four-year college or university with the remainder to be taken at FIU: Six semester hours in accounting, six semester hours in economics, two semester hours in business English, and two semester hours of business law.

UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<i>Professional Education</i>	(36-45)
EDF 3827	Schooling in America 3
EDG 3321	General Teaching Laboratory I 3
EDG 3322	General Teaching Laboratory II 3
RED 4325	Special Teaching Laboratory Reading 3
EVT 3065	Foundations of Vocational Education 3
*EVT 4949	Supervised Occupational Experience (3-9)
BTE 3068	Principles of Business Education 3
BTE 4360	Special Teaching Lab: Business Education Non-Skills 3
BTE 4364	Special Teaching Lab: Business Education Skills 3
BTE 4944	Special Teaching Lab: Business Education Practicum 3
BTE 4945	Student Teaching in Business Education 9
<i>Business Administration</i>	(12)
<i>Recommended Courses:</i>	
MAN 3010	Organization and Management 3
MAN 3023	Marketing Management 3
<i>Advised Electives:</i> Six semester hours in Business Administration selected in consultation with program advisor 6	
<i>Electives:</i> Electives are recommended either in the School of Education or School of Business Administration and Organizational Sciences, and in consultation with the program advisor. (6)	

\*To be a certified vocational business teacher one must have one year (or its equivalent) of office work experience. Supporting letters from former employers are required. EVT 4949 may be taken to meet the work experience requirement.

## Vocational Home Economics Education

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

*Required Courses:* Foundations of Education (6 semester hours).

*Recommended Courses:* With reference to subject matter specialization, the student is required to have for certification 39 semester hours in the areas listed below under *Technical Preparation*. These may be earned in courses in both the lower and upper divisions. It is recommended that as many of the basic courses in these areas as possible be taken in the lower division.

UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<i>Professional Education:</i>	30
EDF 3827	Schooling in America 3
EDG 3321	General Teaching Laboratory I 3
EDG 3322	General Teaching Laboratory II 3
HEE 3302	Home Economics Educational Planning 3
RED 4325	Special Teaching Lab: Reading 3
HEE 4104	Instruction in Vocational Home Economics 3
HEE 4944	Special Teaching Laboratory: Home Economics Education 3
HEE 4941	Student Teaching: Home Economics Education 9

*Technical Preparation:* Total of 39 semester hours needed from lower and upper division: (39)

- Housing and Home Furnishing\* 6
- Management and Family Economics\* 6
- Family and Child Development\* 9
- Food and Nutrition\* 9
- Textiles and Clothing\* 9

\*Courses offered in the School of Technology  
*Advised Electives:* 3

Sub-specialty area of concentration:  
Competencies may be developed in one of the following aspects:

1. One area of consumer and homemaking education
2. One area of wage-earning home economics
3. Education for the handicapped
4. Education for the culturally disadvantaged
5. Education for the adult learner
6. Educational settings in business, industry or public service agencies.

## Health Occupations Education

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

*Required Courses:* Foundations of Education (6 semester hours).

*Required Technical Preparation:* Occupational preparation in the student's intended area

of teaching such as nursing, dental, medical technology, respiratory therapy, radiology technology and other allied health related occupations requiring training beyond the twelfth grade. Licensure in occupational area when applicable.

UPPER DIVISION PROGRAM:

<i>Professional Education Requirements:</i>		<i>Semester Hours</i>
<i>Professional Education</i>		24-30
EDF 3827	Schooling in America	3
EDG 3321	General Teaching Lab I Basic Teaching Skills	3
EDG 3322	General Teaching Lab II Human Relations Skills	3
RED 4325	Special Teaching Lab—Reading	3
EVT 3065	Foundations of Vocational Education	3
or		
EVT 5078	Technical Education in American Society	3
EVT 3165C	Course Planning in Voc. Educ.	3
EVT 3367	Tests and Measurements in Voc. Educ.	3
*EVT 4949	Supervised Occupational Experience	3-9

\*For the student who lacks acceptable occupational experience in the area to be taught. Not to be counted in the upper division 60 hours minimum required for graduation.

### *Specialization Area Requirements*

EVT 4310	Planning and Operating HOE Programs	3
EVT 4311C	Special Teaching Lab Instructional Strategies and Evaluation in HOE Programs	3
EVT 4312	Student Teaching in Health Occupations Education Programs	9

*Suggested Electives:*  
Electives should be taken to equal a minimum of 60 semester hours.

## Industrial Arts Education

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

*Required Courses:* Foundations of Education (6 semester hours).

*Recommended Courses:* With reference to the technical preparation outlined below the student is encouraged to take basic courses in each area in the lower division.

UPPER DIVISION PROGRAM:

	<i>Semester Hours</i>
<i>Professional Education</i>	33
EDF 3827	Schooling in America 3
EDG 3321	General Teaching Lab I 3
EDG 3322	General Teaching Lab II 3
EVT 3165C	Course Planning Vocational Education 3
RED 4325	Special Teaching Lab — Reading 3
EIA 4360	Instruction in Industrial Arts 3
EIA 4941	Student Teaching:

Industrial Arts Education 9

*Advised Electives:* The candidate will be encouraged to select 6 semester hours of professional electives on the basis of individual needs and career goals for a total of 33 semester hours of professional education.

*Technical Preparation:* 27

*Required:* A minimum of 27 semester hours are required for certification, with a minimum of 6 semester hours in each of the following areas:

**CONSTRUCTION**

BCN 3702C Construction Technology 3  
 ETC 4252L Construction Processes 3  
 BCN 4251C Architectural Drafting 3

**MANUFACTURING**

ETI 3417C Manufacturing Technology 3  
 ETI 4421C Materials Processing 3  
 EDT 4525C Drafting I 3  
 or  
 ETD 4526C Drafting II 3  
 ETM 4823C Materials of Industry 3  
 BCN 4033 Industrial Research and Development 3

**GRAPHIC COMMUNICATIONS**

GRA 3506 Reprographics 3  
 GRA 4120 Planographics 3  
 GRA 4507 Photographics 3

**POWER**

ETM 4407 Mechanical Power Systems I 3  
 ETE 4562 Electrical/ Electronics Systems 3  
 ETE 3030 Survey of Electronics 3  
 ETM 4408 Mechanical Power Systems II 3

*Advised Electives:* Enough electives should be taken to equal a minimum of 60 semester hours. 60

**Post-Secondary Technical Education**

DEGREE: Bachelor of Science  
 LOWER DIVISION PREPARATION:

*Required Courses:* Foundations of Education (6 semester hours).

*Required Technical Preparation:* Technical preparation in the student's intended area of teaching such as electronics technology, architectural technology, commercial art, electronic data processing, electro-mechanical technology and other occupations requiring training beyond the twelfth grade or demonstration of competency via EVT 4990 listed below.

UPPER DIVISION PREPARATION:

*Semester Hours*  
*Professional Education* 39-45  
 EDF 3827 Schooling in America 3

EVT 5078 Technical Education in American Society 3  
 EDG 3321 General Teaching Laboratory I 3  
 ADE 5385 Adult Teaching and Learning 3  
 EDG 3322 General Teaching Laboratory II 3  
 EVT 3165C Course Planning in Vocational Education 3  
 RED 4325 Special Teaching Laboratory—Reading 3  
 EVT 4949\* Supervised Occupational Experience 3-9

\*For the student who lacks acceptable occupational experience in the area to be taught.

or  
 EVT 4990 Credit by Examination 3-9  
 EVT 5460 Educational Media 3  
 EVT 4940 Special Teaching Laboratory Technical Education 3  
 EVT 4941 Student Teaching: Technical Education 9

*Advised Electives:* Science, mathematics, technology, psychology or sociology. 6

*Free Electives:* Enough electives should be taken to equal a minimum of 60 semester hours. 60

**Vocational Industrial Education**

DEGREE: Bachelor of Science  
 LOWER DIVISION PREPARATION:

*Required Courses:* Foundations of Education (6 semester hours).

*Occupational Experience:* Evidence of appropriate occupational experience (as per Section 42, Florida State Teacher Certification Guide) must be presented prior to being admitted to the Vocational Industrial Education Bachelor of Science Degree Program.

UPPER DIVISION PROGRAM:

*Semester Hours*  
*Professional Education:* 45-51

EDF 3827 Schooling in America 3  
 EVT 3065 Foundations of Vocational Education 3  
 EDG 3321 General Teaching Laboratory I 3  
 EDG 3322 General Teaching Laboratory II 3  
 RED 4325 Special Teaching Lab—Reading 3  
 EVT 3161 Instructional Materials in Vocational Industrial Education 3  
 EVT 3165C Course Planning in Vocational Education 3  
 EVT 3367 Testing and Measurements in Vocational Education Subjects 3  
 EVT 3815C Vocational Education Laboratory Management and Safety 3

EVT 4949\* Supervised Occupational Experience 3-9  
 \*For students who lack acceptable occupational experience in the area to be taught.

or  
 EVT 4990 Credit by Examination 3-9  
 EVT 5460 Educational Media 3  
 EVT 4940 Special Teaching Laboratory: Voc.-Ind. Ed 3  
 EVT 4941 Student Teaching: Voc.-Ind. Ed 9  
 6

*Advised Electives:*  
 SOC 4265 Man, Society and Technology 3

or  
 SOC 5261 Industrial Sociology 3  
 or  
 INP 3001 Industrial Psychology 3

or  
 EVT 4562 Laboratory Activities for Teachers of the Handicapped 3  
 EGC 5305 Educational and Vocational Guidance 3

*Electives:*  
 Enough electives should be taken to equal a minimum of 60 semester hours. 60

**Graduate Programs**

The Division offers graduate course work leading to the degree of *Master of Science* in Education in Curriculum and Instruction, and Administration and Supervision in Vocational Education.

Requirements for admission to the graduate program in either Curriculum and Instruction or Administration and Supervision for Vocational Education are: the applicant must hold an appropriate certificate or equivalent and (1) have an upper division undergraduate grade point average of 3.0 ("B"), or (2) have a combined score of 1000 on the Graduate Record Examination, (GRE) (verbal and quantitative aptitude sections), or (3) for vocational-industrial and technical education programs only, have a combined score of 2250 on the general examination of the "College Level Examination Program" (CLEP), with a minimum score of 400 on each section. All applicants must submit a GRE score, or where appropriate a CLEP score, even though the GPA may be 3.0 or above.

Students are urged to contact the Admissions Office or the Division for further information.

Areas of emphasis available, along with typical programs of study, follow here.

*Note:* Students who have already met the reading requirements as an undergraduate or through in-service education may substitute an elective for RED 6336.

### Business Education

DEGREE: Master of Science

	Semester	Hours
<b>Required Core:</b>		15
EVT 5168	Curriculum Development in Vocational Education	3
EVT 5766	Evaluation in Vocational & Technical Education	3
EVT 6760	Research in Vocational Education	3
EVT 6930	Seminar in Vocational Education	3
RED 6336	Reading in the Content Area	3
<b>Area of Professional Emphasis</b>		12-15
BTE 5671	Problems, Issues & Trends in Business Education	3
BTE 5371	Teaching in Business Ed. Occupational Programs	3
BTE 5774	Teaching Basic Business & Consumer Education	3
or		
BTE	Teaching Word Processing	
BTE 6905	Directed Independent Study	3
or		
BTE 6940	Supervised Clinical Field Experience	3
<b>Electives:</b> The candidate will be encouraged to make selections on the basis of individual needs and career goals.		3-6
		33

### Health Occupations Education

DEGREE: Master of Science

	Semester	Hours
<b>Required Core</b>		15
EVT 5168	Curriculum Development in Vocational Education	3
EVT 5766	Evaluation in Vocational Technical Education	3
EVT 6760	Research in Vocational Education	3
EVT 6930	Seminar in Vocational Education	3
RED 6336	Reading in the Content Area	3
<b>Area of Professional Emphasis</b>		9
EVT 5315	Improvement of Teaching Strategies in Health Occupations and Nursing Education	3
EVT 5316	Occupational Analysis in Health Occupations and Nursing Education	3
EVT 6318	Issues in Health Occupations and Nursing Education	3
<b>Technical Electives</b>		6
The candidate will be encouraged to select courses that will increase her/his subject area technical competence, career goals, and teaching certification requirements.		
<b>Total 30</b>		<b>30</b>

### Vocational Home Economics Education

DEGREE: Master of Science

	Semester	Hours
<b>Required Core:</b>		15-18
HEE 5335	Trends in Vocational Home Economics Education	3
EVT 5168	Curriculum Development in Vocational Education	3
HEE 6915	Research in Home Economics Education	3
HEE 6126	Teaching Home Economics in the Secondary School	3
HEE 6937	Seminar in Home Economics Education	3
RED 6336	Reading in the Content Area	3
<b>Area of Professional Emphasis:</b> With program advisor's approval, a student may select courses in subject matter of Home Economics chosen from offerings outside of the School of Education, based on professional competencies needed.		9
<b>Electives:</b> The candidate will be encouraged to make selections on the basis of individual needs and career goals.		3-6
		30

### Vocational Industrial Education

DEGREE: Master of Science

	Semester	Hours
<b>Required Core</b>		18-21
EVT 5669	Trends and Issues in Vocational Education	3
EVT 5168	Curriculum Development in Vocational Education	3
EVT 5695	International Comparative Vocational Education	3
EVT 5766	Evaluation in Vocational and Technical Education	3
EVT 6760	Research in Vocational Education	3
EVT 6930	Seminar in Vocational Education	3
RED 6336	Reading in the Content Area	3
<b>Area of Professional Emphasis:</b> A student under the direction of an advisor, may develop professional competencies in an area of emphasis through school-based field experiences, seminars, methods courses, workshops, or independent study.		3-9
<b>Technical Electives:</b> The candidate will be encouraged to select courses that will increase subject area technical competence.		3-6
<b>Total 30</b>		<b>30</b>

### Technical Education

DEGREE: Master of Science

	Semester	Hours
<b>Required Core:</b>		15-18
EVT 5669	Trends and Issues in Vocational Education	3
EVT 5168	Curriculum Development in Vocational Education	3
EVT 5766	Evaluation in Vocational and Technical Education	3
EVT 6760	Research in Vocational Education	3
EVT 6930	Seminar in Vocational Education	3
RED 6336	Reading in the Content Area	3
<b>Area of Professional Emphasis:</b>		6
EVT 5078	Technical Education in American Society	3
ADE 5385	Adult Teaching and Learning	3
<b>Technical Electives:</b>		6-9
The candidate will be encouraged to select courses that will increase subject area technical competence.		
<b>Advised Electives for Non-education Graduates:</b>		6
EDF 5710	National Educational Systems: A Comparative Analysis	3
or		
SOC 5284	Sociology of Education	
and		
EXP 5406	Theories of Learning	
or		
EDF 6215	Application of Learning Theory to Instruction	3
<b>Total 30</b>		<b>30</b>

### Industrial Arts Education

DEGREE: Master of Science

	Semester	Hours
<b>Required Core:</b>		15-18
EVT 5669	Trends and Issues in Vocational Education	3
EVT 5168	Curriculum Development in Vocational Education	3
EVT 5766	Evaluation in Vocational and Technical Education	3
EVT 6760	Research in Vocational Education	3
EVT 6930	Seminar in Vocational Education	3
RED 6336	Reading in the Content Area	3
<b>Area of Professional Emphasis:</b>		9-12
EIA 5811	Equipment and Facilities Planning	3
EIA 6931	Analysis of Industrial Arts Education	3
The student, under the direction of his or her advisor, may develop professional competencies in an area of emphasis through seminars, methods courses, workshops, or independent study.		
<b>Technical Electives:</b> The student is encouraged to select courses that will increase subject area technical competence.		3-6
<b>Total 30</b>		<b>30</b>

## Administration and Supervision of Vocational Education

Admission to the Administration and Supervision program in the Division requires adherence to the general standards as specified in the Admission Requirements for Graduate Students in this Division. In addition, an applicant must have completed at least one (1) year of successful teaching experience as a teacher of vocational education classes. Each graduate student, in consultation with the advisor, plans a program of study to include a core of professional competence, an area of emphasis, and electives. The program requires a minimum of 33 semester hours.

DEGREE: Master of Science

	Semester Hours
<b>Required Core:</b>	<b>27-30</b>
EVT 5168 Curriculum Development in Vocational Education	3
EVT 5265 Supervision and Coordination of Vocational Education Programs	3
EVT 5461 Community Relations and Resources for Vocational Education	3
EVT 6264 Administration of Local Vocational Education Programs	3
EVT 6930 Seminar in Vocational Education	3
EDA 6061 The Organization and Operation of the Public School System	3
EDA 6530 The Administration of the Secondary School	3
EDS 6050 Supervision in Education	3
EDG 6250 Curriculum Development	3
RED 6336 Reading in the Content Area	3
<b>Area of Professional Emphasis:</b>	
EVT 6946 Supervised Field Experience	3
<b>Electives:</b> The candidate may select a course (or courses) that will increase administrative and supervisory competencies.	3
	<b>33-36</b>

## RECOMMENDED PREPARATION VOCATIONAL TEACHER CERTIFICATION

	Semester Hours
<b>Required Courses:</b>	<b>6</b>
Foundations of Education	
<b>Professional Vocational Education:</b>	<b>15</b>
Certificate Area	
EVT 3065 Foundations of Vocational Education	A 3
EVT 3165 Course Planning in Vocational Education (suggested second course in sequence)	B 3
EVT 3161 Instructional Materials in Vocational Industrial Education	B 3
EVT 3815 Vocational Education Laboratory Management and Safety	Elective 3
EVT 4365 Instructional Strategies and Evaluation in Vocational-Technical Education (suggested first course in sequence)	C 3

EVT 5168	Curriculum Development in Vocational Education	3
EVT 5766	Evaluation in Vocational-Technical Education	3
BTE 5671	Problems, Issues and Trends in Business Education	3
BTE 5371	Teaching in Business Education Occupational Programs	3
BTE 5774	Teaching Basic Business and Consumer Education	

**Advised Electives**  
\*Students who have already met the reading requirements as an undergraduate or through in-service education will not be required to take this course.

## Health Occupations Education Professional Certificate Programs General Information

The overall purpose of the professional certificate program in health occupations education is to enhance the development of basic teaching skills and/or instructional techniques of health occupations educators. The professional certificate program provides for the continuing education, upgrading or redirection needs of health occupations teachers through planned advisement and professional certificate recognition. The programs are for both undergraduate and graduate, degree or non-degree seeking students.

## Undergraduate Professional Certificate Program

This 18 semester-hour plan is designed to meet the needs of the individual who 1) is occupationally competent in the health field, 2) does not hold or intend to hold a bachelor's degree in Health Occupations Education, and 3) is currently teaching, or wishes to teach, a health occupations subject.

**Prescribed Courses:**

	Semester Hours
EVT 3065 Foundations of Vocational Education	3
EVT 3165C Course Planning in Vocational Education	3
EVT 3367 Testing & Measurement in Voc. Education	3
EVT 4310 Planning & Operating a Health Occup. Program	3
EVT 4312 Instructional Strategies & Evaluation in Health Occupations Programs	3

**Advised Electives:** A minimum of one course selected from courses in General Professional & Adult Education, Vocational Education, Health Service Administration, or health speciality.

## Graduate Professional Certificate Program

This 24 semester hour plan is designed to meet the needs of the individual who 1) is occupationally competent in a health field and

## Advanced Vocational Teacher Certification

The State Teacher Certification Office will add the designation Advanced Vocational to the vocational teacher certificate of an individual who (a) has completed the requirements for Vocational Certification, and (b) has been employed as a vocational teacher in public or non-public schools in Florida for three years, and earned 36 semester hours of college credit in vocational teacher education and general education and/or general professional education in an approved plan of studies.

A proposed plan of study for Advanced Vocational Certification must be approved by the State Teacher Certification Office. This approval may *only* be obtained through a Division advisor. It is essential that a candidate for Advanced Vocational Certification meet with a Division advisor to develop a proposed plan of study for approval by the State Teacher Certification Office prior to starting his or her program.

## Professional Graduate Certificate Program for Business Education

The professional Graduate Certificate Program for Business Education requires a minimum of 18 semester hours of course work above the bachelor's degree. This program is designed for those who have already earned a bachelor's degree with a major in Business Education. Consequently, the student will have already met the State Department of Education certificate requirements.

A candidate is urged to consult the Business Education advisor to plan a program of study prior to starting a program.

**Recommended Preparation**

	Semester Hours
RED 6336* Reading in the Content Area	3

## Professional Certificate Programs

### Vocational Teacher Certification Education

The regular certificate (vocational), valid for five years, will be issued by the State Teacher Certification Office to an individual having: (a) appropriate occupational experience; (b) three years full-time teaching experience in a vocational industrial education subject; (c) 20 semester hours in professional education and vocational teacher education courses; and (d) successfully completed the Florida Teacher Certification Examination. Specific requirements can be found in Section 42 of the State Teacher Certification Guide. Planned programs of preparation completed for certification requirements may be applied to degree requirements.

currently teaching or desires to teach a health occupations subject, 2) holds a teaching certificate or equivalent and/or bachelor's degree (or both) including out of field and 3) does not wish to, or is unable to, meet the master's degree entrance requirements necessary to pursue the master's degree.

*Prescribed Courses:*

		<i>Semester Hours</i>
EVT 5078	Technical Education in American Society	3
or		
EVT 5669	Trends & Issues in Vocational Education	3
EVT 5168	Curriculum Development in Voc. Educ.	3
EVT 5766	Evaluation in Voc. & Tech. Education	3
EVT 5315	Improvement of Teaching Strategies in Health Occupations & Nursing Education	3
EVT 5163	Occupational Analysis in Health Occupations and Nursing Education	3
and/or		
ADE 5383	Adult Teaching and Learning	3

*Advised Electives:* A minimum of two courses selected from courses in General Professional and Adult Education, Vocational Education, Health Service Administration or Health Speciality 6

## Vocational Education For The Handicapped

### Professional Certificate Program

Vocational Education for the Handicapped is a non-degree Professional Certificate Program offered through the School of Education. The project represents a unique cooperative effort between the Divisions of Vocational Education and Psycho-Educational Services. Instruction in the program focuses on training professionals in vocational skill areas to more appropriately serve the needs of handicapped adolescents and young adults.

Students who are pursuing, or have completed, either Florida Teacher Competency and Certification, or the bachelor's or master's degree in vocational education or special education are encouraged to enroll in this professional certificate program. Program competencies were selected to enhance professionals' knowledge, skills, and attitudes in the following roles: instructional, diagnostic-prescriptive, behavior manager, advocacy, referral agent, and counselor. These professional roles are represented by 124 competencies which are packaged in 4 courses or 12 semester hours of instruction. The Office of Special Education-Division of Personnel Preparation in the U.S. Department of Education has financially supported this program with a Federal Grant for the past five years. Subsequently, it has been possible to provide financial assistance in the form of a Federal stipend to selected applicants. Students inter-

ested in applying for financial assistance should seek further information between January 15 and March 15 of any calendar year.

## The Specialist in Education and Doctor of Education Degrees

Preliminary feasibility studies and need assessments are being conducted for possible establishment of a Specialist in Education degree and a Doctor of Education degree in cooperation with other institutions in the areas of Vocational Education, Industrial Arts Education, Home Economics Education, and Business Teacher Education. For specific information concerning the status of each program, contact the Division Chairperson.

## Course Descriptions

### Definition of Prefixes

BTE — Business Teacher Education; EDG — Education: General; EEX — Education: Exceptional Child, core competencies; EIA — Education: Industrial Arts; EVT — Education: Vocational/Technical; HEE — Home Economics Education; HES — Health, Education, and Safety.

### VOCATIONAL EDUCATION

#### EVT 3065 Foundations of Vocational Education (3)

Competency: A knowledge of the history of vocational education on the national, state, and local levels.

#### EVT 3161 Instructional Materials in Vocational Industrial Education (3)

Competency: Technical knowledge and skill required to locate and evaluate existing instructional material and to plan, develop and validate existing instructional materials.

#### EVT 3165C Course Planning (3)

Competency: Basic knowledge and skill in analyzing, planning, and organizing bodies of knowledge for instructional purposes.

#### EVT 3367 Testing and Measurements in Vocational Education Subjects (3)

Competency: Technical knowledge and skill in planning for and using tests and measurements as an integral part of the vocational-technical laboratory/shop teaching-learning process. Prerequisite: EVT 3165, Course Planning.

#### EVT 3815C Vocational Education Laboratory Management and Safety (3)

Competency: Knowledge and skill in analyzing, planning, organizing, and controlling laboratory environments and student's safe learning activities.

#### EVT 4280 Occupational Safety & Health (OSHA) (3)

Competency: Knowledge of the history, implications and applications of the Occupational Safety and Health Act of 1970. For vocational and technical teachers, industrial employees, and management personnel.

#### EVT 4365C Instructional Strategies and Evaluation in Vocational and Technical Education (3)

Competency: Knowledge and skill in analyzing, planning, developing, executing, and evaluating classroom and laboratory teaching and learning activities.

#### EVT 4668 Emerging Emphasis in Career Education (3)

Competency: A knowledge of current trends and issues in reference to developing and integrating career education into current elementary and secondary educational programs.

#### EVT 4905 Individual Study (1-3)(ARR)

Competency: The ability to identify, research, and report on a special problem of interest to the student. Subject to approval of program advisor.

#### EVT 4940 Special Teaching Laboratory: Vocational Industrial Education and Technical Education (3)

Competency: Knowledge of institutional structure, organization, policies, and roles of school personnel, with actual teaching experience in areas of specialization. Prerequisites: EDG 3321, EDG 3322.

#### EVT 4941 Student Teaching: Vocational Industrial Education and Technical Education (9)

Competency: Utilization of instructional knowledges, attitudes, and skills in a variety of instructional situations in the vocational educational setting. Prerequisite: EVT 4940.

#### EVT 4949 Supervised Occupational Experiences (3-9)(ARR)

Competency: Occupational skill developed via field based work-experience in industry, business, or a government agency in the occupation in which the student is preparing to teach.

#### EVT 4990 Credit by Examination (3-9)(ARR)

Competency: Technical knowledge and skills in an occupational area such as trade, industry, health and technology, as certified by recognized professional examinations such as the National Occupational Competency Test. Credits cannot be used in lieu of upper division professional program courses.

#### EVT 5067 Cooperative Vocational Education Programs (3)

Competency: Knowledge and skill in the basic philosophy, principles, and processes and procedures of the cooperative method in vocational and technical education.

#### EVT 5078 Technical Education in American Society (3)

Competency: Knowledge of the basic role and current status of technical education in an industrial democracy.

#### EVT 5168 Curriculum Development in Vocational Education\* (3)

Competency: Basic knowledge and skill in analyzing, planning, organizing and developing curriculum in an area of specialization.

#### EVT 5265 Supervision and Coordination of Vocational Education Programs (3)

Competency: Knowledge and skill in the super-

vision of personnel, and the coordination of work to achieve institutional goals.

**EVT 5389 Teaching Career Related Activities** (3)

Competency: Integration and articulation of career concepts and activities with regular curriculum.

**EVT 5460 Educational Media** (3)

Competency: Knowledge and skill in selecting, developing and utilizing instructional media forms to communicate or demonstrate concepts.

**EVT 5461 Community Relations and Resources for Vocational Education** (3)

Competency: Knowledge and skill in developing and utilizing community resources and establishing public relations procedures and practices to implement vocational education programs.

**\*EVT 5562 Vocational Laboratory Activities for Teachers of the Handicapped** (3)

Competency: The use of projects, tools, materials and equipment to facilitate training the occupationally handicapped, physically handicapped and mentally retarded.

**\*EVT 5565 Introduction to Vocational Special Needs Education** (3)

Competency: Knowledge of historical developments, legislation, instructional strategies and program alternatives required to instruct special needs students in vocationally related environments.

**EVT 5669 Trends and Issues in Vocational Education\*** (3)

Competency: A knowledge of the basic philosophical and curricular trends and issues in vocational-technical education at the international, national, state, and local levels.

**EVT 5695 International Comparative Vocational Education** (3)

Competency: Skill and knowledge in comparison of vocational education in the United States in terms of purposes, systems, and problems with those of selected foreign countries.

**EVT 5766 Evaluation in Vocational and Technical Education\*** (3)

Competency: Knowledge and skills in the use of tests and measurements, to evaluate teaching and learning effectiveness and the validity of objectives.

**EVT 5905 Individual Study** (1-3)(ARR)

Competency: The ability to identify, research, and report on a special problem of interest to the student. Subject to approval of program advisor.

**EVT 5925 Workshop in Vocational Education** (1-6)

Competency: Selected competencies related to instructional and technical areas.

**EVT 6264 Administration of Vocational Education Programs** (3)

Competency: Knowledge of the principles, practices, functions, and roles of administration, in the operation of vocational education programs.

**EVT 6760 Research in Vocational Education\*** (3)

Competency: Knowledge and skill in identifying, defining, collecting, analyzing, and synthesizing research-related problems in vocational and adult education.

**EVT 6925 Graduate Workshop in Vocational Education** (1-6)

Competency: Selected competencies related to professional and program areas.

**EVT 6930 Seminar in Vocational Education\*** (3)

Competency: The application of knowledge and skills to solve special instructional, curricular and/or administrative and supervisory problems and issues in vocational education.

**EVT 6946 Supervised Field Experience** (3-6)(ARR)

Competency: 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 advisor.

\*Graduate Standing Required.

**HEALTH OCCUPATIONS EDUCATION**

**EVT 4310 Planning and Operating HOE Programs** (3)

Competency: Identifying, designing, implementing and evaluating Health Occupations Education Program.

**EVT 431C Special Teaching Lab in HOE Programs** (3)

Competency: Knowledge of institutional structure, organization, policies, and roles of school personnel with actual teaching experience in area of specialization.

**EVT 4312 Instructional Strategies and Evaluation in HOE Programs** (3)

Competency: Knowledge and skill in analyzing, planning, developing, executing and evaluating classroom and laboratory teaching and learning activities in Health Occupations Education.

**EVT 4941 Student Teaching in HOE Programs** (9)

Competency: Utilization of instructional knowledges, attitudes and skills in a variety of health occupations instructional situations. Prerequisites: EVT 4310, 4311C, 4312.

**EVT 5315 Improvement of Teaching Strategies in Health Occupations and Nursing Education** (3)

Competency: Knowledge and skills in methods of teaching, and clinical performance evaluation appropriate to the health field, and development of teaching materials. Prerequisite: Currently teaching, or permission of instructor.

**EVT 5316 Occupational Analyses in Health Occupations and Nursing Education** (3)

Competency: Analysis of current trends in area of health specialty and their application to teaching learning situations in health occupations education. Prerequisites: Currently teaching, permission of instructor, professional liability insurance.

**EVT 5927 Workshop in Health Occupations Education** (1-3)

Competency: Selected competencies related to Health Occupations Education.

**EVT 6662 Issues in Health Occupation and Nursing Education.** (3)

Competency: Identification and examination of current issues in Health Occupation and Nursing Education. Prerequisites: Currently teaching, permission of instructor.

**BUSINESS TEACHER EDUCATION**

**BTE 3068 Principles of Business Education** (3)

Competency: A knowledge of basic philosophies, principles, practices, trends, and objectives in Business Education.

**BTE 4360 Special Teaching Lab: Business Education Non-Skills** (3)

Competency: Knowledge and application of instructional principles, methods, techniques and practices to the teaching of accounting, book-keeping, and basic business and economic education courses. Prerequisites: BTE 3068 and professional education core concurrent with BTE 4494.

**BTE 4364 Special Teaching Lab: Business Education Skills** (3)

Competency: Knowledge and application of instructional principles, methods, techniques and practices to the teaching for office careers to include office simulation and cooperative business education. Prerequisites: BTE 3068 and professional education core concurrent with BTE 4494.

**BTE 4944 Special Teaching Lab: Business Education Practicum** (1-3)

Competency: Application of methods of teaching in business and office occupations in selected institutions and knowledge of educational institutions. Prerequisites: BTE 3068 and professional education core concurrent with BTE 4360 and BTE 4364.

**BTE 4945 Student Teaching in Business Education** (9)

Competency: Competencies developed in the utilization of instructional knowledges, attitudes, and skills in business education instructional situations. Prerequisites: BTE 3068, 4360, 4364 and 4994; professional education core.

**BTE 5371 Teaching in Business Education Occupational Programs** (3)

Competency: Knowledge of current and evolving methods, techniques and practices to teach and evaluate office education programs to include office simulation and cooperative business education.

**BTE 5671 Problems, Issues and Trends in Business Education** (3)

Competency: Historical information, issues, current trends, new dimensions and problems in business education. Prerequisite: Graduate standing.

**BTE 5774 Teaching Basic Business & Consumer Education** (3)

Competency: Knowledge of current and evolving

ing methods, techniques and practices to teach and evaluate basic business and consumer education programs. Prerequisite: Graduate Standing.

#### INDUSTRIAL ARTS EDUCATION

##### EIA 4042 The Role of Industrial Arts in the Schools (3)

Competency: Knowledge of the basic philosophy, goals, programs, principles, practices and learning environments in industrial arts, and the relationship of industrial arts to other school disciplines.

##### EIA 4360 Instruction in Industrial Arts (3)

Competency: Application of education principles, practices, and techniques to the teaching of industrial arts. Prerequisite: EDG 3321.

##### EIA 4941 Student Teaching in Industrial Arts (9)

Competency: The utilization of instructional knowledge, attitudes, and skills in industrial arts education instructional situations. Prerequisites: EIA 4360, EVT 3165C.

##### EIA 5811 Equipment and Facilities Planning (3)

Competency: Utilization of research, design, and engineering knowledge and skills to plan laboratory facilities and equipment.

##### EIA 5905 Individual Study (1-3)

Competency: The ability to identify, research, and report on an industrial arts problem of interest to the student. Subject to approval of program advisor.

##### EIA 6931 Analysis of Industrial Arts Education (3)

Competency: Knowledge of industrial arts at the national, state, and local levels.

#### VOCATIONAL HOME ECONOMICS EDUCATION

##### HEE 3302 Home Economics Educational Planning (3)

Competency: Development and adaptation of curriculum and strategies for the presentation of vocational home economics content in a variety of educational settings. Subject to approval of instructor.

##### HEE 4104 Instruction in Vocational Home Economics (3)

Competency: Ability to apply educational principles, practices and techniques to teaching home economics in varied educational environments. Prerequisite: EDG 3321. Subject to approval of instructor.

##### HEE 4941 Student Teaching in Home Economics Education (9)

Competency: The utilization of instructional knowledges, attitudes, and skills in vocational home economics education instructional situations. Prerequisites: HEE 3301, HEE 4014, HEE 4944.

##### HEE 4944 Special Teaching Laboratory Home Economics (3)

Competency: Knowledge of the educational institution, and utilization of teaching skills, via mini-teaching experiences within areas of home

economics in selected institutions. Prerequisites: EDG 3321, EDG 3322.

##### HEE 5335 Trends in Vocational Home Economics Education (3)

Competency: Knowledge of current social, economic and educational issues affecting the field of vocational home economics.

##### \*HEE 5360 Teaching Child Development (3)

\*HEE 5361 Teaching Consumer Education and Family Economics (3)

##### \*HEE 5362 Teaching Clothing and Textiles (3)

##### \*HEE 5363 Teaching Family Life Education (3)

##### \*HEE 5364 Teaching Housing and Home Furnishings (3)

##### \*HEE 5365 Teaching Food and Nutrition (3)

\*Course is designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational methods.

##### HEE 5905 Individual Study (1-3)

Competency: The ability to identify, research, and report on a special problem in vocational home economics. Subject to approval of program advisor.

##### HEE 5927 Special Workshop — Home Economics (1-3)

Competency: Skill in developing, organizing, teaching, evaluating, and administering programs related to specified aspects of the home economics education.

##### HEE 6126 Teaching Home Economics in the Secondary School (3)

Competency: Knowledge of current and evolving methods, programs, and materials to teach and evaluate home economics.

##### HEE 6551 Supervision of Student Teachers in Home Economics (3)

Competency: Skill in teaching, observing, and evaluating student teachers in vocational home economics.

##### HEE 6915 Research in Home Economics Education (3)

Competency: The analysis and application of research pertaining to philosophy, curriculum, evaluation, and teacher education in home economics. Subject to approval of program advisor.

##### HEE 6928 Special Workshop — Home Economics Education (1-3)

Competency: Skill in developing, organizing, teaching, evaluating and administering programs related to specific aspects of home economics education.

##### HEE 6937 Seminar in Home Economics Education (3)

Competency: Application of selected instructional, curricular and/or administrative principles and practices to the solution of problems of special interest to vocational home economics educators. Subject to approval of program advisor.

## Faculty

### School of Education

*Acting Dean* Nicholas J. Vigilante  
*Associate Dean, Administrative Affairs* A. Dean Hauenstein

*Associate Dean, Research and Development* Wendy S. Cheyney

*Assistant Dean, Professional Studies* Judith A. Blucker

*Assistant Dean, Student Personnel* Emma Rembert

*Assistant Dean, Development and Community Studies* Luis A. Martinez-Perez

*Assistant Dean, Human Resources Development and Community College* Dominic Mohamed

*Co-Director, Institute for Technical Assistance* Robert F. Testa

*Director, Personnel, Communication and Financial Support* I. Toni Eisner

#### Chairpersons:

*Childhood Education* Richard Campbell

*Educational Leadership and Human Resources Development* Stephen Fain

*Psycho-Educational Services* George S. Mouty

*Subject Specializations* George Pearson

*Vocational Education* George Vanover

## Faculty

Alterman, Richard, Ph.D. (*University of Michigan*), *Visiting Assistant Professor, Educational Leadership and Human Resources Development*

Alvarez, Carlos, M., Ph.D. (*University of Florida*), *Associate Professor, Psycho-Educational Services*

Amster, Judith, Ed.D. (*University of Miami*), *Visiting Associate Professor, Psycho-Educational Services*

Bader, Barbara, M.S. (*Brooklyn College*), *Visiting Instructor, Educational Leadership and Human Resources Development*

Baum, Rosemere, Ph.D. (*Pennsylvania State University*), *Assistant Professor, Home Economics Education, Vocational Education*

Bradley, Curtis H., Ed.D. (*Temple University*), *Professor, Vocational-Industrial Education, Vocational Education*

Bradenberg, Michael, M.A. (*University of South Florida*), *Visiting Instructor, Art Education*

Blucker, Judith A., Ph.D. (*Florida State University*), *Associate Professor, Health and Physical Education*

Campbell, Richard, Ed.D. (*Indiana University*), *Professor, Childhood Education*

Carpenter, John A., Ph.D. (*University of Southern California*), *Associate Vice*

- President for Academic Affairs and Professor, Educational Leadership and Human Resources Development*
- Chadwick, Ida F., Ph.D.** (*Florida State University*), Associate Professor, Health and Physical Education
- Cheyney, Wendy, Ed.D.** (*University of Miami*), Associate Professor, Psycho-Education Services
- Crabtree, Myrna P., Ed.D.** (*Teachers College, Columbia University*), Professor, Home Economics Education, Vocational Education
- Dempsey, Arthur, Ed.D.** (*University of Arizona*), Associate Professor, Childhood Education
- Divita, Charles, Jr., Ph.D.** (*Florida State University*), Professor, Adult Education
- Escotet, Miguel Angel, Ph.D.** (*University of Nebraska*), Visiting Professor (Courtesy), Educational Leadership and Psycho-Educational Services
- Fain, Stephen M., Ed.D.** (*Teachers College, Columbia University*), Professor, Educational Leadership and Human Resources Development
- Farrell, Robert V., Ph.D.** (*Teachers College, Columbia University*), Associate Professor, Educational Leadership and Human Resources Development
- Fisher, Allen, Ph.D.** (*University of Connecticut*), Associate Professor, Educational Leadership and Human Resources Development
- Friedenberg, Joan, Ph.D.** (*University of Illinois*), Visiting Assistant Professor, Vocational Education
- Gallagher, Paul D., Ph.D.** (*Florida State University*), Associate Professor, Educational Leadership and Human Resources Development
- Gardner, Daniel, Ed.D.** (*Florida Atlantic University*), Assistant Professor, Adult Education, Educational Leadership and Human Resources Development
- Gavilan, Marisal, Ed.D.** (*University of Tennessee*), Associate Professor, Psycho-Educational Services
- Gay, Lorraine R., Ph.D.** (*Florida State University*), Professor, Educational Leadership and Human Resources Development
- Goldstein, Deborah, Ed.D.** (*Georgia State University*), Visiting Assistant Professor, Psycho-Educational Services, Bay Vista Campus
- Greenberg, Barry, Ph.D.** (*New York University*), Associate Professor, Educational Leadership and Human Resources Development
- Hauenstein, A. Dean, Ph.D.** (*Ohio State University*), Professor, Industrial Arts, Vocational Education
- Hudelson, Sarah, Ph.D.** (*University of Texas, Austin*), Visiting Associate Professor (Courtesy), Childhood Education
- Kaplan, Joseph E., Ph.D.** (*Florida State University*), Assistant Professor (Courtesy), Educational Leadership and Human Resources Development
- Kennedy, Daniel A., Ph.D.** (*University of Oregon*), Associate Professor, Psycho-Educational Services
- Kossack, Sharon W., Ph.D.** (*University of Georgia*), Associate Professor, Childhood Education (Bay Vista Campus)
- Lazarus, Philip, Ph.D.** (*University of Florida*), Assistant Professor, Psycho-Educational Services
- Llewellyn, Jack H., Ph.D.** (*Florida State University*), Associate Professor, Health, Physical Education
- Lopez, Richard, Ed.D.** (*Florida Atlantic University*), Associate Professor, Health, Physical Education and Recreation
- Lucky, Luretha, Ed.D.** (*Arizona State University*), Assistant Professor, Psycho-Educational Services
- McClintock, C. Edwin, Ed.D.** (*University of Georgia*), Associate Professor, Mathematics Education
- Margolin, Edythe, Ed.D.** (*University of California*), Professor, Childhood Education
- Marshall, Nancy, Ph.D.**, (*Cornell University*), Assistant Professor, Childhood Education
- Martinez-Perez, Luis A., Ph.D.** (*Florida State University*), Associate Professor, Science Education
- Mathewson, Grover, Ph.D.** (*University of California at Berkeley*), Associate Professor, Childhood Education
- Mendoza, Alicia, Ed.D.** (*University of Miami*), Assistant Professor, Childhood Education (Bay Vista Campus)
- Mohamed Dominic A., Ph.D.** (*University of Minnesota*), Associate Professor, Vocational Education
- Mouly, George S., Ph.D.** (*University of Minnesota*), Professor, Educational Psychology, Psycho-Educational Services
- Morrison, George S., Ed.D.** (*University of Pittsburgh*), Professor, Childhood Education
- Nathanson, David E., Ph.D.** (*University of Minnesota*), Professor, Psycho-Educational Services
- Pearson, George B., Ed.D.** (*University of Oregon*), Professor, Health and Physical Education
- Pell, Sarah W. J., Ed.D.** (*Duke University*), Associate Professor, Educational Leadership and Human Resources Development (Bay Vista Campus)
- Pennington, Clement, Ed.D.** (*Pennsylvania State University*), Associate Professor, Art Education
- Perry, Ronald W., Ed.D.** (*Louisiana State University*), Assistant Professor, Parks and Recreation Management
- Pryor, Robert O., Ph.D.** (*Florida State University*), Assistant Professor, Vocational-Industrial Education, Vocational Education
- Reichbach, Edward M., Ed.D.** (*Wayne State University*), Associate Professor, Childhood Education
- Rembert, Emma W., Ed.D.** (*Syracuse University*), Associate Professor, Childhood Education
- Rosenberg, Howard, Ed.D.** (*Teachers College, Columbia University*), Associate Professor, Psycho-Educational Services
- Roulhac, Vicki, Ed.D.** (*University of Florida*), Assistant Professor, Psycho-Educational Services (Bay Vista Campus)
- Ryan, Colleen A., Ph.D.** (*Ohio State University*), Associate Professor Psycho-Educational Services (Bay Vista Campus)
- Sandiford, Janice R., Ph.D.** (*Ohio State University*), Assistant Professor, Health Occupations Education, Vocational Education
- Shostak, Robert, Ph.D.** (*University of Connecticut*), Professor, English Education
- Smith, Donald C., Ph.D.** (*Syracuse University*), Professor, Psycho-Educational Services
- Sowards, G. Wesley, Ed.D.** (*Stanford University*), Professor, Distinguished Professor of Education, Educational Leadership and Human Resources Development
- Spector, Barbara, Ph.D.** (*Syracuse University*), Visiting Assistant Professor, Science and Gifted Education
- Stacek, John J., Ph.D.** (*Georgetown University*), Associate Professor, Modern Language Education/TESOL
- Stinson, John J., Ph.D.** (*University of Connecticut*), Assistant Professor, Childhood Education
- Strichart, Stephen S., Ph.D.** (*Yeshiva University*), Professor, Psycho-Educational Services
- Sullivan, Zola J., Ph.D.** (*University of Illinois*), Associate Professor, Childhood Education
- Tesolowski, Dennis G., Ed.D.** (*Auburn University*), Assistant Professor, Vocational Special Needs Education, Vocational Education
- Testa, Robert F., Ph.D.** (*University of Miami*), Associate Professor, Subject Specializations
- Toomer, Jethro, Ph.D.** (*Temple University*), Professor, Psycho-Educational Services
- Tucker, Jan L., Ph.D.** (*Indiana University*), Professor, Subject Specializations
- Vanover, George W., Ed.D.** (*University of Tennessee*), Associate Professor, Business Education, Vocational Education
- Vigilante, Nicholas J., Ph.D.** (*Ohio State University*), Acting Dean School of Education and Professor, Childhood Education
- Vos, Robert.** (*Rutgers University*), Assistant Professor, Technical Education, Vocational Education
- Wagner, Michael J., Ph.D.** (*Florida State University*), Associate Professor, Music Education
- Wells, James D., Ed.D.** (*University of Florida*), Associate Professor, Educational Leadership and Human Resources Development
- Woods, Sandra L., Ed.D.** (*Rutgers University*), Assistant Professor, Educational Leadership and Human Resources Development
- Younkin, William F., M.Ed.** (*University of Miami*), Instructor (Courtesy), Educational Leadership and Human Resources Development





# School of Hospitality Management

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Anthony G. Marshall, *Dean and Professor*  
Rocco Angelo, *Associate Dean and Associate Professor*

Leonard Berkowitz, *Assistant Professor*  
Dewitt Coffman, *Professor*

Percival Darby, *Assistant Professor*

Edwin Dean, *Assistant Professor*

Donald Greenaway, *Professor*

David Grier, *Assistant Professor*

Fritz Hagenmeyer, *Associate Professor*

Michael Hurst, *Professor*

Richard A. Huse, *Associate Professor*

Charles Ilvento, *Associate Professor*

Marshall Kosiner, *Visiting Assistant Professor*

Lendal Kotschevar, *Visiting Distinguished Professor*

Peter Martini, *Assistant Professor*

Dennis A. Marzella, *Associate Professor*

Steven Moll, *Assistant Professor*

Elisa Moncarz, *Associate Professor*

William J. Morgan, Jr., *Professor*

Alan J. Parker, *Associate Professor*

Nestor Portocarrero, *Assistant Professor*

Norman Ringstrom, *Professor*

Kevin Robson, *Assistant Professor*

Norman Webber, *Lecturer*

Theodore White, *Assistant Professor*

The School of Hospitality Management offers Bachelor's and Master's programs that combine practical experience with classroom theory to assist the student to gain the understandings, skills, and techniques needed to qualify for job opportunities, or to achieve his or her career goals in the growing hospitality industry.

With the cooperation of industry executives, the School has created an internship program which literally utilizes the hotels, motels, restaurants, clubs, airlines, travel agencies and cruise lines as practice labs for students. The advanced phase of the internship program provides each student a structured and closely supervised management experience normally not available to a student until he or she has entered the industry after graduation.

An active *Industry Advisory Board*—which includes outstanding executives in the hotel, food and travel 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 industry.

The School has been designated a *Program of Distinction* by the Board of Regents.

## Admission

### APPLICANTS FOR FRESHMAN CLASS

The University is now a four year institution, thus high school graduates interested in studying for a degree in Hospitality Management are encouraged to apply. Please note that all freshman applications are reviewed by the University

Admissions Committee which makes all decisions regarding admission to the lower division.

All admitted freshmen are enrolled initially in the College of Arts and Sciences which teaches the required general education courses. Each freshman may, however, designate his intended major immediately and receive advisement from the School on his course requirements and scheduling.

The School of Hospitality Management has a recommended four year schedule which will permit freshmen to enroll in hotel-restaurant courses in their first semester and each semester following while also registering for general education courses.

Questions concerning curriculum should be addressed to the Dean, School of Hospitality Management.

## UNDERGRADUATE

Any student who has completed two years of college 60 semester hours, may apply for admission. Full credit will be granted both *Associate of Arts* and *Associate of Science* degrees. One may enroll on either a full-time or part-time basis.

It is not necessary to have been previously enrolled in a hotel or restaurant program. The curriculum will provide the specialized professional education to equip the student for a career in hospitality management. Students with training in liberal arts, business, education, or technology, for example, are qualified to enroll in the program.

## GRADUATE

Each candidate for admission to the graduate program must present his or her score on the Graduate Record Examination or the GMAT and proof of a Bachelor's Degree from an accredited institution.

To be admitted, a candidate must have maintained a "B" average in all upper divisional work or attain a minimum score of 1000 on the Graduate Record Examination (verbal and quantitative aptitude sections) or attain a minimum score of 450 on the GMAT.

The exact amount of additional work will vary with the undergraduate background of the candidate, but will not exceed 35 semester hours including the required managerial internship program. A maximum of 9 semester hours of graduate credit may be transferred from any other university or from the graduate programs of this University.

Additional information on admission procedures may be found in the Admission section of the Catalog.

## SPECIAL STUDENTS

A number of persons currently employed in the hospitality field may not have the educational requirements to meet degree admission standards, but may be interested in enrolling in certain specific courses to improve their skills and to enhance their chances for promotion. Any person currently employed in the field may register as a *Special Student* for a maximum of 9 credit hours per semester.

## CERTIFICATE PROGRAM

The School has a Certificate Program in

Hotel and Restaurant Management and one in Travel and Tourism Management. The program is open to international students with a high school education and experience in the industry. A candidate must complete 30 semester hours of course work in a one year period to earn the certificate. The candidate must submit a satisfactory score on the TOEFL exam or its equivalent and a Certificate of Finances document. Specific courses will be tailored to each candidate's needs.

## Undergraduate Study

The School operates on a single major concept in which a core of 49 semester credits is required of all students. The program requires an additional 15 semester credits of electives. Under this system, the student enjoys maximum flexibility in choosing areas of emphasis while being assured of a comprehensive coverage of all areas of hospitality management.

A maximum of 61 semester credits may be transferred from a junior or community college program.

LOCATION: Tamiami Campus only

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

Students should complete a minimum of 60 semester hours including general education requirements. If a student has completed a minimum of 18 semester hours of general education credits, it is still possible to be accepted into this program. However, the remaining general education requirements need to be completed prior to graduation from the University. Listed below are courses recommended to enter this upper-division major.

Recommended Courses:	Semester Hours
Accounting*	6
Psychology	3
Economics	3
Public Speaking	3

*Remarks:* \*Accounting is a prerequisite for taking course work in the accounting and finance areas. The student who has not taken this prerequisite will be required to take this course during his or her first year at the University. Other recommended electives will not be required as part of the B.S. program.

Course Requirements for Bachelor of Science Degree

	Semester Hours	
<i>Management, Accounting, Finance &amp; Information Systems</i>	9	
HFT 3423	Hospitality Information Systems	3
HFT 4464	Interpretation of Hospitality Financial Statements	3
HFT 4474	Profit Planning & Decision Making	3
	Semester Hours	
<i>Food and Beverage Management</i>	16	
FSS 3221	Introduction to Commercial Food Production	3
FSS 3232	Intermediate Quantity Food Production	3
FSS 3234	Volume Feeding Management	4

FSS 3243	Basic Meat Science	3
HFT 3263	Restaurant Management	3
<b>Administration</b>		24
HFT 3323	Physical Plant Management	3
HFT 3453	Hospitality Industry Management	3
HFT 3503	Marketing Strategy—Phase I	3
HFT 3514	Marketing Strategy—Phase II	3
HFT 3603	Law as Related to the Hospitality Industry	3
HFT 3700	Fundamentals of Tourism	3
HFT 3945	Advanced Internship	3
HFT 4234	Union Management Relations	3

<i>Electives:</i>	15
	64

## Graduate Study Hotel and Food Service Management

LOCATION: Tamiami Campus only

DEGREE: Master of Science in Hotel and Food Service Management

*Semester Hours*

<b>Required Core Courses:</b>		21
HFT 6246	Organizational Behavior in the Hospitality Industry	3
HFT 6586	Research and Statistical Methods	3
HFT 6446	Hospitality Industry Organizational Information Systems	3
HFT 6477	Financial Management for the Hospitality Industry	3
HFT 6296	Seminar in Hospitality Management	3
HFT 6697	Hospitality Law Seminar	3
HFT 6916	Hospitality Industry Project	3

<i>Electives:</i> (5000 and 6000 level)	12
	33

## Course Descriptions

**Definition of Prefixes**

FOS — Food Science; FSS — Food Service Systems; HFT — Hospitality, Food, Tourism.

### UNDERGRADUATE

#### FOS 4201 Sanitation in Food Service Operation (3)

The causes and prevention of food poisoning are stressed. Emphasis is placed on the current problems confronting the industry, with recent food developments as they relate to sanitation. Curriculum developed by the National Sanitation Foundation is included.

#### FSS 3221 Introductory Commercial Food Service Production (3)

Provides an introduction to commercial food preparation, nutrition, standard product identi-

fication, storage and supervisory techniques in the area of food preparation. Course includes classroom instruction, demonstrations and actual cooking experience.

#### FSS 3232 Intermediate Quantity Food Production Techniques (3)

An advanced commercial food production course which provides the student with the opportunity to achieve competence and to develop techniques in the garnishing, pastry, serving, and convenience food areas. Prerequisites: FSS 3221 or equivalent.

#### FSS 3234 Volume Feeding Management (4)

The facilities of various types of large quantity food operations are utilized, to provide the student with both production and managerial experience. Students will be rotated through production stations and, as managers, will be required to plan menus, supervise preparation and service, handle customer relations and keep accurate accounting records on the profit and loss phases of the operation. Staffing, merchandising and cost control procedures are integral parts of the course. Prerequisite: FSS 3221 or equivalent.

#### FSS 3241 Classical Cuisine (3)

Provides an opportunity for students skilled in cookery to expand their knowledge of food preparation into the area of world-respected, traditional dishes. The course includes lecture, demonstration, and actual preparation of classical dishes. The students will utilize conventional methods of preparation as well as convenience foods. Prerequisite: FSS 3221.

#### FSS 3243 Basic Meat Science (3)

Fundamentals of meat: quality yield, utilization of cuts, availability, costing, buying, inventorying, packaging, labor, and trends.

#### FSS 3272 Beverage Management (3)

An introduction to the identification, use and service of wines and other alcoholic beverages, with an in-depth analysis of the various elements of beverage operations including purchasing, control, merchandising, and bar management. Field trips are made to hotels and restaurants to demonstrate salient operating principles.

#### FSS 3273 Wine Technology, Merchandising and Marketing (3)

A course in the fundamentals of wine technology (viticulture and vinification methods). The major types of wine and the factors influencing their quality; principles of sensory evaluation; wine merchandising and marketing.

#### FSS 4105 Purchasing and Menu Planning (3)

Basic information on sources, grades and standards, criteria for selection, purchasing, and storage for the major foods, including the 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 4245 Advanced Meat Science (3)

An advanced course which considers the variable factors of meat, poultry and fish utilization. Emphasis is placed upon newer techniques in purchasing, maximizing yields, and providing

products in unique form. The use of TVP and other analogs is considered, as are the functions of the specialized commissary-type of meat processing plants. Guest speakers will be utilized, and field trips to protein processing plants will be made, to emphasize major points. Prerequisite: FSS 3243.

#### FSS 4315 Institutional Food Service Management (3)

This course brings together basic management techniques and controls that are useful in the area of institutional feeding programs. Federal and state government regulations are studied. Special emphasis is given to hospital food service direction and the National School Lunch Program.

#### FSS 4333 In-Flight Food Service Management (3)

An introduction to the concepts and managerial techniques specifically related to the in-flight food service segment of the hospitality industry. Students will be exposed to a comprehensive study of contract purchasing, contract negotiations, system menu planning, volume food production, staff scheduling, industry pricing methods, product specification factors, client and employee relations, and security control systems; and familiarized with specific and specialized food service equipment, equipment routing and balance, and transportation methods and procedures.

#### FSS 4431 Food Facility Layout and Design (3)

Defines and explains concepts, principles and procedures in evaluating and/or developing varied commercial food service facilities that will increase profit by reducing investment and operating cost and/or by increasing capacity. Actual installations are intensively reviewed. Current trends in food service methodology and technology are studied in detail, and food service equipment manufacturing processes and distribution economics are observed and evaluated.

#### FSS 4614 Food and Beverage Merchandising (3)

This is an application of marketing and advertising principles to the specific area of food and beverage for hotels and restaurants.

#### FSS 5361 Advanced Food Service Operation (3)

A senior course designed to coordinate the various management functions covered in previous courses into a comprehensive approach to profitable food service operations.

#### 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 3343 or FSS 4431.

**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.

**HFT 3000 Introduction to Hospitality Management** (3)

A survey course providing an overview of the industry: its history, problems and general operating procedures. Operating executives from the fields of hotel, restaurant, food service, travel and tourism will be featured periodically.

**HFT 3203 Fundamentals of Management in the Hospitality Industry** (3)

A basic course in general management to acquaint the student with theories and principles of organization, the tools of managerial decision-making, and the management process, with particular reference to the hospitality industry.

**HFT 3263 Restaurant Management** (3)

An analysis of the principal operating problems in the restaurant field. Procedures, approaches and techniques of management are explored and developed as they relate to the various categories of restaurants ranging from fast food to gourmet. Industry leaders will present successful concepts of restaurant operation.

**HFT 3313 Hospitality Property Management** (3)

The problems of cost and operation of pest control, security, parking, general cleaning and upkeep, laundry, fire prevention, pools, tennis courts and care of guest rooms and public space, with emphasis on equipment, personnel, and modern innovations.

**HFT 3323 Physical Plant Management** (3)

A comprehensive survey of engineering, maintenance and efficiency control in hotels, restaurants and institutions.

**HFT 3343 Hotel and Restaurant Planning and Design** (3)

Considers analysis, evaluation and scheduling of the economic, technical, aesthetic and merchandising factors involved in the planning, programming and design stages of hotels and restaurants. Actual hotel and restaurant projects will serve as the basis for discussion and student project work.

**HFT 3403 Introduction to Management Accounting for the Hospitality Industry** (3)

Introduction and practice in accounting processes, and the principles of hospitality management accounting. Prepares the student for work in advanced accounting and financial management. Required for students who have not completed an introductory accounting course.

**HFT 3413 Lodging Systems and Procedures** (3)

Detailed examination of the functions and procedures utilized in servicing the guest of a lodging establishment, contrasting traditional techniques and modern systems. Extensive use

of the School's Mobydata minicomputer hospitality system to demonstrate "state-of-the-art" concepts. Prerequisite: HFT 3403.

**HFT 3423 Hospitality Accounting Information Systems** (3)

The study of an accounting system for hospitality operations within the context of the firm's overall information system. The flow of data from source inputs through financial statement preparation, with emphasis on computer assisted processing and reporting techniques. Students use the University computer for a case project. Prerequisite: HFT 3403.

**HFT 3434 Club Operations Management** (3)

Lecture, discussion, case studies and field trips specifically designed to expose the future club manager, golf professional and turf manager to club operations. Introduction to the uniform system of accounts for clubs, annual club studies for operating results, control systems, taxation, budgeting and management reports.

**HFT 3453 Hospitality Industry Management** (3)

Study of the management tools available to control sales and expenses within hospitality operations. Detailed analysis of the responsibility centers using a cost managing approach. Case problems provide the students the opportunity to develop control systems for food and lodging organizations.

**HFT 3503 Marketing Strategy—Phase I** (3)

Application of marketing principles to business operations within the hospitality industry, with particular emphasis on viewing marketing as a competitive strategy in domestic and international markets.

**HFT 3514 Marketing Strategy—Phase II** (3)

Consideration of all aspects of the advertising element of the promotion mix to execute the corporation's or tourist destination's marketing strategy. Prerequisite: HFT 3503.

**HFT 3524 Sales Management for the Hospitality Industry** (3)

The course focuses on organizing sales and servicing effort and executing marketing strategy by developing sales strategies, plans and tactics for hospitality corporations and tourist destinations. Special emphasis is placed on group markets and gaining travel retailer support for destinations, hotel corporations and cruiseships. The course may be followed by a sales management internship. Prerequisite: HFT 3503.

**HFT 3630 Law as Related to the Hospitality Industry** (3)

A basic course in hotel, motel and restaurant law. The student is introduced to the fundamental laws, rules and regulations applicable to the hospitality industry. The case study approach is used to develop an awareness and understanding of the legal problems confronting the executive in his policy and decision making role.

**HFT 3700 Fundamentals of Tourism** (3)

An introduction to the broad fields of travel and tourism. Among the topics covered are cultural tourism, sociology of tourism, tourism components and supply, tourism development, the economic role of tourism demand, and the marketing of tourism.

**HFT 3713 International Travel and Tourism** (3)

An introduction to the complete international scope of travel and tourism. A brief analysis of regional framework and specific regions of the world, the interrelationship between human society and the physical environment. Tourism as a factor in economic development and its cultural and sociological factors are explored. An analysis of the international organization of tourism and the facilitation procedures required for its successful implementation are highlighted.

**HFT 3722 Retail Travel Agency Management** (3)

An introduction to the basic operations aspect of travel agency management. The application of fundamental principles and successful practices in developing a satisfied clientele.

**HFT 3727 Technical Agency Operations** (3)

Comprehensive, detailed course covering the technical procedures, practices and systems of day-to-day travel management, the counseling, sales and personal relationships with clients, hotels, tour agencies and transportation systems. Prerequisite: HFT 3722.

**HFT 3733 Creative Tour Packaging** (3)

A thorough study of the functions of the wholesale tour operation. Includes tour operations and development, sales methods used in selling group business, costing and contracting of group business, and in-depth study of the promotional aspects of tour packaging.

**HFT 3753 Convention and Trade Show Management** (3)

A course concentrating on organizing, arranging and operating conventions, trade shows, and concessions. Emphasis will be placed on the modes and methods of sales used in booking conventions and trade shows, as well as the division of administrative responsibility in their operation.

**HFT 3763 Passenger Traffic Management** (3)

A survey of land, water and air transportation from an integrated, intermodal frame covering organization, operations, financing, research, regulation, economics and certain social and political factors, as well as contributions made by each mode to the development of tourism.

**HFT 3793 Sociology of Leisure** (3)

An introduction to the fundamental, psychological and sociological concepts and theories as they relate to the motivation behind travel and tourism.

**HFT 3900-3905 Independent Studies** (VAR)

With permission from the Chairperson of the Division of Hotel and Restaurant Services, or Division of Travel Services, students may engage in independent research projects and other approved phases of independent study.

**HFT 3941 Internship in Hospitality Management** (3)

Experience in all the major phases of hospitality operations. Reports are required.

**HFT 3945 Advanced Internship in Hospitality Management** (3)

Structured management experience in a specialized career in the hospitality industry. Pro-

grams include: food and beverage management, rooms division management, sales management, in-flight catering management, fast food service management and restaurant management. Structured management experience with an airline, a travel agency, a tour operator or a cruise line. Report required.

**HFT 4224 Human Relations in the Hospitality Field (3)**

The problems faced by the supervisor and the executive in managing the human element in the hospitality field. Designed to give the student insight into the varied social and psychological factors present in any employee-employer relationship.

**HFT 4234 Union Management Relations in the Hospitality Industry (3)**

A comprehensive course covering labor legislation, union history and the day-to-day administration of the labor contract. Emphasis is placed on collective bargaining and the business relationships between union and management.

**HFT 4276 Resort Management (3)**

A course designed to focus on the unique problems of resort hotel management and the application of special techniques to meet these problems.

**HFT 4293 Restaurant Management Seminar (3)**

By permission of instructor only. A senior course reviewing current problems and practices, developing policies and procedures and implementing same.

**HFT 4444 Computer Systems for Hospitality Industry Management (3)**

A seminar on computer systems and their applications within the hospitality industry. Consideration is given to an understanding of the basic computer hardware and software concepts needed for a manager to communicate with data processing personnel. Prerequisite: HFT 3423.

**HFT 4455 Functions of the Hospitality Industry Comptroller (3)**

A specialized course designed for students desiring strong emphasis and training in the complex accounting and finance functions of hospitality industry management. Prerequisites: HFT 3423, HFT 3453.

**HFT 4464 Interpretation of Hospitality Industry Financial Statements (3)**

In-depth study of hospitality industry financial statements including consideration of the significant relationships between the various accounts found on financial reports. The statement of changes in financial position is studied, emphasizing funds as a means of payment. Major emphasis is placed upon trend analysis, ratio analysis and comparison analysis using hospitality industry annual studies. Prerequisites: HFT 3453, HFT 3423, HFT 3413.

**HFT 4474 Profit Planning and Decision Making in the Hospitality Industry (3)**

Study of the decision-making process involved in the development of profit plans through anal-

ysis of hospitality industry studies. The establishment of short and long term goals and the means to reach these goals through profit plans. Emphasis on pricing decisions, responsibility centers, variance analysis, cost-volume profit analysis, capital budgeting and tax considerations. Prerequisite: HFT 4464.

**HFT 4485 Seminar in Tax Planning for the Hospitality Industry (3)**

Develops tax awareness and the ability to recognize the possible tax implications of business decisions. Tax considerations are studied for existing, expanding and planned hospitality operations. Included are compensation plans, pension and profit sharing plans, depreciation methods, acquisitions, mergers, liquidations, organization structure, accounting methods and capital gains and losses. Prerequisite: Permission of the instructor.

**HFT 4494 Seminar in Hospitality Information Systems (3)**

A study of the information systems utilized in hospitality operations to provide better management information for analysis and decision-making. Industry participants afford students the opportunity to study and evaluate their information system. This forms the basis for their course project. Research, case problems, class analysis and discussion. Prerequisite: Permission of the instructor.

**GRADUATE**

**HFT 5476 Feasibility Studies for the Hospitality Industry (3)**

A survey of various theories and techniques available by which management may determine the financial feasibility of investments in the hospitality field. Prerequisites or Corequisites: HFT 3503, HFT 4474.

**HFT 5495 Seminar in Hospitality Industry Financial Management Systems (3)**

Visits to various hospitality businesses for seminars with management team members. Lectures, demonstrations and discussion of each operation's methods and procedures, with emphasis on accounting and control systems. Prerequisite: Permission of the instructor.

**HFT 5595 Problems in Marketing (3)**

Team-work analysis and recommended solution of an actual marketing problem which has been posed by a local operator. Prerequisite: HFT 3503.

**HFT 5901, 5906, 5911 Independent Studies (VAR)**

With permission from the Chairperson of the Division of Hotel and Restaurant Services, or Division of Travel Services, students may engage in independent research projects and other approved phases of independent study.

**HFT 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.

**HFT 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.

**HFT 6256 International Hotel Operations (3)**

A consideration of the 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.

**HFT 6286 The Organization and its Environment (3)**

A study of the hospitality industry as it is affected by its environment and in turn attempts to influence the various elements in this environment.

**HFT 6296 Seminar in Hospitality Management (3)**

Attention is focused on major problems facing management in today's economy. Special emphasis is placed on the food service industry. Research of the current literature, class analysis and discussion.

**HFT 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.

**HFT 6446 Hospitality Industry Organizational Information Systems (3)**

Study of information systems in the hospitality industry. Consideration of the design and development of an information system based on user needs. Emphasis on identification and specification of user requirements and the selection of the appropriate design. Students work on a systems development project.

**HFT 6456 Operations Control (3)**

Focus is directed to the information used in the decision process and the information flow associated with each decision process throughout hotel or restaurant enterprises.

**HFT 6477 Financial Management for the Hospitality Industry (3)**

A study of the principles of financial management and their application to the hospitality industry. Discussion and case studies are used to develop plans for meeting financial needs (short, intermediate and long term) from internal sources or capital markets. Attention is focused on capital budgeting, leasing, franchising, mergers, consolidations and current financial issues in the hospitality industry.

**HFT 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.

**HFT 6487 Taxation Federal and State** (3)  
A study of state and federal taxation concepts, including tax management for individuals, partnerships, and corporations engaged in the hospitality field.

**HFT 6586 Research and Statistical Methods** (3)

A study of basic research methodology as applied to a variety of hospitality industry research projects. Techniques for data collection, and interpretation, and methods of reporting are considered.

**HFT 6596 Marketing Management** (3)  
Team-work analysis and recommended solution of an actual marketing problem which has been posed by a local operator.

**HFT 6697 Hospitality Law Seminar** (3)  
New laws and their impact on the hospitality industry are examined. Students research and publish "industry alert bulletins," explaining the impact of new legislation on the hospitality industry. Prerequisite: HFT 3603 or equivalent.

**HFT 6916 Hospitality Industry Project** (3)  
An individualized research project dealing with current problems in the hospitality industry. Topics and research methods must be approved by the graduate faculty before registration for the course.

**HFT 6946 Graduate Internship** (3)  
Structured graduate management experience in a specialized career in the hospitality industry. Programs include: food and beverage management, rooms division management, sales man-

agement, in-flight catering management, fast food service management and restaurant management. Prerequisite: Permission of the instructor.

## School of Hospitality Management

Dean and Professor Anthony G. Marshall  
Associate Dean and Associate Professor Rocco M. Angelo

### Faculty

Angelo, Rocco M., M.B.A. (*University of Miami*), Associate Dean and Associate Professor, Management

Berkowitz, Leonard, B.A. (*University of Maine*), Assistant Professor, Meat Sciences

Coffman, Dewitt, Distinguished Professor

Darby, Percival, M.S. (*Florida International University*), Assistant Professor, Counseling and Placement

Dean, Edwin, Assistant Professor, Union/Management Relations

Greenaway, Donald, M.S. (*Washington State*) Distinguished Professor

Grier, David R., Assistant Professor, Beverage Management

Hagenmeyer, Fritz, G., M.A. (*Cornell University*), Associate Professor, Hotel Engineering

Hurst, Michael E., M.A. (*Michigan State University*), Professor, Hotel and Restaurant Management

Huse, Richard A., M.S. (*Niagara University*), Associate Professor, Travel and Tourism

Ilveto, Charles L., M.B.A., C.P.A. (*Cornell University*), Associate Professor, Accounting and Information Systems

Kosiner, Marshall S., B.S. (*Stetson University*), Visiting Assistant Professor, Tourism  
Kotschevar, Lendal, Ph.D., Visiting Distinguished Professor

Marshall, Anthony G., J.D. (*Syracuse University*), Dean, School of Hospitality Management, Professor, Law and Finance

Martini, Peter C., M.S. (*Florida International University*), Assistant Professor, Food Management

Marzella, Dennis A., M.B.A. (*Michigan State University*), Associate Professor, Marketing

Moll, Steven V., M.S. (*Florida International University*), Assistant Professor, Accounting

Moncarz, Elisa, B.B.A., C.P.A. (*Bernard-Baruch College, City U. of New York*), Associate Professor, Accounting and Information Systems

Morgan, William J., Jr., Ph.D. (*Cornell University*), Professor, Hotel and Restaurant Management

Parker, Alan J., Ph.D. (*Columbia University*), Associate Professor, Information Systems Management

Portocarrero, Nestor, B.B.A. (*University of Miami*), Assistant Professor, Accounting

Ringstrom, Norman H., Ph.D. (*State University of Iowa*), Professor, Hotel Management

Robson, Kevin, M.S. (*Florida International University*), Assistant Professor, Food Management

Webber, Norman, Distinguished Lecturer, Food Management

White, Theodore, Assistant Professor, Club Management

# School of Nursing



## School of Nursing

The School of Nursing is located on the Bay Vista Campus. It is one of the seven academic units of Florida International University. It was re-established in August 1982 to meet the increasing need and demand for professional nurses in the Southeast Florida region. The School offers a professional program of study leading to the degree of Bachelor of Science in Nursing.

The program is open to graduates of diploma and associate degree programs who are licensed, or eligible for license in the State of Florida at the time of application. The School of Nursing is approved by the Florida State Board of Nursing, as a generic baccalaureate educational program, to enable graduates of the program to write the State Board examinations to become registered nurses.

### Purpose of School of Nursing

The purpose of the professional baccalaureate program in nursing is to prepare practitioners and leaders of nursing who will demonstrate self-directiveness, and assume responsibility toward continuous achievement of goals of the profession, and good citizenship in an urban, multicultural and multiethnic changing society. The curriculum prepares the individual to become a generalist in professional nursing practice, a responsible, contributing member of the profession and community, and to pursue graduate study.

### Objectives of Program

The objectives of the baccalaureate nursing program are to prepare graduates who will, with competency:

1. Utilize the nursing process in providing health services in a variety of settings to individuals and groups;
2. Utilize the nursing role of collaborator, practitioner, teacher, leader, change agent, and ongoing professional in any setting;
3. Provide leadership to other individuals involved in rendering care to promote clients to their highest level on the health continuum;
4. Participate in health planning with members of the allied health field and/or the community;
5. Initiate and implement a plan for teaching health concepts to individuals and groups in any setting;
6. Recognize the responsibility for continuing education and professional growth;
7. Interpret trends in nursing and society as they relate to the past, present and future development of the profession;
8. Demonstrate a compassionate blend of the art and science of nursing;
9. Demonstrate a commitment to the nursing profession.

### Philosophy

The University supports the belief that students should be provided a broad educational base for intellectual, aesthetic, social, emotional and physical development. We believe

that this base provides a firm foundation essential for pre-professional and professional programs. It further provides a strong foundation for the major in nursing in order that students may develop their potential as individuals, citizens, and professional nurses capable of assuming leadership roles in nursing practice.

The program is designed to prepare practitioners and leaders of nursing, who will demonstrate self-direction and responsibility for making continuing contributions towards the achievement of goals of the profession, and for good citizenship in a changing society.

We believe that the preparation of a generalist entails a program consisting of an upper division nursing major, which focuses on and builds upon a broad general education. Moreover, nurses educated at the baccalaureate level, because of their broad base in professional nursing education, are uniquely prepared to implement the nursing process in utilizing an holistic approach to assist man in achieving his health potential.

The faculty believes that professional nursing education develops from, changes with, and influences the health needs and resources of society. Nursing education at the baccalaureate level is based on scientific knowledge and the theoretic concept of nursing and results in the development of professional skills, ethics and values. The professional nursing education program focuses on the preparation of the professional nurse who is capable of functioning independently in primary, secondary and tertiary care settings within multicultural, multiethnic urban communities. Professional nursing education encourages the development of values and provides the experiences designed to promote responsible citizenship. In addition, professional nursing education provides an educational stimulus which promotes student interest and advanced study.

We believe that learning is a lifelong process which is independent and self-initiated and results in potential or actual changes in behavior. Learning is a complex process which evolves from the integration of psycho-motor, cognitive and affective experiences; and therefore, occurs best when the person is actively involved in the pursuit of established goals. Although faculty and students share the responsibility for creating an educational climate which is conducive to learning and encourages self-direction and inquiry, the students must assume responsibility for their own learning. The nursing educator shares knowledge, attitude and skills and invokes her role as a facilitator, resource person and role model in the learning process.

## Admission

Lower division nursing students, registered nurses, and transfer students seeking admission to the School of Nursing must submit an Application for Admission to the University and follow the regular University procedures. The applicants must be eligible for admission to the University before admission to the School of Nursing

All necessary forms must be submitted, including official transcripts from all college work and other documents, as required by the School

of Nursing, by July 1, 1982, and April 1, of each succeeding year preceding the Fall Term Admission.

Students who indicate nursing as their major field are assigned to the School of Nursing at the time of enrollment, and are advised by the Nursing faculty.

Transfer students must have an overall grade point average of at least 2.5 from an accredited college or university and must have completed a minimum of 60 semester hours in lower division course work. A personal interview by the Nursing faculty and academic advisors is required.

Registered Nurse students will be accepted into the program. Interested applicants are counseled individually by the faculty advisor before an application is accepted. Registered Nurse students are required to meet the same core curriculum requirements as generic students. R.N. students may seek credit by selecting challenge examinations after successful completion of core course requirements in the second semester of the nursing curriculum. A maximum of 20 credit hours of lower division nursing courses may be counted as a lower division elective credit, but may not be used to meet requirements of upper division nursing majors.

The program in nursing is a selective program. Limitations are set on enrollment on the basis of availability of qualified faculty, laboratories and classroom facilities, and clinical resources for student experiences. Priority is given to Florida residents. The South Florida Hospital Association sponsors generic nursing students through participation in the Nursing Education Enhancement Funding Program.

The criteria described, which is used as a basis for evaluating eligibility of applicants for admission to the School of Nursing, is minimal. In addition, applicants are evaluated with regard to factors relevant to potential program completion and professional nursing practice.

### General Education Requirements:

Students must complete 36 semester hours of the general education distribution requirement for admission to the University. These include requirements in English Composition, Humanities, Mathematics/Quantitative Methods, Natural Sciences and Social Sciences. The general education and prerequisite courses are required for admission to the School of Nursing are outlined below:

Overall Requirements	Credits
English	12
Humanities	6
<i>Prerequisite Courses for Nursing Major</i>	
A. Mathematics/Quantitative Methods	
Introduction to Statistics	3
Basic Mathematic Concepts	3
B. Natural Sciences	
General Chemistry	4
Biochemistry or Organic Chemistry	4
Human Anatomy/Physiology	6
General Zoology or Biology	4
General Bacteriology or Microbiology	4
General Physics	4
Human Nutrition	3
C. Social Sciences	
American Political Issues or Equivalent	3

Introductory Sociology	3
General Psychology	3
Human Growth and Development	3

**Scholastic Requirements**

The School of Nursing has identified the following scholastic standards to be maintained by students if they are to be considered in good standing:

1. Achieve a grade point average of at least 2.0 each semester.
2. Maintain an overall cumulative grade point average of at least 2.25.
3. Achieve a grade point average of at least 2.0 in the science courses offered, after admission to the School of Nursing.
4. Achieve at least a grade of C in each nursing course. If the cumulative grade point average in courses in nursing is 2.25 or above, and the student in any semester earns less than a C but not an F, the student's academic standing in the School of Nursing will not be affected that semester.
5. The student who is placed on probation will be officially notified of the change in academic standing. No more than one instance of probation is permitted during the total nursing program. A second failure to meet scholastic standards will justify termination of enrollment in the School of Nursing. To retain good standing, the student must have at the end of succeeding semester, a grade of at least C in all nursing courses; a semester GPA of 2.0, and an overall cumulative GPA of 2.25 or better.

The School of Nursing reserves the right to terminate a student from nursing for:

1. Failure to regain good standing.
2. Earning two grades of D in required courses in nursing.
3. Earning an F in any of the required subjects.
4. Earning an F in a required course in nursing.
5. Personal reasons related to inability to carry professional responsibility in nursing.

**Graduation Requirements**

A total of 130 semester credit hours of nursing major courses, supporting sciences, general education and electives are required for graduation. Upon completion of the program in the School of Nursing, students are awarded the Bachelor of Science in Nursing Degree. The basic or generic nursing students are eligible to take the State Board Test Pool Examination for Licensure as Registered Nurses.

**Clinical program**

All students who are admitted to the School of Nursing are required to participate in the assigned clinical learning experiences in health care agencies to receive learning experiences. Clinical agencies are located throughout Dade County, and a limited number of agencies in Broward County. Nursing students should anticipate expenses in addition to tuition costs. These costs include nursing textbooks, uni-

forms, and transportation associated with clinical experiences.

All students are responsible for their own actions and must be protected against possible malpractice problems. Each student must subscribe to professional liability insurance before entering a clinical agency for learning experiences. The School of Nursing will make this available to the students through an insurance provider which makes available professional insurance coverage for professional nurses.

**Health Programs for Students**

A complete physical examination is required for admission to the School of Nursing. This must be completed within three months prior to the admission of the application to the School of Nursing. The examination consists of a physical, including a chest X-ray and tuberculin test. Immunization or booster shots are required prior to the entrance to the program. Students are responsible for keeping immunizations and X-rays current. Dental care remains the responsibility of the student in maintaining total optimum health.

A health insurance program is available for medical and dental services. Complete health services, while the student is in the nursing center, are available on the Tamiami and Bay Vista Campuses. After admission to the professional program, students must have a yearly tuberculin test. Tuberculin skin tests are provided for the student at the University Health Services on the Tamiami and Bay Vista Campuses. The test should be done preferably January 1st of each year. Those students who have positive skin tests must have a chest X-ray. The Health Services include the services of a nurse practitioner. Health promotion and prevention programs are available and these services are primarily on the Tamiami Campus.

**UPPER DIVISION NURSING MAJOR**

LOCATION: Bay Vista Campus  
DEGREE: Bachelor of Science Degree in Nursing

The upper division nursing major encompasses two academic years in addition to one Summer Semester. The nursing curriculum is composed of supporting science courses, required nursing courses and electives.

**Course Requirements for Bachelor of Science Degree:**

**UPPER DIVISION COURSES**

		JUNIOR YEAR	
Fall Term I	Nursing Process I	Semester Hours	
		Introduction to the Nursing Process and Nursing Care of Well Individuals	
NUR 3610C		Approaches to Nursing I and II	8
NUR 3611C		Nursing Seminar I	2
PCB 4701		Human Systemic Physiology	3
		Physics	1
			Total 14

		Spring Term II	
		Nursing Process II	Nursing Care of Individuals and Families with Minor Problems
NUR 3500C/4501C		Nursing of Adults I and II	8
NUR 3423C		Nursing Seminar II	2
NUR 3424C		Nursing of the Aged Population	
NUR 3725		Patho-Psychophysiology	3
		General Education and Nursing Electives	2
			Total 15

		Semester Hours	
		Nursing Process III	Nursing Care of Individuals and Families with Major Health Problems
NUR 4501C		Nursing of Adults II	4
NUR 4120C		Nursing of Children	5
NUR 4425C		Nursing Seminar III	2
			Total 11

		Senior Year	
		Fall Term IV Nursing Process IV	Nursing in Health Care Systems
NUR 4137C		Nursing of Expanded Families	5
NUR 4321C		Mental Health Nursing	5
NUR 4430C		Nursing Seminar IV	2
		Nursing Electives	4
			Total 16

		Spring Term V	
		Nursing Process V	Nursing practicum
NUR 4432C		Community Health Nursing	4
NUU 4300		Nursing Seminar V	2
NUU 4941		Practicum	4
NUR 4943L		Nursing Electives	4
			Total 14

		Total credits required for a Bachelor of Science Degree in Nursing:	
		Lower Division—General Education and Prerequisites	60
		Nursing Major Supporting Sciences Electives	53 7 10
			Sub Total 70
Total Credits Required 131			

**Course Descriptions**

**Nursing Process I**  
Fall Semester  
Introduction to the Nursing Process and Nursing Care of Well Individuals

- NUR 3610C Approaches to Nursing I** (4)  
Examines concepts relating to the nursing role and nursing process. Major topics include the nature of health care settings; health term relationships; nursing assessment and diagnosis; and the research-grounded nursing care plan. Professional communication theory is developed as a vehicle for effective nurse-client relationship building. Adaptation and coping responses of individuals in relation to the health-illness continuum are also explored. Includes clinical laboratory. Prerequisites: 52 credits in required courses.
- NUR 3620C Approaches to Nursing II** (4)  
An introduction to the nursing process and application of scientific principles, concepts and skills required in comprehensive nursing care. The application of principles of pharmacology theory, which govern the use of drugs essential to providing nursing care, are incorporated. The application of concepts include normal nutrition, accountability, communication, and assessment skills. Prerequisites: 52 credits in required courses.
- NUR 3611C Nursing Seminar I** (2)  
Prerequisite: Concurrent with NUR 3610C.
- Dimensions of Professional Nursing — Part I** (1)  
Concerned with the professionalization process and enables students to consider issues and dilemmas to which nursing has a role, in relation to the health care system and its impact on consumers. Emphasis is placed on the development of the professional nurse practitioner. Legal, ethical, and professional standards necessary for nursing practice are explored.
- Educative Process in Nursing — Part II** (1)  
Focuses on how individuals learn, factors affecting learning, and teaching methods that facilitate the teaching-learning process. It provides a basis for teaching clients, families and health care providers. The student plans, implements, and evaluates a teaching session.
- Nursing Process II**  
Spring Semester
- Nursing Care of Individuals and Families with Minor Problems**
- NUR 3500C Nursing of Adults I** (4)  
Planning and implementation of nursing care of adults with emphasis on the health deviation related to oxygen, nutrient, and fluid needs. The effects of illness on clients and families and health are promoted by client education; implementation of nursing skills; utilization of teaching-learning concepts; legal and professional accountability; and implementation of decision-making principles. Prerequisites: NUR 3610C, PCB 4701.
- NUR 4501C Nursing of Adults II** (4)  
Focuses on principles of adult nursing care based on human needs. Emphasis is on high level care i.e. critical care and the long-term stress clients and rehabilitation nursing. Prerequisite: NUR 3500C.
- NUR 3423C/NUR 3424C Nursing Seminar II** (2)  
Prerequisites: NUR 3610C, 3620C, PCB 4701, Concurrent with NUR 3500C/4501C.
- Community Health Nursing — Part I** (1)  
Provides an introduction to the concepts and sciences related to community health with emphasis placed upon theoretical components relevant to nursing practice in the community setting. Emphasis is placed on assessment of individual health needs in the community.
- Nursing of the Aged Population — Part II** (1)  
Focuses on the physiological and psychological changes associated with the aging process. Designed to provide the student with an overview of the interrelatedness of age and the impact of man, health and nursing needs of the aged. Clinical laboratory concurrent with Nursing of Adults I, and well elderly assessment in nursing home and residential, as well as outreach facilities.
- NUR 3725 Patho-Psychophysiology** (3)  
Focuses on minor and major deviations in health status of individuals, families, and communities; the study of physiological, psychological and environmental abnormalities through the life cycle. The effects of heredity, environment, life patterns, and cultural factors of abnormalities are explored. Implications for clinical practice are explored. Prerequisites: PCB 4701, Concurrent with NUR 3500C/4501C.
- Nursing Process III**  
Summer Semester
- Nursing Care of Individuals and Families with Major Health Problems**
- NUR 4120C Nursing of Children** (3)  
Provides for study of the basic human needs of children during growth and development, considering the impact of self care deficits in the physiologic and psychosocial realms. Major topics include the application of the nursing process in the care of children and adolescents, health promotion of children with the family, coping behaviors of the child, and the exploration of societal trends on child health care. Prerequisites: NUR 3500C, 4501C, 3423C.
- NUR 4425C Nursing Seminar II—Community Health Nursing** (2)  
Places emphasis upon health promotion and maintenance of population aggregates. Major topics include: epidemiological approach to define risk potential of defined population, nursing process utilization to promote self-care ability, community resource availability, and health status assessment of population aggregates. Prerequisite: NUR 3423C.
- NUR 4501C Nursing of Adults II** (4)  
The principles of adult nursing care based on human needs are continued with emphasis on critical care and long-term clients and rehabilitation nursing.
- Nursing Process IV**  
Fall Semester
- Nursing in Health Care Systems**
- NUR 4137C Nursing of Expanded Families** (5)  
Presents an holistic approach to human re-
- production with exploration of the concept of stress — adaptation in relation to the individual's and family's self-care ability to meet basic human needs during the childbearing cycle. Focuses on the physio-psycho-social dynamics in relation to the development phases of pregnancy, trends in maternal-infant care and practices, and issues in the nurse's role. Students' learning experiences take place in a variety of settings within the community. Prerequisites: NUR 3500C, 4501C, 3423C.
- NUR 4321C Mental Health Nursing** (5)  
Focus is on the application of the nursing process in the promotion of self-care ability of individuals and families whose emotional health is diminished. Emphasis is placed on the dynamics of responses to stressors and utilization of nursing intervention which promote satisfaction of basic human needs which are primarily psychological in nature. The role of the psychiatric nurse practitioner is explored in relation to acute care and community settings. Prerequisite: NUR 3725.
- NUR 4431C Nursing Seminar IV** (2)  
Prerequisites: NUR 4422C, 53 semester hours in Clinical Nursing.
- Community Health Nursing — Part I** (1)  
Explores the basic approaches used in family assessment and analysis. Emphasis is placed upon the role of the community health nurse, its relation to group structure in the promotion, maintenance and restoration of health of the larger community through total family nursing.
- Introduction to Nursing Research — Part II** (1)  
An introduction to research and methodology designed to assist the student in becoming a critical consumer of research findings and to gain an appreciation of the effect of research upon professional viability. Emphasis is placed upon the steps of the research process and the manner in which practicing nurses may influence the quality, relevance, and usefulness of nursing research.
- Nursing Process V**  
Spring Semester
- Nursing Practicum**
- NUR 4432C Community Health Nursing** (4)  
Provides for the application of the nursing process to community groups. The dynamics influencing the health status of a defined community are explored. Emphasis is on participatory group leadership and planned intervention in helping communities enhance their self-care ability. Prerequisites: 53 semester hours of required nursing courses or permission of faculty.
- NUR 4301C Nursing Seminar V** (2)  
Prerequisites: 53 semester hours in clinical nursing.
- Problems in Research — Part I** (1)  
Second research seminar provides an opportunity for the student to demonstrate an analysis and evaluation utilizing self-direction, in the selection and development of a research design. The student will meet periodically with a research advisor while undertaking the development of a proposal for research.

**Perspective of Professional Nursing****— Part II**

(1)

An exploration of trends, issues, and dilemmas which impact nursing and the health care delivery system. Emphasis is placed upon the role of the professional nurse, philosophies of nursing practice, in relation to the contributing professional nursing responsibilities.

**NUU 4941 Leadership Practicum**

(4)

A synthesizing experience which assists the student in a role of transition to beginning practitioner. Theory and practice in developing leadership skills through the use of leadership principles and management theories is empha-

sized. Emphasis is on the leadership role of the professional nurse in planning, organizational structures, and communication lines; the effectiveness of policy and management protocols in the delivery of nursing services to individuals and groups in multicultural and multi-ethnic health care settings. Faculty serves as resource persons along with selected preceptors in clinical facilities. Prerequisites: 53 semester hours of required nursing courses or permission of faculty.

*Nursing Electives:* (To be developed)

- Aging and Health
- Poverty and Health

- Nursing and Anthropology
- Biomedical Issues in Nursing
- The Health Professions in the Social Services
- Psycho-Social Dynamics in Death and Dying

**School of Nursing**

Professor and Coordinator *Rosebud L. Foster, Ed.D.*

**Faculty**

Butler, Patricia (*University of Miami*) Visiting Professor Medical-Surgical Nursing  
 Foster, Rosebud L., R.N., Ed.D., (*University of Miami*)



# School of Public Affairs and Services

# School of Public Affairs and Services

The School of Public Affairs and Services offers programs of professional study which provide academic and applied courses for students interested in public and non-profit organizational needs, management and research. Emphasis is placed on achieving a comprehensive, developmental and community oriented understanding of problems, issues, alternatives and needs of an urban society faced with rapidly changing social, political, economic and cultural conditions.

The departments of the School of Public Affairs and Services are: Criminal Justice, Health Services Administration, Public Administration and Social Work. Each of these Departments offers both the baccalaureate and master degrees.

## I. ADMISSION REQUIREMENTS

**UNDERGRADUATE AND GRADUATE**  
Policies on admissions and prerequisites for the graduate and undergraduate programs are described in the appropriate departmental sections of this catalog.

## II. ADVISEMENT

Each student is assigned a faculty advisor upon being admitted to a program and together the student and the advisor plan the student's program of study. Students needing pre-advisement should contact the specific department.

## III. CLINICAL AND FIELD EXPERIENCES

As an integral part of the program curriculum, the student may be provided supervised learning experiences in community service agencies. The clinical and field work experience is one of orientation, observation and practice in the particular program specialty of Public Affairs and is structured concurrently with relevant classroom experiences. Numerous community organizations provide opportunities for student internships and field practices.

## IV. CONTINUING EDUCATION AND SPECIAL PROGRAMS

The School of Public Affairs and Services, in cooperation with the Division of Continuing Education, offers many credit, non-credit and workshop courses in Off-Campus locations in Dade, Broward and Monroe Counties. Courses and locations vary each semester and the departments should be contacted for specific offerings.

## V. GRADING SYSTEMS

Course work in the School of Public Affairs and Services is generally graded on the letter system: A, B, C, D or F. Certain clinical or field experience program courses award a grade of P (Pass) or F (Fail). A grade of IN (Incomplete) may be awarded at the discretion of the instructor with specific time limitation imposed on the completion of the required work. Individual programs may have specific requirements regarding

grades earned in required program of study courses. Undergraduate students must achieve an overall grade point average of 2.0 in order to graduate. Graduate students must maintain a grade point average of 3.0 in order to graduate.

## Criminal Justice

Robert Snow, *Associate Professor, Director*

Robert Clark, *Professor*

Jose Marques, *Associate Professor*

Regina Shearn, *Associate Professor*

Luis Salas, *Associate Professor*

Ray Surrette, *Assistant Professor*

William Wilbanks, *Associate Professor*

Criminal Justice is an area of study dealing with the formal mechanisms of social control by which our society exercises constraint over its members. The study of criminal justice is an interdisciplinary one; i.e., it involves law and the social/behavioral sciences. It is concerned with the primary means of social control — the law. It involves the study of crime, the reaction of society to this major social issue, and the instrumentalities utilized in treating the problem. Heavily intertwined throughout the entire approach is the pervading issue of social justice.

A wide variety of career opportunities are available in criminal justice at all levels of government. Due to its interdisciplinary approach, the study of criminal justice fills the needs of students seeking careers in teaching, research, law, and the various criminal justice occupations.

**LOCATION:** Bay Vista

Courses may be offered on the Tamiami Campus or other locations.

**DEGREE:** Bachelor of Science in Criminal Justice

**LOWER DIVISION PREPARATION:**

*Required Courses:* None

*Remarks:* The student majoring in Criminal Justice should consult with an academic advisor to ensure that the actual courses selected (1) meet program and degree requirements, and (2) are consistent with the individual's long range academic and career objectives.

*Recommended Courses:* The student intending to enroll in the Criminal Justice program is urged to complete an Associate of Arts degree at the lower division. An entering student is not required to have been enrolled in a pre-criminal justice program. A student having an Associate of Science degree or 60 semester hours will also be accepted, but must complete general education requirements before the bachelor's degree can be awarded.

**UPPER DIVISION PROGRAM:**

*Core Courses:* Six courses are required for every student in Criminal Justice. A core course requirement can only be waived by the Chairperson with the recommendation of the student's faculty advisor.

The core courses are:

CCJ 3011	Nature and Causes of Crime	3
CCJ 3101	Law Enforcement	3

CCJ 3290	Judicial Policy Making	3
CCJ 3301	Correctional Philosophy	3
CCJ 3700	Methods of Criminal Justice Research	3
CCJ 4251	Criminal Justice and the Constitution	3

*Area of Interest:* See explanation below<sup>1</sup> 18

*Specific Electives:* See explanation below<sup>2</sup> 9

*General Electives:* See explanation below<sup>3</sup> 15

*Area of interest:* 18 semester hours at the 3000 level or above in criminal justice are required for criminal justice majors. Only 9 semester hours of CCJ 4940 will count toward this requirement.

<sup>2</sup>*Specific electives:* 9 semester hours at the 3000 level are required in sociology-anthropology, social work, psychology, political science, computer science or statistics. Any combination of these courses is acceptable.

<sup>3</sup>*General electives:* 15 semester hours are required. No more than 9 hours can be Criminal Justice courses. Relevancy of elective courses will be determined in consultation with the student's advisor or the Chairperson. The faculty retains the prerogative to accept or reject electives taken without approval.

*Remarks:*

(1) Independent study and directed readings courses may not be taken outside of the Criminal Justice Department except with written permission of the Criminal Justice Chairperson.

(2) Course work from disciplines outside of Criminal Justice will not be accepted to fulfill requirements in the Criminal Justice area of interest category.

(3) Students are required to maintain a minimum G.P.A. of 2.0 in the CCJ Area of Interest and Core Courses.

## Program Honors:

Students may qualify for program honors if they meet the University academic honors requirements and have a GPA of 3.5. Students may qualify for program high honors if they meet University honors requirements for high honors, have a GPA of 3.75.

## Transfer Credit

A student transferring from a four year college may transfer up to 89 semester hours into the Criminal Justice Program; however, the student must still have at least 60 semester hours at the 3000 level or above. All work transferred to FIU is subject to review and approval by the Criminal Justice Chairperson. Criminal Justice courses completed with a grade of "D" will not be transferred.

## Double Majors and Degrees

Students must complete the core courses (18 hours) plus 18 additional hours in Criminal Justice in order to:

- 1) Satisfy Criminal Justice requirements for a double major
- 2) Obtain a second degree with a major in Criminal Justice
- 3) Obtain two baccalaureate degrees simultaneously (provided requirements for two majors

have been completed as certified by the appropriate academic units, and a minimum of 30 appropriate semester hours beyond the requirements of one degree have been earned).

### PRE-LAW CONCENTRATION

*Pre-law Concentration Core Requirements:* Same as requirements for a bachelor's degree in Criminal Justice (18 semester hours).

*Criminal Justice Elective:* The student shall complete a minimum of 18 semester hours of the following selected Criminal Justice course work:

		<i>Semester Hours</i>
CCJ 3270	Criminal Procedure	3
CCJ 3291	Judicial Administration	3
CCJ 3501	Juvenile Delinquency, Prevention and Control	3
CCJ 3934	Contemporary Issues in Criminal Justice	3
CCJ 4251	Criminal Justice and the Constitution	3
CCJ 4280	Law and Criminal Justice	3
CCJ 4282	Legal Issues in Corrections	3
CCJ 4752	Introduction to Legal Research	3
CCJ 4940	Field Work and Special Projects	6
CCJ 4910	Independent Research in Criminal Justice	3
CCJ 5216	Criminal Law	3
CCJ 5275	Criminal Procedure	3
CCJ 5286	Comparative Law	3
CCJ 5385	Legal Aspects of Corrections	3

*Specific Electives:* Same as requirements for a bachelor's degree in Criminal Justice (9 semester hours).

*General Electives:* Same as requirements for a bachelor's degree in Criminal Justice (15 semester hours).

\*Upon Consultation with the Criminal Justice advisor, students may be granted the opportunity to formulate a more intensive Pre-law Program of Study.

## Course Descriptions

### Definition of Prefixes

CCJ — Criminology and Criminal Justice.

### CRIMINAL JUSTICE CORE COURSES

CCJ 3011 The Nature and Causes of Crime (3) Social cultural, behavioral, political and economic causative factors in the development of crime. Psychological and sociological considerations involved in criminal behavior. The role of the legislature as policy maker in criminalizing conduct, and the limits of the criminal sanction.

CCJ 3101 Law Enforcement Systems (3) A conceptual study of the American police system.

CCJ 3290 Judicial Policy Making (3) An analysis of judicial systems and their legal, social and political environments. Interrelation-

ships between the prosecutorial and other criminal justice substructures will be examined.

CCJ 3301 Correctional Philosophy, Theory and Practice (3) Appraisal of correctional methods, utilized in the United States and other countries. Prisons, probation, parole, work-release programs, halfway houses, community-based correction programs and other techniques are analyzed.

CCJ 3700 Methods of Criminal Justice Research (3) Elements of scientific perspective, interaction of research theory and practice. Research design, data collection, analytic and statistical techniques, use of data processing resources, and preparation of research reports.

CCJ 4251 Criminal Justice and the Constitution (3) A study of the constitutional issues as they relate to the administration of justice. Emphasis shall be placed upon the case method of study and the establishment of precedent.

### ELECTIVES

CCJ 3020 An Overview of Criminal Justice (3) A survey of the agencies and process involved in the administration of justice. Interrelationships and functions of the legislative, police, prosecutor, defender, courts, and corrections are examined. (This course is suggested for non-majors and entering students without a criminal justice background.)

CCJ 3271 Criminal Procedure (3) An in-depth study of the 4th through 8th Amendments of the Constitution, and their impact on the criminal justice process.

CCJ 3291 Judicial Administration-Criminal (3) Study of the rules of criminal procedure and evidence affecting the responsibilities of court administrators. Administrative relationships of courts with agencies involved in the criminal justice system will be examined.

CCJ 3320 Community Based Treatment (3) An examination of the various pre-trial and post-trial community based treatment programs. A special emphasis will be placed on the impact these programs have upon the criminal justice system and the clients they serve.

CCJ 3342 Offender Counseling (3) A course designed to explore the nature and function of counseling within the correctional setting.

CCJ 3302 Correctional Treatment Programs (3) A concentrated study of the various institution-based treatment programs. Emphasis is on the impact and operational aspects of these programs.

CCJ 3450 Institutional Organization and Administration (3) Analysis of internal organizational structure and executive roles and functions in criminal justice agencies. Examines administrative and managerial concepts underlying decision making, policy formulation, operational strategies, and coordination and control procedures. Cases and outside research reports are used for specific

analysis.

CCJ 3460 Human Resources in Criminal Justice (3) Analysis of criminal justice manpower input problems — recruitment, selection, placement, training, development and control at all levels. Emphasis is on policy issues, research findings, and advanced techniques.

CCJ 3461 Developing Interpersonal Communication (3) The emphasis of this course is on the development of interpersonal communication practices that can be effectively utilized in a helping role and on the job, to improve interaction among employees and between the employees and the public.

CCJ 3470 Criminal Justice Planning (3) Planning methods applicable to criminal justice agencies are examined. Emphasis is on planning as a decision making process for criminal justice agencies. Theories, techniques, and applications studied.

CCJ 3501 Juvenile Delinquency, Prevention and Control (3) Social dimensions of juvenile delinquency, its nature, scope and distribution. Comparison and analysis of agencies of control and prevention.

CCJ 3934 Contemporary Issues in Criminal Justice (3) An extensive examination of selected contemporary issues in criminal justice. May be repeated.

CCJ 3949 Cooperative Education in Criminal Justice (3) Supervised full time semester work for criminal justice academic majors who demonstrate their interest in and potential for developing practical field agencies experience. Limited to students admitted to Co-op program with consent of advisor. Prerequisite: second semester academic standing.

CCJ 4032 Crime and the Media (3) This course will explore the relationship between the media, crimes, criminals and the Criminal Justice System. Specifically, the impact of the media and the media's attention on the operation of the C.J.S.

CCJ 4131 Police and the Community (3) A study of the concept of policy-community relations, emphasizing the police role in community tension and conflict.

CCJ 4251 Criminal Justice and the Constitution (3) A study of constitutional issues as they relate to the administration of criminal justice. Emphasis shall be placed upon the case method of study and the establishment of precedent.

CCJ 4280 Law and Criminal Justice (3) The resolution of criminal justice problems through the application of the law. The nature, sanctions, and limits of law. Categories of law and schools of jurisprudence.

CCJ 4282 Legal Issues In Corrections (3) This course addresses the investigation of legal problems of prisoners, from conviction to release. Emphasis will be placed on the legal prob-



lems involved in pre-sentence investigations, sentencing, probation, parole, incarceration, and loss and restoration of civil liberties.

**CCJ 4331 Probation, Parole and Community Programs** (3)

An examination of the treatment of convicted law violators by the correctional field services, before and after prison.

**CCF 4452 Criminal Justice Reform** (3)

Analysis of evolutionary and revolutionary changes in political institutions and agencies. Means, methods and techniques for initiating and implementing meaningful change within the criminal justice system.

**CCJ 4441 Administration of Correctional Institutions** (3)

Theories and techniques of administering correctional institutions, treatment, security, and custody. Social structure of the prison community and inmate social systems. Case studies.

**CCJ 4462 Human Relations Training** (3)

An experience based course that will prepare selected students to present human relations training programs in criminal justice agencies.

**CCJ 4630 Criminal Justice: The International Perspective** (3)

A critical comparative study of various American criminal justice subsystems with those of selected industrialized foreign countries, including discussion of administration, organization, objectives, principal functions, and levels of control.

**CCJ 4640 Organized Crime** (3)

An intensive study of the secret, conspiratorial activity that eludes the legal apparatus of criminal law enforcement. No prerequisites.

**CCJ 4660 Crime and the Schools** (3)

An examination of the crime problem in the schools. The course will include crime prevention programs utilized by schools, the nature and extent of crimes committed against students and faculty, crime against the schools (arson and vandalism), and effects to teach students about the law. Attention will also be given to the process by which student offenders are disciplined/punished.

**CCJ 4661 Terrorism and Violence in Criminal Justice** (3)

An analysis of terrorism and violence in criminal justice. Law and other control mechanisms will be examined.

**CCJ 4662 Criminal Justice and the Minority Community** (3)

A general survey of the institutions of justice in the United States, and their contacts with minority people. The focal point of this course will be the role of racial/ethnic minorities in the criminal justice system.

**CCJ 4663 Women, Crime and the Criminal Justice System** (3)

Women as deviants, criminals, victims and professionals in the criminal justice system.

**CCJ 4752 Introduction to Legal Research** (3)

Introduction to legal research, its scope, theory and practice. Materials and methods used for specific research goals. No prerequisites.

**CCJ 4900 Directed Readings in Criminal Justice** (1)

Extensive reading and analysis of selected literature under faculty supervision. Permission of instructor and Program Chairperson required. One credit per semester with a 3 credit maximum.

**CCJ 4910 Independent Research** (1-3)

A course designed to provide qualified students with the opportunity to perform meaningful research in areas of criminal justice under the direction of a faculty member. Permission of the instructor required. (6 credit maximum)

**CCJ 4940 Field Work and Special Projects** (1-12)

A course designed to broaden the experiential base, application of theoretical content to criminal justice. Advisor's approval required. (Pass/Fail grading)

**CCJ 4949 Cooperative Education in Criminal Justice** (3)

Supervised full time work semester for criminal justice academic majors who demonstrate their interest in and potential for developing practical field agencies experience. Limited to students admitted to Co-op Program with consent of advisor. Prerequisite: Senior academic standing.

**CCJ 5056 History and Philosophy of Criminal Justice** (3)

The historical and philosophical background of criminal justice is presented as a foundation for analysis and theory. The historical presence of peacekeeping and order-maintenance in all groups is researched. The nature and impact of philosophical comment on criminal justice is evaluated. No prerequisites.

**CCJ 5057 Ethics of Criminal Justice** (3)

An examination of the principles supporting various formal statements of appropriate standards of conduct for professionals in criminal justice. Each of the major subdivisions of criminal justice is examined as to ethical and moral judgments, past and present. Prerequisites: Admission to the Graduate Program of Criminal Justice or, for undergraduate students, permission of the instructor.

**CCJ 5216 Criminal Law** (3)

A concentrated study of the substantive criminal law based on concepts, statutes, and cases that are enforced in state and federal courts.

**CCJ 5275 Criminal Procedure** (3)

A case study of major legal cases dealing with criminal procedure in the United States. No prerequisites.

**CCJ 5286 Comparative Law** (3)

An analysis of the major legal families of the world. Emphasis shall also be given to legal families which are becoming more important as colonialism comes to a close. No prerequisites.

**CCJ 5385 Legal Aspects of Corrections** (3)

A study of the contemporary legal problems of convicted offenders, correction staffs, and administrators as they relate to rights granted by case law and statute.

**CCJ 5605 Deviance and Social Control** (3)

Deviance and Social Control will serve as an

introductory core course in the Criminal Justice Masters program. It will cover the major theoretical issues and ideas concerning deviant and criminal behavior and methods of socially controlling these behaviors.

**CCJ 5669 Race/Ethnicity, Crime and Criminal Justice** (3)

An examination of the concepts of race and ethnicity and the extent to which racism and ethnocentrism are important in understanding the etiology of crime and decisions about offender made by those in the criminal justice system. The course will focus on statistical evidence for disproportionality in crime and explanations offered for differences in rates and types of crime. Attention will also be given to evidence of racial and ethnic discrimination at various points in the system.

## Criminal Justice Graduate Program

The Master of Science degree program in Criminal Justice is a professional program designed to prepare students for management responsibilities in the Criminal Justice sector or public sector related activities.

The objectives of the master's program are:

1. To provide present and future Criminal Justice managers with the skills needed to function effectively in our ever-changing society.
2. To serve as a catalyst for interdisciplinary research and study of Criminal Justice and related problems.
3. To provide the Criminal Justice system with qualified students for academic careers in administration, planning and analysis, and teaching in colleges and universities.

The minimum academic requirement for admission to the Criminal Justice Master's program is graduation from an accredited Baccalaureate program. Although it is helpful students need not have had any formal coursework in criminal justice. Competent students from any major field of study are eligible for admission. After initial counseling, a determination will be made regarding any need for remedial course work.

Students having a bachelor's degree from an accredited institution and a "B" average or above for the last two years of undergraduate work, or a total score of 1000 on the Graduate Record Examination (verbal and quantitative) are eligible for unconditional admission to the program. Provisions can be made for admittance as Special Students until admissions criteria have been satisfied. Under certain circumstances, exceptions to these standards can be made.

(All applicants must complete the GRE prior to full admission status.)

LOCATION: Tamiami and Bay Vista Campuses.  
DEGREE: Master of Science in Criminal Justice.

*A. Degree Credit Requirements:*

The Master's degree in Criminal Justice requires (36) semester hours of credit. A maximum of (6) semester hours may be transferred into the program from other accredited institutions, subject to the approval of the Graduate Admissions Committee. Candidates have the option of two

programs of study, i.e., the thesis and non-thesis options. Those selecting the thesis option are required to complete 27 semester hours of course work and 6 semester hours of thesis. The non-thesis option consists of 36 semester hours of course work and comprehensive written and oral examinations. All candidates must take five core seminars.

#### B. Specific Program Requirements:

All course work taken in residence must be in the Criminal Justice Graduate Program, except that with the permission of the Graduate Admissions Committee, a total of not more than four (4) semester hours may be taken in any other relevant graduate program at FIU.

#### Core Courses:

CCJ 5605	Deviance and Social Control	3
CCJ 6055	Seminar in Criminal Justice	3
CCJ 6709	Research Methods	3

#### Core Semesters Hours: 9

#### General Electives

#### Semester Hours: 27

CCJ 5056	History and Philosophy of Criminal Justice	3
CCJ 5057	Ethics of Criminal Justice	3
CCJ 5216	Criminal Law	3
CCJ 5275	Criminal Procedure	3
CCJ 5286	Comparative Law	3
CCJ 5385	Legal Aspects of Corrections	3
CCJ 5605	Deviance and Social Control	3
CCJ 5669	Race/Ethnicity Crime and Criminal Justice	3
CCJ 6058	Seminar in Criminology	3
CCJ 6105	Seminar in Law Enforcement	3
CCJ 6285	Seminar in Judicial Process	3
CCJ 6365	Seminar in Corrections	3
CCJ 6456	Administration and Management of CCJ Agencies	3
CCJ 6457	Organizational Development in Criminal Justice	3
CCJ 6467	Human Resources Management in Criminal Justice	3
CCJ 6468	Intergroup Relations in Criminal Justice	3
CCJ 6476	Criminal Justice Planning	3
CCJ 6477	Seminar in Information Systems	3
CCJ 6485	Politics and Criminal Justice	3
CCJ 6486	Labor Relations in the CCJ Sector	3
CCJ 6495	Seminar in Court Administration	3
CCJ 6525	Seminar in Juvenile Delinquency	3
CCJ 6635	Seminar in Comparative Criminal Justice	3
CCJ 6665	Seminar in Victimology	3

CCJ 6706	Applied Statistical Techniques for CCJ	3
CCJ 6716	Productivity and Program Evaluation	3
CCJ 6717	Social Implications of Human Evaluation by Criminal Justice Agencies	3
CCJ 6945	Field Research in CCJ	3
CCJ 6971	Thesis Research Prospectus	5
CCJ 6976	Masters Thesis Defense	4

#### Additional Procedures:

All students will select a committee of three graduate faculty members, the student's major faculty advisor being a member and Chairperson of this committee. The major advisor and committee will be responsible for overseeing the student's work while in the master's program. Admission to the program should not be construed as admission to candidacy for a degree. Students may apply for candidacy upon completion of 15 semester hours (including 2 of the 5 core courses). Admission to candidacy should be completed before the student enrolls for the last 12 hours.

#### C. Graduation Requirements:

To receive the Master's degree in Criminal Justice, a student must satisfy all University regulations governing graduate study. Students in the thesis track must be admitted to candidacy and complete the 3 core courses, and 7 general electives, and the thesis. The student may be required to undergo an oral discussion of the thesis. Students in the non-thesis track must be admitted to candidacy and complete the 3 core courses, and 9 general electives.

## Master of Science in Criminal Justice

#### Definition of Prefixes

CCJ — Criminology and Criminal Justice

## Core Courses

CCJ 5605 Deviance and Social Control (3)  
Deviance and Social Control will serve as an introductory core course in the Criminal Justice Masters program. It will cover the major theoretical issues and ideas concerning deviant and criminal behavior and methods of socially controlling these behaviors.

CCJ 6055 Seminar in Criminal Justice (3)  
Advanced study of problems, trends and critical issues involved in the administration of criminal law as a means of social control. Emphasis is on systematic relationships and systems theory building.

CCJ 6709 Research Methods \* (3)  
The focus of this course is on the presentation and discussion of research methodology of primary interest to Criminal Justice students. Emphasis is placed on preparation for thesis research, the requirements for proposal preparation and final thesis report.

CCJ 6971 Thesis Research (5)

CCJ 6976 Masters Thesis (4)

## ELECTIVES

CCJ 5056 History and Philosophy of Criminal Justice (3)

The historical and philosophical background of criminal justice is presented as a foundation for analysis and theory. The historical presence of peacekeeping and order maintenance in all groups is researched. The nature and impact of philosophical comment on criminal justice is evaluated. No prerequisites.

CCJ 5067 Ethics of Criminal Justice (3)

An examination of the principles supporting various formal statements of appropriate standards of conduct for professionals in criminal justice. Each of the major subdivisions of criminal justice is examined as to ethical and moral judgments, past and present. Prerequisites: Admission to the Graduate Program of Criminal Justice or, for undergraduate students, permission of the instructor.

CCJ 5216 Criminal Law (3)

A concentrated study of the substantive criminal law based on concepts, statutes, and cases that are enforced in state and federal courts.

CCJ 5275 Criminal Procedure (3)

A case study of major legal cases dealing with criminal procedure in the United States. No prerequisites.

CCJ 5286 Comparative Law (3)

An analysis of the major legal families of the world. Emphasis shall also be given to legal families which are becoming more important as colonialism comes to a close. No prerequisites.

CCJ 5385 Legal Aspects of Corrections (3)

A study of the contemporary legal problems of convicted offenders, correctional staffs, and administrators as they relate to rights granted by case law and statute.

CCJ 5605 Deviance and Social Control (3)

Deviance and Social Control will serve as an introductory core course in the Criminal Justice Masters program. It will cover the major theoretical issues and ideas concerning deviant and criminal behavior and methods of socially controlling these behaviors.

CCJ 5669 Race/Ethnicity, Crime and Criminal Justice (3)

An examination of the concepts of race and ethnicity and the extent to which racism and ethnocentrism are important in understanding the etiology of crime and decisions about offenders made by those in the criminal justice system. The course will focus on statistical evidence for disproportionality in crime and explanations offered for differences in rates and types of crime. Attention will also be given to evidence of racial and ethnic discrimination at various points in the system.

CCJ 6058 Seminar in Criminology (3)

A critical study of selected theoretical and research issues related to the nature and causes of crime. Special topics are announced at the beginning of each semester. May be repeated.

CCJ 6105 Seminar in Law Enforcement (3)

An analysis of current major hypotheses and problems in law enforcement. Special topics an-

nounced at the beginning of each semester. May be repeated.

**CCJ 6285 Seminar in Judicial Process (3)**  
A study of philosophical and utilitarian approaches to the definition of justice, and the varied translations of the concepts of justice into concrete action.

**CCJ 6365 Seminar in Corrections (3)**  
An analysis of current major hypothesis and problems in corrections. Special topics announced at the beginning of each semester. May be repeated.

**CCJ 6456 Administration & Management of Criminal Justice Agencies (3)**  
An examination of the criminal justice system from the perspective of administrative and management problems. Emphasis is on the identification of solution alternatives for those problems having the most significant impact on the components of the Criminal Justice system.

**CCJ 6457 Organizational Development in Criminal Justice (3)**  
A course designed to familiarize students with the organizational development methodologies that have relevance to the management of change within criminal justice agencies. Special attention will be given to case studies of the various methodologies utilized by criminal justice agencies.

**CCJ 6467 Human Resources Management in Criminal Justice (3)**  
A study of the various employment practices within criminal justice agencies and the impact of these practices on the development of the criminal justice system.

**CCJ 6468 Intergroup Relations in Criminal Justice (3)**  
A study of theories, strategies and tactics employed in intergroup relations in criminal justice. Attention is given to increasing the student's awareness and sensitivity to the dynamic forces within intergroup relations, as a means of increasing his or her productivity as a criminal justice practitioner.

**CCJ 6476 Criminal Justice Planning (3)**  
The planning environment of Criminal Justice is examined. Emphasis is on the role and methods of managing and organizing the planning process applicable to systematizing criminal justice. Case studies are developed.

**CCJ 6477 Seminar in Information Systems (3)**  
An advanced seminar in the survey and application of electronic data of use to the Criminal Justice sector. Prerequisite: COC 3300 or permission of instructor.

**CCJ 6485 Politics and Criminal Justice (3)**  
An analysis of the various criminal justice subsystems as they interrelate with the political system, political feasibility, community control, and social and economic policy.

**CCJ 6486 Labor Relations in the Criminal Justice Sector (3)**  
An examination of the area of collective bargaining for public employees. Special emphasis is placed on the current status of labor relations law and its impact on the criminal justice system.

**CCJ 6495 Seminar in Court Administration (3)**  
An analysis of current major hypotheses and problems in judicial administration. Special topics announced at the beginning of each semester. May be repeated.

**CCJ 6525 Seminar in Juvenile Delinquency (3)**  
Philosophy and procedures of the juvenile courts. Discussion of dependency, delinquency, and family law. Evaluation of juvenile court practices.

**CCJ 6635 Seminar in Comparative Criminal Justice (3)**  
A comparative study of the various criminal justice systems in the United States with similar governmental and social systems in other countries.

**CCJ 6665 Seminar in Victimology (3)**  
An in-depth study of the criminal-victim relationship.

**CCJ 6706 Applied Statistical Techniques for Criminal Justice (3)**  
Statistical tools applicable to criminal justice research are examined. Emphasis is on developing an understanding of the various techniques and their applications. The use of computerized statistical packages will be presented. Prerequisites: STA 3122 and STA 3123 or permission of instructor.

**CCJ 6716 Productivity and Program Evaluation (3)**  
A systematic review of the problems involved in productivity, improvement in criminal justice agencies, and program evaluation.

**CCJ 6945 Field Experience in Criminal Justice (3)**  
A course designed to provide selected students an opportunity to engage in action-oriented research within a criminal justice agency on a designated research project.

**CCJ 6717 Social Implications of Human Evaluation by Criminal Justice Agencies (3)**  
An advanced study of the social implications of human evaluation by criminal justice. This study deals with the impact made on society by agency policies and procedures. There is a heavy research component in this course.

**CCJ 6971 Thesis Research (5)**  
This course is devoted to the actual research labor required for a thesis in the Masters program.

**CCJ 6976 Masters Thesis Defense (4)**  
This course is devoted to the effort required to prepare the thesis document.

## Health Services Administration

Joseph Patterson, *Professor and Director*  
Thomas M. Dunaye, *Professor*  
Donald E. Davis, *Associate Professor*  
Charles Frankenhoff, *Associate Professor*  
Vandon White, *Professor*

studies leading to Bachelors and Masters degrees in Health Services Administration.

The baccalaureate program provides professional education which typifies the traditional preparation of mid-level administrators and department supervisors practicing various middle-management functions usually in community based health care settings.

The graduate program provides scholarly, scientific and professional education which is characteristic of traditional preparation for management executives practicing the administration of complex health care organizations in governmental and private settings geographically within communities, regional, state and national systems.

The modern management of health services occurs in an environment vexed with problems of organizational and technological change. Administrators charged with executive responsibilities must be grounded in a high degree of formal professional training followed by lifelong learning which fosters their continuous professional growth. With the delivery of health services becoming vastly more complex, general management competencies have emerged three and four levels below that of the chief executive officer in large health institutions. Many of the same skills needed for executive management are now also required to provide administrative leadership in staffing, directing, coordinating and controlling the operational resources of administrative and clinical units in such organizations.

The Bachelors program is designed to qualify students for entry-level administrative positions with various health care organizations or may, depending upon a student's prior professional experience in this field, serve as the necessary ideal preparation for further graduate study in health care management such as the masters program offered by this Department. Both programs are structured systematically on the model of bachelors studies scholastically-linked directly to the masters studies in a logical sequence of "basic-to-advanced" education for this profession. Such opportunity for bi-level academic preparation in an integrated programmatic framework at the same university is an unusual innovation in academic settings at the present time in the United States.

The Masters program in health care management, by virtue of its academic and field experience requirements, is generally considered a professional degree program. Most graduates will seek immediate employment in a career application of these studies at the central or overall level of administration.

The Master's program is designed so that full-time students may complete all course work in three semesters. The same curriculum can be completed by part-time students within three years. Formal studies stress a basic foundation of professional knowledge, skills and competencies in management, planning, analytic and policy functions of health services. This focus is concerned with application both in the United States and the international setting.

Since these studies provide a professional emphasis, the Department utilizes a variety of local hospitals, longterm care facilities, prepayment plans, mental health programs, multi-institu-

The Department of Health Services Administration offers graduate and undergraduate

tion corporations, emergency medical systems, health maintenance organizations, community health centers, and related public health and private agencies to give students supervised field experiences and a "practical laboratory" for operational research in health services administration.

The goal of both Masters and Bachelors programs is to create an academic center in which the university can respond to the educational needs of the field of health services administration. The Department's mission, therefore, is dedicated to the following educational objectives:

1) To provide professional studies in the theories, methods and practices of health care management, planning, analysis, applied research and policy development in health services organizations.

2) To offer continuing education opportunities periodically for practicing administrators toward improving the effectiveness of their management performance.

3) To participate in interprofessional education experiences with faculty, students, and practitioners of the allied health sciences, public affairs and related human services professions interacting with the field of health care management.

4) To extend consultation and technical assistance to appropriate organizational settings and practitioners in health services and administrative practice.

5) To conduct scholarly and applied research on various management problems and issues of significance to improving the delivery of health services.

6) To review and revise program curricula and objectives from time to time in order to keep current with the changing educational and professional needs of the field.

## Bachelor of Health Services Administration

### Admissions Criteria

Students seeking admission into the bachelors program must meet the following minimum requirements:

- A. An Associate of Arts degree, or its equivalent (e.g., Associate of Science, three year nursing diploma) in lower-division coursework (60 semester hours) completed in the first two years of preparation at an accredited college or university, with a minimum 2.0 cumulative grade point average.
- B. Non-traditional coursework is to be referred to the Department for evaluation.
- C. The maximum of lower-division transfer credits is 60 semester hours. Upper division credit hours from another institution or department may be transferred up to a maximum of 30 semester hours toward the fulfillment of required or elective courses in the program.
- D. Admitted applicants must meet all general educational requirements of the University, or receive provisional admission. Students with 1 deficiency will be admitted and applicants with 2 or more deficiencies will only be admitted with departmental approval.
- E. Any other general admissions requirements of undergraduate programs at the University

as found in the catalog of the current academic year.

## Internship Requirement

Students electing an administrative internship generally begin their internship in the final semester. If this period of field placement is evaluated by the Department as successful, the student will graduate at the end of that semester provided that all other requirements have been met.

All students must achieve a GPA of 2.5 or better in all upper-division coursework before they are permitted to enroll in the Administrative Internship (HCA 4940).

The Department utilizes the administrative internship as a mechanism in lieu of special arrangements with the University's Office of Cooperative Education.

For further information regarding internship placements, reference should be made to the Department Policy and Procedures Statement on the Administrative Internship.

### Program Requirements:

DEGREE: Bachelor of Health Services Administration

Program Total:  
Semester Hours  
60

All Department students completing BHSA in Health Services Administration are also subject to undergraduate student regulations and degree requirements governed by the policies of the School of Public Affairs and Services, Florida International University and the State University System.

LOCATION: Undergraduate courses may be offered on both the Bay Vista and Tamiami campuses as well as appropriate off-campus locations.

### Semester Hours

I. Core courses required of all students: 27	
HCA 3120*	Health and Social Services Delivery System 3
HCA 3501*	Management for Health Professions 3
HCA 4203	Health Care Financing & Accounting Management 3
HCA 4303	Health Care Organization and Administration 3
HCA 4313	Legal Aspects & Legislation in Health Care 3
HCA 4430	Principles & Programs in Public Health 3
HCA 4432	Principles of Applied Epidemiology 3
HCA 4711	Statistical Methods for Health Care 3
HCA 4714	Fundamentals of Health Research Methods 3

\*HCA 3120 is a prerequisite for all courses. HCA 3501 is prerequisite for all management courses.

### II. Areas of Specialization:

One area of specialization required.

### Semester Hours

A. Special Care Systems	15
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GEY 3002	Issues & Trends in Gerontology	3
HCA 3103	Mental Health & Mental Retardation	3
HCA 4127	Family Health Centers	3
HCA 4612	Program Planning & Evaluation	3
SOW 5643	Understanding the Process of Aging	3
<b>B. Management and Supervision</b>		<b>15</b>
PAD 4104	Organizational & Administrative Theory	3
HCA 4506	Applied Management in Health Care Organization	3
HCA 4511	Human Resource Management	3
HCA 4520	Automated Management and Information Systems	3
HCA 4710	Health Management Systems Engineering	3
<b>C. Health Care Technological Systems</b>		<b>15</b>
HCA 4506	Applied Management	3
HCA 4520	Automated Management & Information Systems	3
HCA 4521	Health Care Computer Applications	3
HCA 4710	Health Management Systems Engineering	3
PAD 3702	Quantitative Techniques for the Public Sector	3
<b>III. Elective Courses**</b>		<b>18</b>
HCA 4115	People, Power and Politics in Health Affairs	3
HCA 4123	Team Approach to Health Services Delivery	3
HCA 4125	Issues and Trends in Health Care Delivery	3
HCA 4905	Independent Study	3
HCA 4930	Special Topics Seminar in Health Services	3
HCA 4940	Administrative Internship	6

\*\*Elective courses may include upper-division courses offered by any University department including departmental courses in an area of specialization not selected by the student.

## Bachelor of Health Services Administration Course Descriptions

Definition of Prefixes:  
HCA — Health Care Administration  
GEY — Gerontology

GEY 3002	Issues and Trends in Gerontology	(3)
This course introduces the students to a study of the aging phenomenon and societal attitudes toward the elderly. Reviewed are various program efforts being undertaken by public and private agencies to cope with the problems of the aged.		
HCA 3103	Mental Health and Mental Retardation	(3)

The student will examine the community mental health services and services for the mentally retarded from a historical, policy, legislative and systems perspective.

**HCA 3120 Health and Social Service Delivery Systems** (3)

In this course students examine the history and current functions of health and social service delivery systems in the United States. The focus is on the components of these human service systems, how they interact, and their internal and external controls. Since this is the basic foundation course in the bachelor's curriculum for health services administration, the content is largely didactic in presentation.

**HCA 3501 Management for the Health Professions** (3)

This course surveys the fundamental theories, principles, and concepts of management to prepare the student for a middle-management position in health care. A primary objective is to begin developing the ability to effectively solve problems utilizing management tools and techniques. Practical applications of management theory in health care organization are approached largely through the use of case studies.

**HCA 4115 People, Power and Politics in Health Affairs** (3)

In this course a demographic analysis of the United States population is examined in terms of the health needs of various special groups. Community power structures are analyzed to determine how they function in policies and decisions that govern the distribution of goods and services in society. The make-up of the board of Health Planning Agencies is discussed in terms of the political implications involved. Values, morals and expectations of various cultural and political groups are analyzed in relation to their impact on health care delivery systems. The role of organized health professional is also studied to determine their influence in the political process of community control of health services. The course will also treat health policy development in other nations.

**HCA 4123 Team Approach to Health Service Delivery** (3)

The purpose of this course is to identify factors involved in team formation, structure, composition, maturity, growth and process. The fundamental processes of role definition and negotiation, communication, conflict-resolution and decision-making, as they relate to team effectiveness, are presented to analyze team functioning. Factors such as individuality, personal values and leadership styles are discussed. The structure and operation of team management in health facilities are discussed. Organizational behavior of management teams is discussed. Much of the course is developed experimentally using role-play, simulation gaming and group projects as the predominant instructional approach.

**HCA 4125 Issues & Trends in Health Care Delivery** (3)

This course presents the students with various significant health care issues and their developing trends. To keep timely with changing events

of varying importance, the course content may be somewhat different each time it is offered. Depending on the currentness and relevance of these developments, however, the basic focus will generally cover policy questions involving health care organization, financing, quality, controls, and delivery of services.

**HCA 4127 Family Health Centers** (3)

This course presents an historical review of family health centers and considers the role of primary care as an expanding alternative in meeting community health needs.

**HCA 4203 Health Care Financial & Accounting Management** (3)

This course is designed to help the future health service department-level administrators understand financial management as one of their primary responsibilities. Basic accounting information to make managerial decisions.

**HCA 4303 Health Care Organization & Administration** (3)

This course examines health care organization in the U.S. from a systems viewpoint, with a focus on: 1) the extent to which the nation is presently developing a unified "macro" health care system; 2) a variety of "microsystem" settings; and 3) the growing phenomenon of corporate hospital management. The administrative implications of a systems approach are explored with opportunity for students to prepare schematic models of various sectors of the health care system with the objective of improving the existing patterns. Prerequisite: HCA 3120

**HCA 4313 Legal Aspects & Legislation in Health Care** (3)

This course involves the study of the corporate structure and legal liabilities of different types of health care institutions. The responsibilities and duties of health professions and what action constitutes a breach of that duty, are presented. Intentional and unintentional tort law is examined, including the health professional's grounds for defense in malpractice suits. Federal, state and local statutes for the provision and regulation of health services and facilities form the legal framework for analysis.

**HCA 4430 Principles & Programs in Public Health** (3)

This course presents analysis of public health programs and their planning, with an overview of the organization of public health practices at various levels. Public health history and philosophy form the background of discussion which focuses on broad environmental and epidemiological problems occurring in urban and rural communities throughout the United States. Prerequisites: HCA 3120, 3501 or 4125.

**HCA 4432 Principles of Applied Epidemiology** (3)

The student is introduced to a broad survey of the methods and techniques used by epidemiologists investigating the distribution and causes of infectious and non-infectious diseases. A holistic approach is taken to the application of epidemiology principles in disease surveillance and control at the community level through public health agencies. Prerequisites: HCA 4430 and 4711.

**HCA 4506 Applied Management in Health**

**Care Organization** (3)

In this course management theory and principles are examined in their application to the administrative process linking executive level administration with management functions at the unit or department level in complex health care organizations. The student explores in depth how formal structure, organizational policies, interprofessional practices, and program resources are combined in making and implementing departmental decisions which support the objectives of the organization as a whole. Case studies are emphasized as a source of actual problems and situations illustrating operational conditions found in health care settings.

**HCA 4511 Human Resources Management & Supervision** (3)

The role of health personnel supervisors is examined in relation to directing the work responsibilities of health care employees. Interviewing, performance appraisal, disciplining, counseling, job orientation, in-service training, and other personnel functions are explored. The literature on employee motivation and productivity is reviewed with implications for improved management practices. Legislation affecting personnel in hospitals and other health care organizations is reviewed for understanding the basic structure of labor relations developing in the health field.

**HCA 4520 Automated Management & Information Systems** (3)

This course is concerned with the analysis, design, and installation of management information systems in health care organizations. Cost-benefit aspects of information, evaluation of computer systems, file design and data management, data capture, storage and retrieval, and various economic considerations in systems acquisition are among the topics addressed. Emphasis is placed on understanding the unique characteristics of management information techniques systematically applied in the health care industry.

**HCA 4521 Health Care Computer Applications** (3)

Students in this course experience the use of computer applications for administrative analysis of various patient care, financial and program data typically found in health care situations. The hospital organization is used as a framework for discussing the design, interface characteristics, and data structures which can be technologically facilitated through the use of appropriate computer services. Basic hardware and software requirements of high volume data processing situations are examined in hospital operations.

**HCA 4612 Program Planning and Evaluation** (3)

In this course students are introduced to basic concepts of planning and evaluation as the fundamental tools of program design and development. Opportunities for both theoretical and practical applications in the use of basic techniques are developed through both classroom exercises and student projects.

**HCA 4710 Health Management Systems Engineering** (3)

This course provides administrative health personnel with an introduction to health systems analysis and applications of various industrial engineering methods and procedures. Work systems, job analysis, space utilization, inventory control, and traffic patterns are among the program engineering topics explored.

#### HCA 4711 Statistical Methods for Health Care (3)

This course is designed to acquaint administrative health personnel with the fundamental techniques of quantitative analysis. The format and development of course content require a basic foundation in mathematical background in order to build further on the use and application of descriptive and inductive statistics as they contribute to managerial decision-making in health care settings.

#### HCA 4714 Fundamentals of Health Research Methods (3)

This is an introductory course in research methods as applied to the health care field. In addition to the study of research methods and tools, students complete exercises in literature search, research report analysis covering research design and data analysis and report writing.

#### HCA 4905 Undergraduate Independent Study (1-3)

This course is designed to allow students an opportunity for in-depth research or an action-oriented project carried out under the supervision of their faculty advisor. As an elective, an independent study should only be taken after substantial course work has already been completed in the program curriculum. In all cases preparation and approval for this course should be arranged during the academic semester preceding the semester planned for the study to begin. Prerequisite: Permission of faculty advisor.

#### HCA 4930 Special Topics Seminar in Health Services (3)

This course is arranged to allow students to investigate one or more special topics of interest in the health care field and will usually be taught by visiting faculty or a planned group of guest lecturers who are qualified to bring particular expertise and experience to the topic(s) selected. The objectives aim toward expanding student knowledge in specialized fields when particular circumstances can be arranged for the required faculty resources and sufficient course enrollment. In all cases preparation and approval for this course should be arranged during the academic semester preceding the semester planned for the study to begin. Prerequisite: Permission of faculty advisor.

**HCA 4940 Administrative Internship (6)**  
The student who has completed all required upper division course work is provided an opportunity to observe and engage in administrative practice in a health care setting in order to enhance all prerequisite classroom instruction in the program. Upon successful completion of this course the student will be able (among others) to: 1) recognize and identify the administrative methods used in the organizational placement setting, 2) perform selected admin-

istrative procedures, 3) identify administrative, governance, funding and service structures, and 4) relate academic management theory to the organization's actual functioning. The student's experience will be evaluated by Department faculty through a combination of institutional visits and conferences with the agency preceptor and the student, evaluation of a weekly log kept by the student, and evaluation of final reports submitted by both student and preceptor. Prerequisite: Completion of all curriculum required course work.

## Master of Health Services Administration

### Admission Criteria

Students seeking admission into the graduate program must meet the following minimum requirements:

A Bachelor's degree from a regionally accredited university or college. Prerequisites for admission to this program are upper-division coursework in basic accounting and statistics with grade equivalents of "C" or better. (HCA 4203 and HCA 4711 are examples of equivalent courses provided by the Department.)

A "B" or better average in all work attempted while registered as an upper-division student for a baccalaureate degree, or a total score (verbal and quantitative) of 1000 on the Graduate Record Examination (GRE), or 450 on the Graduate Management Admissions Test (GMAT). Preference will be given to those who meet both of these qualifications. All graduate applicants to this program are required to take the GRE or equivalent test regardless of previous grade-point average.

Meeting the minimum requirements does not guarantee admission to the program. Admission will be based on additional factors such as space availability, relevant work experience, motivation, successful completion of work as a special student, and compatibility of applicant's career goals with the program's objectives. The department adheres to the University policy governing the 10% waiver on admissions.

### Admissions Procedures

A student planning to enroll in the graduate program in Health Services Administration must complete the following steps and meet the stipulated requirements:

- Submit a graduate application for admission to the Admissions Office, and a written statement of his/her career goals in relation to the desire to seek higher education in the field of Health Services Administration. This information should not exceed 500 words in length.
- Have all official transcripts of previously-earned college or university credits sent from the applicant's former institution(s) to the Admissions Office, (copies submitted directly by applicants are not acceptable for application purposes).
- Submit his/her scores on the Graduate Record Examination (GRE) or Graduate Management Admissions Test administered nationally by the Educational Testing Ser-

vice, Box 955 (GRE), Princeton, New Jersey 08540.

Foreign students must submit their scores on TOEFL or a comparable examination, and meet all University admissions standards and procedures for international student admissions (see the appropriate section of the University Catalog).

All admitted students, whether full or part-time may begin their program of study in any semester, and all applications for admissions should be received by the Department no later than two months preceding the semester in which the student wishes to commence the program. If the admissions process cannot be completed in this time frame, the applicant may register as a special student pending admission.

The Department Admissions Committee will review completed applications and candidates will be notified if they are selected for a personal interview, which will be arranged at the mutual convenience of applicants and University faculty or their designee.

### Degree Requirements

To be eligible for a Master's degree, a student must:

- Satisfy all University requirements for the Master of Health Services Administration Program.
- Complete a minimum of 45 semester hours of graduate-level coursework in the department approved program.
- Earn a minimum GPA of 3.0 or equivalent in all work completed at FIU as a graduate student.
- No courses in which a grade below "C" is earned may be counted toward the master's degree.
- A maximum of 9 semester hour-credits of graduate coursework may be transferred from an accredited university by petition at the time of admission.

### Special Student Registration

Special students are those who wish to register for 5000- and 6000-level courses, but who have *not* been admitted to a degree program. Special students may register for 6000 level courses with permission of the instructor. University regulations pertaining to non-degree seeking status must be observed.

### Academic Probation and Dismissal

**Probation:** A student on academic warning whose grade level point average (GPA) in any semester falls below a 3.0 will automatically be placed on warning/probation, indicating serious academic difficulty. The Department, through University channels will appropriately communicate the necessary conditions to be met for continuing to remain enrolled in the program.

**Dismissal:** A student on probation who fails to earn a 3.0 GPA during that semester will automatically be dismissed from further enrollment. A student who has been academically dismissed may apply for readmission no earlier than one year after the semester of dismissal.

## Administrative Residency

Candidates for the Master's degree who have not had appropriate administrative experience in a health care organization are encouraged to pursue an administrative residency as a supplement to the Master's program. The residency is required for persons selecting institutional management specialization.\* The responsibility for locating and arranging an approved placement shall be made by the Field Placement Coordinator in conjunction with the student, the semester prior to student enrollment in the residency. The faculty will supervise the student during this period. During this period, the residency will also constitute full-time matriculation in the program and require payment of regular tuition fees for the field placement courses. For more information, reference should be made to the Department Policy and Procedure Statement on the Administrative Residency.

\*Unless waived.

## Master's Research Project Requirement

The Master's Research Project, if taken as an elective, is normally initiated and completed during the second year. Three credits are awarded for this problem-solving analysis written in standard essay form. For more information, reference should be made to the Department Policy and Procedures Statement on the Master's Research Project.

## Program Requirements

DEGREE: Master of Health Services Administration

*Program Total: Semester Hours 45*

All Department students completing the master's program are also subject to graduate student regulations and degree requirements governed by the policies of the School of Public Affairs and Services and Florida International University.

LOCATION: Graduate courses may be offered on both the Bay Vista and Tamiami campuses as well as appropriate off-campus locations.

*Semester Hours*

I. *Core Courses required of all students 21*

HCA 5101*	Introduction to Health Services	3
HCA 5713	Statistical Methods for Health Services	3
HCA 6114	Health Politics, Policy and Regulation	3
HCA 6201	Financial Management of Health Systems	3
HCA 6431	Public Health and Environmental Management	3
HCA 6504	Health Care Management Theory & Practice	3
HCA 6508	Organizational Behavior in Managing Health Institutions	3

\*HCA 5101 is a prerequisite for all departmental graduate courses except for students who have completed the departments Bachelors program.

For such students HCA 5101 is waived and an elective will be substituted in the Master's program.

II. *Areas of Specialization (One Area required)*

*Semester Hours*

A. *Institutional Management 15*

HCA 6302	Hospital and Health Facilities	3
HCA 6316	Health Law and Legal Aspects of Management	3
HCA 6505	Personnel Management and Labor Relations	3
HCA 6717	Quantitative Managerial Methods	3
HCA 6719	Advanced Health Services Management and Research Seminar	3

*Semester Hours*

B. *Health Planning 15*

HCA 6200	Health Economics & Insurance Principles	3
HCA 6434	Methods of Epidemiology	3
HCA 6610	Applied Program Development and Evaluation Methods in Health Services	3
HCA 6611	Health Planning Methods & Techniques	3
HCA 6691	Health Services Planning & Development	3

*Semester Hours*

C. *Community Health Services 15*

HCA 5425	Long Term Care Administration	3
HCA 6128	HMO and Ambulatory Care Administration	3
HCA 6434	Methods of Epidemiology	3
HCA 6610	Applied Program Development and Evaluation Methods in Health Services	3
HCA 6616	Mental Health Administration & Planning	3

*Semester Hours*

III. *Electives\* 9*

HCA 5135	Emergency Medical Care Systems	3
HCA 5318	Legal Issues and Ethics in Health Care Delivery & Management	3
HCA 6105	Behavioral Aspects of Health & Illness	3
HCA 6117	Policy Science & Health Policy Analysis	3
HCA 6205	Financial Reporting, Review—Reimbursement Systems in Health Care	3
HCA 6206	Methods of Financial Analysis in Health Care Institutions	3
HCA 6509	Advanced Health Care Management Seminar	3

HCA 6613	Design & Functional Planning of Health Facilities	3
HCA 6615	Comparative Health Systems & International Health Planning	3
HCA 6718	Advanced Applications of Operations Research	3
HCA 6732	Masters Research Project	3
HCA 6811**	Administrative Residency	6
HCA 6905	Graduate Independent Study	3

\*Elective courses may include graduate courses offered by any University department including departmental courses in an area of specialization not selected by the student.

\*\*Required for students specializing in Institutional Management, unless waived.

## Course Descriptions

Definition of Prefixes:

HCA — Health Care Administration

HCA 5101 Introduction to Health Services (3)

In this course the student is introduced to organized health services in terms of delivery, financing, resources and function in American society. A wide variety of health care settings, including in-patient-ambulatory, public-private, clinical-administrative, etc., are examined through weekly two-hour lectures by faculty with varied expertise, followed by weekly two-hour seminars during which students will be encouraged to analyze and amplify the lecture material in small group discussions with faculty coordinators. This is a cornerstone course upon which the entire graduate curriculum is a greater degree in more specialized depth.

HCA 5135 Emergency Medical Care Systems (3)

This course is designed to explore the development and implementation of emergency medical service systems. It covers history, legislation, structure and planning of emergency medical services with the objective of preparing managers for EMS systems (such as emergency departments in hospitals, police-fire rescue squads and coast guards, etc.).

The second portion of the course will focus on the special skills required of EMS administrators and planners. The approach in this section will switch to a seminar format with variable topic selection depending upon current developments in the field.

HCA 5318 Legal Issues & Ethics in Health Care Delivery & Management (3)

The legal basis of regulatory boards and agencies is scanned in this course, including the relationships which exist between professionalism, legality, consumerism and ethics in delivering health services in various settings (e.g., urban and suburban hospitals, health centers, nursing homes, home health agencies, etc.). The relationship between organizational and productive efficiency in patient care will be treated in terms of the ethical roles of both providers and consumers. Patients' rights and the role of

the patient to make decisions concerning his care are explored. The issues of life and death decisions and the use and role of modern technology and bio-engineering is examined.

#### HCA 5425 Long-Term Care Administration (3)

This course is aimed at offering the student an overview of administration of long-term care health services for elderly (and others with chronic conditions), both at the institutional and community based levels. To give the students a working knowledge of the holistic approach to the care of elderly and long-term care individuals, and the need to *coordinate the service modalities available for care*, both at institutional and community levels. Also an overview of special needs and problems of individuals who need long-term care. It will include sociological, ethical, political and economic factors associated with long-term care conditions.

#### HCA 5713 Statistical and Research Methods for Health Services (3)

This course deals with concepts of descriptive, inferential and non-parametric statistics, introduction to matrix notation and matrix algebra. Students will use various basic computer packages for matrix manipulation and statistical computations. A separate laboratory for student problem solving and computer training is arranged as part of the studies.

The student is also introduced to the formal study of research design and methodology which applies statistical analysis to problems in health care settings. Surveys are the aspects of formulation of research problems, hypothesis generation and testing, sampling methods, research designs and data analysis. Prerequisite: HCA 4711 or equivalent requiring instructor's permission.

#### HCA 6105 Behavioral Aspects of Health and Illness (3)

This course examines man's capacity to adapt to his social, economic, cultural and psychological environment and the degrees of health and illness which result. Differing definitions of health and illness impact significantly on health care delivery. Client population behaviors and beliefs can either impede or make effective health care management processes. Individual and professional ability to identify and manage stress is studied. The remedies of holistic health are evaluated.

#### HCA 614 Health Politics, Policy and Regulations (3)

This course examines the power structure of communities and who governs. It also examines the use of consumer rights and consumer participation in making health care decisions.

In this course the role of government and forces in the private sector are analyzed in determining national, state and local health policies for American society. Various political structures and interest groups that influence the design and implementation of health policy are studied to understand the nature of their involvement in this process. The increasing role of regulation and public control in the health care industry will be examined in terms of current direction and impact on the management and

financing of health facilities and services.

#### HCA 6117 Policy Science and Health Policy Analysis (3)

This course is an introduction to Health Policy as seen within the context of the evolution of Social Policy. Building on an analysis of the evolution of national social policy, the course will examine major health policy issues. Various theories of policy making are considered, as well as a study of the various interest groups and processes involved. The course will examine major current health policy issues and examine historical and current efforts to effect change.

#### HCA 6128 HMO & Ambulatory Care Administration (3)

The course involves an overview of the management process employed in health maintenance organizations (HMO's) and other group medical practices operating under various financial arrangements, including pre-payment.

Topics include analysis of the organization, delivery and planning of ambulatory care in hospitals, and free-standing facilities with a focus on preventive care, cost containment, accessibility and availability of primary health services at the community level.

Case studies are used to review successes and failures in group practice organization with the objective of exploring ways to increase both its quality and cost-effectiveness. Prerequisites: HCA 5101, 6200 and 6302.

#### HCA 6200 Health Economics and Insurance Principles (3)

Economics tends to deal with health systems in a linear fashion, applying traditional micro-economic analysis. This course will apply such analysis to hospitals and medical practice with special attention to the unique health care market. A systems approach will also be employed including cost-benefit and planning, programming, budgeting methodologies. Analysis of the health care production functions will be related issues of cost containment. General principles of health insurance are reviewed from the point of view of the impact of reimbursement incentives on health care and national health insurance.

#### HCA 6201 Financial Management of Health Systems (3)

The thrust of this course is to prepare health care managers at the executive level to address major issues and questions involving financial planning and management in their organizations. The student will gain insight into current policies of financial control in becoming a responsible management decision-maker. Topics covered in the course include cost finding, working capital management, capital financing, accounts receivable management, investments, internal auditing and budgeting.

#### HCA 6205 Financial Reporting, Review & Reimbursement Systems in Health Care (3)

Financial reporting requirements of health care facilities and programs serve as the primary focus of this course. Cost reporting requirements of medicare, medicaid and private third party payers are analyzed. Requirements of the Annual Report of Hospitals and the Florida

Hospital Cost Containment Commission are reviewed. Provisions of cost-based reimbursement and rate review systems are analyzed. Prerequisite: HCA 6201 or permission of instructor.

#### HCA 6206 Methods of Financial Analysis in Health Care Institutions (3)

This course is designed for advanced students in health care management who have a need for command of methods and principles of financial and economic impact analysis as tools of managerial decision making. Course content emphasizes both the institutional and community level of decision requirements. Prerequisite: HCA 6201 or permission of instructor.

#### HCA 6302 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. Students learn how formal structure, function, policies, inter-professional practices, community needs, and program resources are combined in delivering effective hospital and health services.

#### HCA 6316 Health Law & Legal Aspects of Management (3)

This course includes a survey of currently significant issues in law applicable to the delivery of health care. Included are such areas of concern as professional malpractice, research on human subjects, the rights of patients, hospitalization of the mentally disabled, community participation in the health care system and collective bargaining with health care providers. Emphasis is placed on the relevance of practical problems faced in professional practice to the framework of law and public policy. Other topics include consent to medical and surgical procedures, medical-moral problems, concept of the corporation, principles of hospital liability, charitable immunity, medical records, contracts, taxation, regulatory authority, etc.

#### HCA 6431 Public Health & Environmental Management (3)

This course examines the organization and functions of state and local health departments through the literature and specific case studies. A major health focus deals with environmental entities affecting health status and the programmatic measures and methods which are utilized to develop environmental control.

Students are given an administrative overview of the broad program concerns receiving the attention of public health and environmental management agencies and regulatory efforts to cope with these regional and community problems. Prerequisites: HCA 5101, 6316 or permission of instructor.

#### HCA 6434 Methods of Epidemiology (3)

The methods of epidemiology as applied by public health agencies are presented in historical and current perspective with disease and illness patterns of changing impact. How these techniques have transferred value to hospital, health agency and community environments is a concern of administrators who have high level responsibilities for managing the resources to improve health status. This course provides students with a foundation for applying useful



quantitative tools in monitoring and evaluating levels of illness and disease conditions. Prerequisites: HCA 6431, 5713 or permission of instructor.

**HCA 6504 Health Care Management Theory and Practice (3)**

In this course the student is introduced to the role of modern management concepts, tools and techniques in health care administration, and to practical applications of management theory in health organizations. The course attempts to facilitate an understanding of the managerial role in a complex, dynamic, and multidimensional environment. Prerequisites: HCA 3501 or equivalent with Instructor's permission unless admitted as MHSA program major.

**HCA 6505 Personnel Management & Labor Relations (3)**

This course studies personnel structure, practices, and problems in health care organizations. Topics include salary and wage determinations, task analysis, employee recruitment, selection, testing methods, staffing requirements, and evaluation techniques through use of case studies. The course also reviews governmental regulations and policies affecting the conduct of parties in bargaining relationships between labor and management in health care settings. Theory and principles of collective bargaining, negotiation strategies and tactics, methods of handling union grievances, understanding of agreement clauses, and benefit plans for health workers are additional topics considered.

**HCA 6509 Advanced Health Care Management (3)**

This is an advanced study of management aspects of changing technology, organizations, and systems in the health care industry. Students will actively assist in the seminar presentation of such topics as crisis, management, organization development, stress and time management of human factors, and advanced quantitative applications toward the control of complex systems management problems. Prerequisites: HCA 6504 or equivalent with instructor's permission.

**HCA 6508 Organizational Behavior in Managing Health Institutions (3)**

General theories of organizational behavior and executive functions are examined in their application to hospitals and other health agencies. The nature of administrative process, the role of individuals and groups, human relations, leadership and power, bureaucracy, authority, communications, goal and policy formulation, and functional strain, among other elements, are researched in the context of defining organizational effectiveness. Practical methods for organizational analysis are tested for utility. Prerequisite: HCA 6504 or equivalent with instructor's permission.

**HCA 6610 Applied Program Development and Evaluation Methods in Health Services (3)**

This course enters the process of designing grant applications and the study and application of program evaluation methods. Grant designs for governmental and nongovernmental sources of funds will be examined. Methods of program

evaluation include Delbecq and Delphi, experimental and quasi-experimental designs, planning programming and budgeting (PPBS), and cost-effectiveness. Case studies will be used.

**HCA 6611 Health Planning Methods & Techniques (3)**

This course focuses on methods which produce informed recommendations for health systems evaluation and change. These include needs assessment through nominal group process and Delphi; identification of health indicators; service location models, demand for forecasting, measurement of hospital performance; evaluation of linear regression, queueing analysis, and value analysis; cybernetic control systems; cost-benefit analysis; measurement of capital investment opportunities; and simulation modeling for cost containment strategies.

**HCA 6613 Design and Functional Planning of Health Facilities (3)**

This course recognizes that the health facility administrator must manage institutional planning for new and/or expanded facilities. Course analysis include needs assessment, long range planning, and functional programming. Design includes short term planning and financial analysis. Execution includes phasing in of growth, regulations, and specific pitfalls. Cost containment strategies, including planning for multi-hospital systems are treated. Case studies and field visits are used as part of a laboratory process in which students plan and program specific facility development.

**HCA 6615 Comparative Health Systems & International Health Planning (3)**

This course prepares the student to appreciate the social, political, and cross-cultural aspects of international health care program planning and development found in selected countries of mixed economies (e.g., Latin America and the Circum-Caribbean). The problems and "pitfalls" imbedded in the planning process at national and regional levels in these countries are the focus of cooperative approaches explored.

**HCA 6616 Mental Health Administration and Planning (3)**

Mental health planning and administration are essential for the development of community mental health services. This course will give primary attention to the development of a balanced network of community mental health services. Federal, state and local organizations will be identified and evaluated in their role in this enterprise. Population-based planning and categorical planning will be analyzed on a systems process basis including development, implementation, and evaluation. Third party reimbursement incentives will be considered.

**HCA 6691 Health Systems Planning and Development (3)**

This course is an introduction to the formal organization and professional practice of health planning. Health care services are analyzed on a population basis rather than in terms of program categories. Community, regional and systems approaches to integrated planning are explored. Interventions in health systems at these levels are related to social, political and economic forces that interact dynamically.

**HCA 6717 Quantitative Managerial and Applied Research Methods (3)**

This course begins with an overview of research methodology leading in the student's preparation of an outline for a research proposal during the initial period of topics covered. It then introduces the theoretical and practical aspects of operations research techniques, such as linear programming, computer simulation, and decision analysis. The primary objective here is to give students experience in formulating and solving typical management problems, and acquaint them with the advantages and limitations of research and quantitative techniques. The course will make use of case study material and actual operational data from health care institutions so that students may experience some direct skill applications of the methods and techniques. Prerequisites: HCA 5711 or equivalent with permission of instructor.

**HCA 6718 Advanced Applications of Operations Research (3)**

This course teaches various advanced operations research and industrial engineering techniques for health care managers to apply in systems analysis and quantitative decision-making. Methods include game theory, graph and network analysis, critical path and PERT, queueing models, integer and non-linear programming techniques, and computer simulation. Optimization techniques and the use of the simplex algorithm in problem-solving are examined as they apply to improved administration functioning in health care settings. Prerequisites: HCA 5713 and 6717 or equivalent with instructor's permission.

**HCA 6719 Advanced Health Services Management and Research Seminar (3)**

This is an integration capstone course designed for students in the final stage of their program as an opportunity to integrate the theoretical and practical knowledge acquired in other courses and activities of the curriculum. Selected case studies and relevant research drawn from the literature in health care management provide the substantive framework for seminar analysis of issues and policy questions which may invite attack for resolution through use of various managerial strategies and methods.

**HCA 6732 Masters Research Project (3)**

In this course the student will be 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 first and, after faculty advisor approval, the project will be carried out to conclusion in a final professional report. 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. Prerequisite: Permission of advisor.

**HCA 6811 Administrative Residency (6)**

This course is designed to enhance and complement the academic experience of students majoring in the graduate Health Services Administration program. This off-campus learning experience provides an opportunity to link the

student's academic studies with actual practice in direct observation and supervised participation of the management processes in a selected health care organization. Students participating in this experience will carry out their assigned tasks under the guidance and direction of a field instructor/preceptor from the host agency, who may hold a voluntary adjunct faculty appointment in the Department of Health Services Administration and School of Public Affairs and Services.

**HCA 6905 Graduate Independent Study (1-3)**  
This course is designed to allow students an opportunity for in-depth research or an action-oriented project carried out under the supervision of their faculty advisor. As an elective, an independent study should only be taken after substantial course work has already been completed in the program curriculum. In all cases preparation and approval for this course should be arranged during the academic semester preceding the semester planned for the study to begin. Prerequisite: Permission of faculty advisor.

## Public Administration

Donald Klingner, *Associate Professor and Director*

J. Arthur Heise, *Associate Professor*  
Adam W. Herbert, *Professor and Dean,*  
*School of Public Affairs and Services*

M. Aman Khan, *Assistant Professor*

Ralph G. Lewis, *Associate Professor*

Thomas D. Lynch, *Professor*

Carmen Mendez, *Instructor*

Myung S. Park, *Associate Professor*

Ann-Marie Rizzo, *Assistant Professor*

**LOCATION:** Bay Vista Campus — courses may be offered on the Tamiami Campus or other locations.

**DEGREE:** Bachelor of Public Administration

The Bachelor of Public Administration degree within the School of Public Affairs and Services is offered mainly for students interested in beginning a public service career upon completion of their undergraduate work but also for those who wish to continue in public administration on the graduate level.

**Admission Requirements:** A student who has completed an Associate of Arts degree at a Florida public community college, or has earned 60 semester hours of college credit at any other accredited institution at an acceptable performance level.

### LOWER DIVISION PREPARATION:

Included in the applicant's Associate of Arts degree or equivalent must be one year of English composition, American history, introductory algebra, and economics; and one course in American government, sociology and psychology. The entering student who has not taken these courses must enroll in appropriate courses at FIU. These courses must be taken in addition to the 60 semester hours required for the B.P.A. degree.

### UPPER DIVISION PROGRAM:

*Required Courses:* Semester Hours  
21

PAD 3034	Public Policy and its Administration
PAD 3702	Quantitative Techniques for the Public Sector (prerequisites: STA 3122 or COP 3112 or equivalent)
PAD 4024	Concepts and Issues in Public Administration
PAD 4104	Organization and Administrative Theory
PAD 4223	Public Sector Budgeting
PAD 4414	Personnel Skills for Administrators
PAD 4804	Government and Administration of Metropolitan Areas

Note: Students must maintain a 3.0 average in the seven required courses to be awarded the B.P.A.

### Semester Hours

Area of Concentration Courses: 12

Four courses are to be taken in a selected area of concentration relevant to public administration.

Option I: The student can complete a recommended area of concentration integral to public administration in one of the following subfields:

(a) Administrative Theory and Behavior (Prerequisite: PAD 4104)

Two of the following:

PAD 4432 Administrative Leadership and Behavior

PAD 4103 Politics of Administrative Organization

PAD 3430 Personal Growth and Administrative Development

Plus two of the following:

INP 3002 Introductory Industrial Organizational Psychology

SOC 5261 Industrial Psychology

SOC 4406 The Problems of Bureaucracy in the Modern World

(b) Public Personnel (Prerequisite: PAD 4414)

Four of the following:

PAD 3413 Organizational Group Processes

PAD 5427 Collective Bargaining in the Public Sector

MAN 4320 Personnel Recruitment and Selection

MAN 4330 Wage and Salary Administration

MAN 4322 Personnel Information Systems (Prerequisites: CIS 3000 and MAN 4301)

INP 3002 Introductory Industrial/Organizational Psychology

INP 4203 Personnel Psychology

(c) Urban Policy and Administration (Prerequisite: PAD 4804)

Four of the following:
PAD 3033 Administrators and the Legislative Process
PAD 4103 Politics of Administrative Organizations
POS 3424 The Legislative Process
POS 3122 State Government and Politics
PUP 4314 American Ethnic Politics
POS 4463 Interest Group Politics
PUP 4203 Environmental Politics and Policy
POS 3153 Urban Politics
POS 4154 Topics in Urban Politics and Policy

(d) International Public Administration (Prerequisite: PAD 3834)

Four of the following:

MAN 4610 International and Comparative Industrial Relations

INR 4283 International Relations, Development and the Third World

CPO 4002 Theories in Comparative Politics

INR 3002 Dynamics of World Politics

INR 4931 Topics in International Politics

CPO 4034 The Politics of Development and Underdevelopment

(e) Public Budgeting and Finance (Prerequisite: PAD 4223)

Four of the following:

PAD 4032 Public Choice

PAD 3204 Financing Public Organizations

ECO 3101 Theory of Price

ECO 4504 Public Choice and the Public Finances

ECP 4222 Manpower Problems and Programs

ACC 5865 Governmental and Institutional Accounting (Prerequisite: ACC 4122 or ACC 5311 or equivalent)

ACC 3300 Accounting for Decisions

HCA 4203 Health Care Financial and Accounting Management

(f) Public Sector Analysis (Prerequisites: PAD 3034 and PAD 3702)

Four of the following:

CIS 3000 Introduction to Information Systems

HSC 4201 Information Systems

QMB 3150 Application of Quantitative Methods in Business

COC 3400 Computers and Society

HCA 4711 Quantitative Methods for Health Care

STA 3163 Introduction to Statistical Analysis I

STA 3164 Introduction to Statistical Analysis II

Option 2: The student can select a recommended area of concentration in a functional area closely related to public administration. They include but are not limited to the following:

(a) Criminal Justice

Two of the following:  
 CCJ 3011 The Nature and Causes of Crime  
 CCJ 3020 An Overview of Criminal Justice Systems  
 CCJ 3101 Law Enforcement Systems  
 CCJ 3301 Correctional Philosophy, Theory and Practice

And two of the following:

POS 3603 Constitutional Law: Powers  
 POS 3604 Constitutional Law: Limitations  
 POS 4284 Judicial Behavior  
 POS 4493 Politics of Judicial Administration

(b) Applied Urban Administration:

Four of the following:  
 PAD 4603 Administrative Law  
 PUP 4520 Politics of Urban Transportation Decision-Making  
 ETC 3570 Introduction to Transportation Systems  
 URP 3000 Urban Planning Concepts  
 URP 4021 Urban Land Use Planning  
 ARC 4335C Site Development  
 POS 4154 Topics in Urban Politics and Policy: Urban and Environmental Policy and Design

(c) Social Work

Students must take these required courses in sequence:

SOW 3113 Dynamics of Human Behavior in the Social Environment (Prerequisites: PSY 3013, DEP 3000 or their equivalents).  
 SOW 3232 Social Welfare Policy and Services I  
 SOW 3313 Methods of Social Work Practice I

Depending on the individual's interests in the field, he or she may select *one* of the following with the approval of an advisor:

SOW 4125 Dynamics of Human Behavior in the Social Environment  
 SOW 4233 Social Welfare Policy and Services II (Prerequisites: SOW 3232, SOW 3511 and SOW 3522)  
 SOW 4322 Methods of Social Work Practice II (Prerequisites: SOW 3313, SOW 4124 or their equivalents)

Option 3: The student can select an area of concentration to fulfill his/her personal needs by designing an individual program with the advice and approval of the public administration faculty.

*Elective Courses:*

Seven courses will consist of general coursework to be completed outside the Department of Public Administration. These courses are to be selected with the approval of the Department of Public Administration from offerings by the Departments of English, Economics, Mathematical Sciences, Sociology / Anthropology, Political Science and elsewhere.

## Master of Public Administration

LOCATION: Tamiami Campus, Bay Vista Campus, and off-campus locations.

DEGREE: Master of Public Administration

The Master of Public Administration degree within the School of Public Affairs and Services is offered to prepare individuals for successful public service careers. Given, on the one hand, the varying needs of the students, and on the other, the demand for highly qualified professionals, the MPA program is demanding but flexible. Therefore, the Department seeks serious students who challenge it to provide them with a genuine learning experience tailored to their individual needs.

*Admission Requirements:* All applicants must hold a baccalaureate degree from a regionally accredited college or university. In addition, each applicant must have a Graduate Record Examination (GRE) composite score of at least 1000 on the Verbal and Quantitative sections OR a grade point average (GPA) of 3.0 or better (on a 4.0 scale) for all college coursework on the junior and senior level. An applicant with a 3.0 GPA and above is required to take the GRE under Board of Regents policy.

### Program of Study

The Master of Public Administration program is a 39 semester hour program composed of seven required courses (21 semester hours):

PAD 6053 Political, Social and Economic Context of Public Administration  
 PAD 6106 Organizational Theory and Administrative Behavior  
 PAD 6227 Public Finance and the Budgetary Process  
 PAD 6417 Public Personnel Administration  
 PAD 6701 Quantitative Methods and Computer Skills  
 PAD 6706 Research Methods in Complex Public Organizations  
 PUP 6005 Public Policy

Any core course may be waived through petition to the faculty. In such cases, students must demonstrate that their performance in previous course work meets or exceeds core course requirements.

The remaining 18 semester hours can be earned by pursuing one of three different tracks. These tracks are based on the fact that in general terms the students in the program fall into two major

categories: those who already have public sector experience, and those who wish to embark on public service careers but whose relevant experience is limited. To accommodate the diverse needs generated by those backgrounds, three tracks are included in the program.

Track I is aimed at persons seeking a more general background in public administration. All non-core courses are arranged into six modules. These modules are not concentrations or specializations, but simply clusters of courses arranged by commonality of subject matter:

Module I: Values and Administration	
PAD 5041	Values and Technology in Modern Society
PAD 6035	Public Interest and the Public Trust
PAD 6042	Democracy and the Administrative State
PAD 6605	Administrative Law and Procedures
Module II: Organizational Behavior	
PAD 5427	Collective Bargaining in the Public Sector
PAD 6109	Organizational Development and Change
PAD 6437	Dynamics of Individual Growth
Module III: Quantitative Management Techniques	
CIS 6204	Management Information Systems
PAD 6205	Public Financial Management
PAD 6715	Public Monitoring and Evaluation
PUP 6006	Public Policy Analysis and Evaluation
Module IV: Administrative Issues	
PAD 5435	Administrator and the Role of Women
PAD 5443	Public Administrator and Media Relations
PAD 6043	Government and Minority Group Relations
Module V: State and Local Governments	
PAD 6807	Urban and Municipal Government Administration
PAD 6816	Regional and State Government Administration
Module VI: International	
PAD 6225	Comparative Public Budgeting
PAD 6836	International Public Administration
PAD 6838	Development Administration

Students electing Track I will take at least one course from five of these six modules.

Track II is aimed at students who wish to specialize in either personnel management and labor relations, or budget and financial management. Students who elect either of these specializations will take at least five courses approved by the Department.

Track III is for those students who wish to concentrate on a particular area relevant to public administration, for instance, public health management, public sector finance and accounting, criminal justice, social work, etc. In such cases, students may take up to 15 semester hours from other departments within the university which offer courses relevant to the area of concentration. Students who select this approach must identify their area of concentration early in their course of study, and all courses to be taken outside the Department of Public Administration must be approved prior to registration. Any remaining course work required to complete the 39 semester hour program is to be chosen from elective courses in Public Administration.

The remaining 3 semester hours may be taken as either PAD 6907, PAD 6915, PAD 6946, or a scheduled elective course. Pre-service students (those lacking at least one year of related post-baccalaureate professional experience prior to the date of application) are strongly urged to enroll in PAD 6946 (Internship). No more than three hours of PAD 6907, PAD 6915, or PAD 6946 will be credited toward degree requirements.

## Course Descriptions

### Definition of Prefixes

CIS — Computer and Information Systems; MAN — Management; PAD — Public Administration; PUP — Public Policy.

### CIS 6204/MAN 6830 Management Information Systems (3)

Introduction to the application of computers to information processing problems in organizations. This includes a survey of the basic computer hardware and software concepts necessary for users to work with information processing personnel. The rudiments of a computer programming language will be taught, and applied to data processing problems. Consideration will also be given to the managerial aspects of information systems planning and development.

### PAD 3033 Administrators and the Legislative Process (3)

A study of executive-legislative interactions; the impact of legislation and legislative processes on administrative policy decision-making and implementation; the influence of administration on the legislating process.

### PAD 3034 Public Policy and Its Administration (3)

Examines the formulation, implementation and evaluation of governmental efforts at federal, state and local levels.

### PAD 3204 Financing Public Organizations (3)

Financial management in public organizations. The securing of funds through taxes and bond issues. The management of funds, and expenditure decisions.

### PAD 3413 Organizational Group Processes (3)

The impact of various organizational climates, tasks, roles and reward systems, on the behavior of both the individuals and groups of employees in public organizations. Particular attention is given to alienation and motivation in job effectiveness and Public Service.

### PAD 3430 Personal Growth and Administrative Development (3)

The administrator as a person. Development of interpersonal skills. Self evaluation and career planning. Training and education for the public service sector.

### PAD 3702 Quantitative Techniques for the Public Sector (3)

Quantitative techniques useful to public administration, non-parametric techniques, probability concepts, and decision techniques are presented, as well as concepts underlying the use of data systems. Prerequisites: STA 3122, or COP 3112, or equivalent.

### PAD 3834 International Comparative Administration (3)

This course is an introduction to a wide range of scholarly and practical ("applied") interests. Emphasis is on institution-building and development administration, particularly within the Third World countries.

### PAD 4024 Concepts and Issues in Public Administration (3)

The function of administrative institutions in society. The growth of administration through the bureaucratic model both as an art and a science. Contemporary and comparative forms and theories of organization. Responsibilities of public servants.

### PAD 4032 Public Choice (3)

Some historical analysis of the origin and concept of the public interest in public administration. The various formulations of public administration as a concept, and contemporary interpretations of same. Specific role definitions and concepts of the public interest and public policy.

### PAD 4040 Public Values, Ethics and Morality in Changing Environment (3)

Theories of value; ethical systems and their influence on administration, behavior and process; the administrator as an ethical actor; value conflict and resolution; the philosophical basis of American thought.

### PAD 4103 Politics of Administrative Organization (3)

The role of political processes in relationship to public organizations and the types of intra- and inter-organizational politics which are unique to public organizations. Effects of these political processes upon organizational performance and their role in promoting or thwarting organizational change.

### PAD 4104 Organization and Administrative Theory (3)

Historical survey of theories of public organization and of contemporary and emerging theories and management issues. With special attention to the role of bureaucratic theory and behavior. Case investigation of bureaucratic experience in federal, state and local levels will be conducted.

### PAD 4110 Administrative Interaction in the Public Sector (3)

Definition and analysis of administrative interfaces with multiple and varied public and private organizations. A study of the role expectation, pressures and opportunities of the administrator in a complex environment.

### PAD 4223 Public Sector Budgeting (3)

The theory and practice of various approaches to budgeting, including time-item, performance, PPBS budgeting. Special emphasis on the role of the budget in shaping the program and performance and policy direction of public organizations.

### PAD 4414 Personnel Skills for Administrators (3)

The general nature of public personnel administration; the development of the civil service system; concepts and issues currently applicable at the federal, state and local levels of government.

### PAD 4415 Administration of Personnel Resources (3)

Problems of training in government service and management of human resources development; the concept of civil service career systems; evaluation of public personnel systems; human relations in supervision; and personnel theory are examined.

### PAD 4432 Administrative Leadership and Behavior (3)

Designed to expose students to a systematically related set of concepts for diagnosing human behavior in organizations; and to establish a positive value for the analysis of problems involving people, structure, environment, task technology, and situational climate.

### PAD 4603 Administrative Law (3)

Surveys the principles of law from the perspective of the public administrator; administrative procedure; procedural due process; delegation of legislative power; regulatory administration; conflict-of-interest statutes, etc.

### PAD 4804 Government and Administration of Metropolitan Areas (3)

An intensive analysis of administrative problems in large complex urban areas encompassing many political entities. Examines overlapping relations among municipalities with special attention given to Dade County as well as current trends in public management and future directions for change.

### PAD 4905 Independent Study in Public Administration (1-6)

Individual conferences, supervised readings; reports on personal investigations; and similar undertakings. Prerequisites: Consent of faculty sponsor and Department Director required.

### 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 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 Administrator 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 Public Administration 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 6035 Public Interest and the Public Trust** (3)

Analysis of the meaning of the public interest, using both experimental and cognitive tools. The purpose is to allow individuals in the course to clarify their current definitions of the concept, and to be exposed to alternative points of view. The course is intended for everyone in the public sector, and all those who have the term "public" in their repertoire of justifications.

**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 6043 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 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.

**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, socio-psychological aspects of organization and management.

**PAD 6109 Organizational Development and Change** (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 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 inter-governmental financial relations.

**PAD 6417 Public Personnel Administration** (3)

This course focuses on the fundamentals of public personnel administration applied to general and specific issues of civil service. Some of the specific issues which will be considered are: the merit system and civil service history and development; manpower development and training; the application of the behavioral approach in personnel administration; unique public personnel management problems; governmental unionization and collective bargaining; and future perspectives in personnel administration.

**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 respon-

siveness under the law; the regulatory process; state administrative law systems; the executive order process; the relationship between administrative law and the checks-and-balance system; discretionary justice; and others.

**PAD 6701 Quantitative Methods and Computer Skills** (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. (No credit will be given to students who have had undergraduate or graduate equivalents.)

**PAD 6706 Research Methods in Complex Public Organizations** (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.

**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 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 6907 Independent Study in Public Administration** (1-6)

Individual conferences; supervised readings; reports on personal investigations and similar undertakings. Consent of faculty sponsor and Department Director required.

**PAD 6915 Independent Research in Public Administration** (1-6)

An individualized research project and report which, if feasible, should include field work with a public organization. Permission of a faculty advisor is required before registering for the course, which should be taken during the last half of the student's graduate program.

**PAD 6946 Public Administration Internship** (1-6)

Supervised work in a public or quasi-public organization. Should not be undertaken until completion of required courses in public administration program. Consent of faculty advisor and Department Director required.

**PUP 6005 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, rationality versus extrarationality, policy environments, and policy roles of proactive public administration) are examined.

**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.

**Social Work**

**Paul K.H. Kim, Professor and Acting Director**

**Sanford Kravitz, Distinguished Professor**

**Monte Koppell, Professor**

**Roger Lind, Professor**

**L. Yvonne Bacarisse, Associate Professor**

**James E. Garrett, Associate Professor**

**Rosa Jones, Associate Professor**

**Magaly Queralt, Associate Professor**

**Betsy Smith, Associate Professor**

**Esther Blynn, Assistant Professor**

**Mary Helen Hayden, Assistant Professor**

The Department of Social Work offers graduate and undergraduate studies leading to the Masters and Bachelors degrees in Social Work.

This profession requires a high degree of knowledge, skill, 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 of social work practice; and identification with values of the profession.

**Bachelor of Science in Social Work**

The program offers an integrated educational experience that combines the theoretical and

the practical. It is designed to prepare the student for beginning professional practice in social work, for entrance into a graduate school of social work, and for participation in society as an informed citizen.

The four semester program includes a sequence of academic courses and field instruction under qualified supervision in social agencies in South Florida.

The program is accredited by the Council on Social Work Education.

**LOCATION:** Bay Vista campus only. — Courses may be offered on Tamiami Campus or other locations.

**DEGREE:** Bachelor of Science in Social Work

**LOWER DIVISION PREPARATION:**

The student desiring to major in Social Work must have completed the Associate of Arts degree at a Florida public community college, or equivalent work from an accredited institution.

**Required Courses:** Before admission to the Social Work program, the student must complete courses in introductory psychology, statistics, American government, and principles of economics, and two courses in sociology.

**UPPER DIVISION PROGRAM:**

	<i>Semester Hours</i>	
<b>Required Courses:</b>	<b>45</b>	
SOW 3113	3	Dynamics of Human Behavior in the Social Environment I
SOW 3125	3	Dynamics of Human Behavior in the Social Environment II
SOW 3232	3	Social Welfare Policy and Services I
SOW 3233	3	Social Welfare Policy and Services II
SOW 3302	3	Introduction to Social Work Practice
SOW 3313	3	Methods of Social Work Practice I
SOW 3403	3	Methods of Community Research
SOW 4322	3	Methods of Social Work Practice II
SOW 4332	3	Methods of Social Work Practice III
SOW 4511	8	Field Experience I
SOW 4512	8	Field Experience II
SOW 4522	1	Integrative Field Seminar I
SOW 4523	1	Integrative Field Seminar II
<i>Electives:</i> with approval of the faculty advisor	<b>15</b>	
	<b>60</b>	

**Remarks:** Students should be aware that courses in this program are sequenced. Students must check with their advisors for pre- and co-requisites courses. A grade of C or better in all courses required for the major is necessary for graduation.

**Course Descriptions****Definition of Prefixes**

SOW — Social Work.

**SOW 3113 Dynamics of Human Behavior in the Social Environment I** (3)

An examination of the psychosocial foundations of social work practice, focusing on the analysis of factors affecting human development and functioning in relation to social systems. Prerequisite: PSY 3013, or equivalent.

**SOW 3125 Dynamics of Human Behavior in the Social Environment II** (3)

Within the framework of the life cycle, the content of this course focuses on the study of selected client systems frequently encountered by social work practitioners. Emphasis is placed on understanding bio-psycho-socio-cultural factors contributing to problems. Prerequisite: SOW 3113 or its equivalent.

**SOW 3232 Social Welfare Policy and Services I** (3)

This course considers the major social welfare programs in the United States: how they emerged and developed, and how they operate today. Analysis of financial resources, decision-making processes, and structure of delivery systems serves as a basis for understanding policy assessment. Prerequisite: POS 3044 or its equivalent.

**SOW 3233 Social Welfare Policy and Services II** (3)

This course considers characteristics and processes common to organizations within the social service system, and the impact of policy decisions on individuals and groups. A systems approach will be used as a basis for understanding strategies for innovation and change. Prerequisites: SOW 3232 and SOW 3302.

**SOW 3302 Introduction to Social Work Practice** (3)

An overview of the profession of social work within the institution of social welfare. Historical and philosophical development, field of practice, values and ethics.

**SOW 3313 Methods of Social Work Practice I** (3)

An overview of social work intervention for the beginning practitioner. Generic values, attitudes and processes in client-worker relationship-building are discussed and analyzed. Authentic case material is utilized to acquaint students with assessment, modes of intervention, goal setting, and implementation. Prerequisites: SOW 3113, SOW 3232, SOW 3302, or their equivalents. Corequisite: SOW 3125.

**SOW 3350 Techniques of Interviewing** (3)

A competency-based course designed to provide students with basic interviewing skills. Emphasis is on acquisition of interview behavior rather than theory. Audio and videotaping, role-playing, simulations, and micro-counseling training methods will be utilized. Prerequisites: SOW 3113 and permission of Instructor.

**SOW 3403 Methods of Community Research** (3)

Introduction to basic skills of research for beginning social work practitioners: background searching, definition of variables, sampling, analysis of data, data depiction, and report writing. This course is also designed to enable social work students to read research articles more

critically, understand reports of results and evaluate evidence for hypotheses. Prerequisite: STA 3013 or its equivalent.

**SOW 3675 Social Work Philosophy and Values** (3)

This course is designed to investigate philosophical and social thought in order to explore concepts of social welfare and to assist students in the identification and clarification of values inherent in the social work profession.

**SOW 3703 Self-Awareness, Self-Modification, and Service** (3)

An experience oriented course directed toward helping students become aware of their own intrapersonal and interpersonal processes and how these may influence their skill and effectiveness as professional helping persons. Emphasis is on personal learning.

**SOW 3949 Co-Operative Education—Social Work I** (3)

A special program permitting social work majors to work in social agencies during alternate semesters, up to a maximum of two semesters. Written reports and supervisory evaluations will be required. This experience may not be substituted for SOW 4511 or SOW 4512. Prerequisites: Three social work courses and permission of Director.

**SOW 4193 The Systems Approach in the Social Services** (3)

This course focuses on general systems theory and its implications for social service delivery. Emphasis is on systems approach models elaborated for social service system analysis. Prerequisite: Permission of the instructor.

**SOW 4242 Child Welfare Policies** (3)

This course deals with legal principles upon which the child welfare system has been built; and the policies and issues that arise in planning services for children in their own homes — homemaker service, day care, and protective services — and in various types of substitute care — foster or adoptive homes and institutions. Prerequisites: SOW 3113 and SOW 3232, or their equivalents.

**SOW 4283 Legal & Administrative Issues in Child Welfare Services** (3)

Legal & Administrative issues relevant to the evolution of child welfare policies and practices are stressed. Decision-making skills in program planning, budgeting monitoring and evaluation are presented. Prerequisites: SOW 3113, 3232, 4242, or permission of instructor.

**SOW 4322 Methods of Social Work Practice II** (3)

This generic skills course is designed to provide students with the theories and techniques of social work practice as applied to small groups. Prerequisites: SOW 3313 and SOW 4125 or their equivalents. Corequisites: SOW 4511 and 4522.

**SOW 4332 Methods of Social Work Practice III** (3)

Provides an understanding of planned change at the community level from a social work perspective, as well as strategies and methods utilized in community organization practice. Identifica-

tion of generalist skills and prevalent models of community organization in social work practice. Prerequisites: SOW 4511, SOW 4522, SOW 4322. Corequisites: SOW 4512 and 4523.

**SOW 4511 Field Experience I** (8)

This is the first 315 clock hour social work practice experience in service to individuals, groups, and/or communities. Placement in an agency or institution is for the purpose of gaining a first-hand awareness of needs and behavioral responses, as well as a knowledge base of expectations, responsibilities, and activities involved in the delivery of social services. This experience facilitates the development of beginning social work skills, and a continually growing awareness of self as a helping person. Majors only. Prerequisites: SOW 3125, SOW 3233, SOW 3302, SOW 3313, and 3403, or their equivalents. Corequisites: SOW 4522 and SOW 4322.

**SOW 4512 Field Experience II** (8)

This second 315 clock hour supervised social work practice experience enables the student to progress toward a higher level of awareness and understanding of needs and behavioral responses. Generic skills are applied more selectively with increasing interest and proficiency in one or more practice areas. This second placement affords the student an opportunity to become a more effective part of the social service delivery system. Majors only. Prerequisites: SOW 4511, SOW 4522, and SOW 4322. Corequisites: SOW 4332 and SOW 4523.

**SOW 4514 Field Experience III** (4 or 8)

This third supervised social work practice experience makes it possible for students to sharpen diagnostic skills and to refine planning and implementation of appropriate helping techniques as these relate to individuals, groups, and/or communities. Majors only. Prerequisites: SOW 4512, SOW 4332, and SOW 4523, or their equivalents.

**SOW 4522 Integrative Field Seminar I** (1)

This course is one-hour seminar, to be taken concurrently with SOW 3511 and SOW 4322, designed to analyze the field experience and integrate theory and practice. It provides an arena for students from various settings to come together in order to provide a richer understanding of social services on all levels. Majors only. Prerequisites: SOW 3125, SOW 3233, SOW 3313, SOW 3302, and 3403, or their equivalents. Corequisites: SOW 4511 and SOW 4322.

**SOW 4523 Integrative Field Seminar II** (1)

This course is a one-hour seminar to be taken concurrently with SOW 4512, designed to analyze the field experience and integrate theory and practice. It provides an arena for students from various settings to come together in order to provide a richer understanding of social services on all levels. Majors only. Prerequisites: SOW 4511, SOW 4522, and SOW 4322, or their equivalents. Corequisites: SOW 4332 and SOW 4512.

**SOW 4621 Crises in the Lives of Women** (3)

Introduction to special experiences in the lives of women which might lead women to seek supportive counseling or other professional as-

sistance. Topics include rape, abortion, sex discrimination, menopause, childbirth.

**SOW 4654 Child Welfare Practices** (3)

Theories and models of intervention with children and adolescents will be examined within the context of the family. The main focus of the course will be on the special diagnostic and treatment skills necessary for the effective intervention with this client population. Prerequisites: SOW 3125 and SOW 3313 or permission of instructor.

**SOW 4658 Permanency Planning in Child Welfare Services** (3)

Emphasis is on those practice skills needed for implementing permanent plans for children "at-risk." Included are intervention strategies for developing contractual arrangements insuring a child's security. Prerequisites: SOW 3125, 3233, 4322, 4654, or permission of instructor.

**SOW 4905 Individual Study** (1-6)

Individually selected program of supervised personal study related to specific social issues. Prerequisite: Permission of instructor.

**SOW 4949 Co-Operative Education—Social Work II** (3)

A continuation of SOW 3949. Prerequisites: SOW 3949 and permission of Director.

**MASTER OF SOCIAL WORK**

The Department offers an integrated program which leads to the degree of Master of Social Work. The program is designed to give the student basic professional education for the practice of social work. All students will be required to acquire or to possess the common base in the areas of professional study considered essential in social work education: human behavior and the social environment, social welfare policies and services, research, and social work practice. The theory acquired in the professional courses will be applied in supervised field experiences in social agencies.

All students will be expected to select one of three specializations — Services to the Elderly, Services to Children and Families, or Administration and Community Development — and to plan a course and field practicum program that supports practice in the specialized field. With the help of faculty, students will develop individualized programs in the specializations that seem most likely to meet their educational needs and contribute to their professional objectives.

The Master of Social Work program is a 58 semester hour program composed of 31 semester hours of the required common base in the first year and 27 semester hours of specialization courses in the second year. The advanced standing Master of Social Work is a 38 semester hour program composed of 11 semester hours of required courses (SOW 5237, SOW 5366, and PAD 6106), and 27 semester hours of specialization course.

For additional information regarding the graduate social work program of study and degree requirements contact the Department directly.

The program has applied for candidacy for accreditation by the Council on Social Work Education.

**ADMISSION REQUIREMENTS:**

Applicants to the graduate program are required to meet the minimum standards set forth by the Florida Board of Regents and the Graduate Social Work Program. This includes a combined score of 1000 on the Verbal and Quantitative Aptitude Tests of the Graduate Record Examination or at least a "B" (3.0 on a 4 point scale) average in all upper-level division work. Application procedure for admission to graduate study will be found in the discussion of university procedure for admission to graduate study in the current FIU catalog. An application to the social work graduate program, a personal narrative and three letters of reference will be required for admission. All applicants should have had at least one college-level course in sociology, and/or cultural anthropology, psychology, political science (American Government), economics, and statistics.

Applicants with a B.S.W. degree from a program accredited by the Council on Social Work Education will be considered for admission to advanced standing. Advanced standing is not automatically granted. It is subject to the following additional requirements: An 11 semester hour summer session, successful completion of the summer session with grades of "B" or better. Final admission to the second year program will be governed by successful completion of the special summer session.

All applicants must be approved for admission by the faculty of the Department of Social Work.

**GRADUATE PROGRAM:****Common Required Courses:** (31)

SOW 5105	Human Behavior and the Social Environment	3
SOW 5165	Human Behavior and the Social Environment	3
SOW 5235	Social Welfare Policy I	3
SOW 5236	Social Welfare Policy II	3
SOW 5342	Social Work Practice I	3
SOW 5344	Social Work Practice II	3
SOW 5404	Basic Research Methodology I	3
SOW 5523	Integrative Field Seminar I	1
SOW 5532	Field Practicum I	6
PAD 6106	Organization Theory and Administrative Behavior	3

**Advanced Standing Required Courses:** (11)

SOW 5237	Advanced Social Welfare Policy and Research	4
SOW 5366	Advanced Social Work Practice	4
PAD 6106	Organization Theory and Administrative Behavior	3

**Specialization Requirements:** (27)

SOW 5354	Services to Children and Families Techniques for Prevention and Early Intervention	3
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SOW 6242	Child and Family Social Policy Issues	3
SOW 6381	Legal Issues in Social Work Practice	3
SOW 6435	Evaluating Social Service Programs I	3
SOW 6655	Advanced Intervention Strategies with Children and Adolescents	3
SOW 6523	Integrative Field Seminar	1
SOW 6535L	Field Practicum Elective	8
Service to the Elderly		
SOW 5643	Understanding the Process of Aging	3
SOW 6245	Social Welfare Policy and Aging	3
SOW 6381	Legal Issues in Social Work Practice	3
SOW 6435	Evaluating Social Service Programs I	3
SOW 6523	Integrative Field Seminar	1
SOW 6535L	Field Practicum	8
SOW 6646	Social Services for the Elderly	3
SOW 6647	Social Work Practice with Aging	3

**Administration and Community Development**

Please check with the Department for a listing of course requirements.

**Course Descriptions****SOW 5105 Human Behavior and the Social Environment I** (3)

An examination of the psychosocial foundations of social work practice, focusing on the study of human micro system — namely, individuals and families — with emphasis on the analysis of bio-psycho-socio-cultural factors affecting human development and social functioning through the life cycle.

**SOW 5165 Human Behavior and the Social Environment II** (3)

This course continues the examination of the psycho-social foundations of social work practice with focus on the study of human macro systems — namely, groups, organizations, communities, society, and culture — from major theoretical perspectives. The course stresses social change as a basic macro concept and places emphasis on developing understanding of major racial-ethnic groups in our society.

**SOW 5217 Seminar in Social Work** (3)  
An exploration of various critical issues of concern to the social work profession. Prerequisite: Permission of instructor.

**SOW 5235 Social Welfare Policy I** (3)  
A beginning study of a historical continuum of institutional mechanisms that carry out specific social welfare systems resulting from social policies developed by society in response to social problems. Power, standards, and scarcity issues are identified, while various definitions basic to the social policy field are established and clarified. Basic analytic and evaluative criteria are introduced.

**SOW 5236 Social Welfare Policy II** (3)  
A study of the present institutional response to social problems and social policy evolution. Definitions, structure, and modes of financing are considered utilizing various models. Specific delivery systems, such as health, income maintenance, housing, correction and child welfare, are explored. Evaluative criteria are further developed upon the framework used in Social Policy I.

**SOW 5237 Advanced Social Welfare Policy and Research** (4)  
Integrates understanding of welfare policy issues with research knowledge and skills. Demonstrates use of social work research in social welfare policy-making and analysis of social service. Prerequisite: Admission to Advanced Standing.

**SOW 5272 Social Welfare: Cross-Culture Comparisons** (3)  
A seminar in which students will analyze and compare social welfare policy, problems, and programs in various countries. This course is designed for seniors and graduate students. Prerequisites: SOW 3232 or permission of the instructor.

**SOW 5354 Techniques for Prevention and Early Intervention** (3)  
This course has been designed to enable the student to learn about crisis intervention etiology, structure and theory so he/she may acquire some beginning practical knowledge in a speciality. This course is designed for seniors and graduate students. Prerequisites: Senior or graduate standing.

**SOW 5342 Social Work Practice I** (3)  
The primary aim of this course is to introduce students to the social work profession and to practice with individuals, families, groups, and organizational systems. The major content areas include: purpose and function of social work, phases of the social work process, values and ethical issues, assessment, and interviewing and recording skills. The material will be presented within a framework that will provide students with the opportunity to view social problems and social work practice in a cross-cultural, multi-ethnic perspective.

**SOW 5344 Social Work Practice II** (3)  
This course will continue to build on the knowledge and skills acquired in the first practice course. It will include an in-depth understanding and application of theories, techniques, and strategies dealing with individuals, families, groups, and organizational systems. Didactic materials will be presented within the framework of a laboratory setting. Through this medium, student's ability to understand, synthesize, and apply appropriate skills will be examined.

**SOW 5366 Advanced Social Work Practice** (4)  
An examination of select theoretical approaches to social work intervention with individuals, groups, communities and organizations with attention to social structure, social systems theory and socio-cultural variations. Prerequisite: Admission to Advance Standing.



**SOW 5405 Basic Research Methodology I** (3)  
The scientific method as a way of knowing problem-solving in research and social work practice. Basic research principles and procedures, with an emphasis on the assessment process in social work practice settings.

**SOW 5523 Integrative Field Seminar I** (1)  
This one-hour seminar, taken concurrently with the first field practicum (SOW 5532), requires students to analyze their field experience and integrate theory and practice. Major only. Corequisite: SOW 5532.

**SOW 5532 Field Practicum I** (6)  
Students spend three days a week in supervised practice in a field setting in which they are expected to carry responsibilities for services to individuals, groups, and/or communities. Generic skills are applied in a range of situations in one or more practice areas. Majors only. Prerequisites: SOW 5105, SOW 5535, and SOW 5342, or equivalents. Corequisite: SOW 5523.

**SOW 5643 Understanding the Process of Aging** (3)  
This course is designed to develop an understanding of the multiple psychosocial problems experienced by the aging person, and the impact of such on the older person's physical and emotional well-being. Such an understanding will facilitate the helping person's ability to evaluate and intervene with behavior responses exhibited by the elderly. Prerequisite: Senior or graduate standing.

**SOW 5684 Professional Values in the Human Services** (3)  
This course is designed to assist students in identification, exploration, and experiencing the values inherent in professionalism, as they are manifested in the various human service professions. Material will be presented in a didactic and experiential manner with a heavy emphasis upon student involvement in the value clarification process. Prerequisite: Senior or graduate standing.

**SOW 5914 Independent Research** (1-6)  
Individually selected program of supervised data collection and analysis. Prerequisite: SOW 3403 or permission of instructor.

**SOW 6242 Child and Family Social Policy Issues** (3)  
A comprehensive overview of the range of child and family policies programs and issues in the U.S.A. in the context of alternative residual and institutional social welfare perspective of policy evolution. Prerequisite: Advanced standing status.

**SOW 6245 Social Welfare Policy and Aging** (3)  
An examination of federal/state social welfare policies affecting the quality of life of the elderly, and an overview of the situation of the aged, and policy formulation and implementation processes. Prerequisites: Admission to Specialization, and SOW 5643. Corequisite: SOW 5643.

**SOW 6281 Legal Issues in Social Work Practice** (3)  
This course will introduce the student to impor-

tant legal aspects of social welfare policy, of social services, and of client rights. It should enable the social worker to provide knowledgeable referrals to legal services and interact effectively with courts and legal counsel. Prerequisite: Permission of instructor.

**SOW 6351 Intervention Strategies in Marriage and the Family** (3)  
This advanced practice course will assist the student in understanding and applying various means of intervention with families. Family systems and various approaches to family therapy will be studied. The influence of cultural and ethnic differences on child-rearing practices and family life styles will be stressed. Prerequisite: Admission to graduate Specialization.

**SOW 6435 Evaluating Social Service Programs I** (3)  
Introduction to experimental and quasi-experimental designs and measurement techniques suitable for evaluation of social service programs. Field experience in defining agency or program goals objectively and designing an actual program evaluation are provided. This course is designed for seniors and graduate students. Prerequisite: SOW 3403 or equivalent.

**SOW 6436 Evaluating Social Service Programs II** (3)  
Implementation of program evaluation proposal generated in SOW 6435. This seminar will provide actual field experience in data collection, analysis, and program evaluation report writing. Prerequisite: SOW 6435.

**SOW 6523 Integrative Field Seminar II** (1)  
This one-hour field seminar taken concurrently with the specialization field practicum requires students to analyze their field experience and integrate theory and practice. Prerequisites: SOW 5522 and SOW 5532. Corequisites: SOW 6535 and Advanced Specialization Practice course.

**SOW 6535 Field Practicum II** (8)  
This field practicum is a 512-clock hour educational experience in an agency setting designed to provide the student an opportunity to develop and practice social work skills in the student's area of specialization. Prerequisites: Admission to advance standing and 3 graduate courses in specialization. Corequisites: SOW 5523, and an advance practice course in the specialization.

**SOW 6646 Social Services for the Elderly** (3)  
A comprehensive overview of existing public and private social service programs for the elderly, and an in-depth exploration of new service delivery models. Prerequisites: Admission to Specialization, and SOW 5643.

**SOW 6647 Social Work Practice with Aging** (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. Prerequisite: SOW 6646. Corequisites: Field Work II, Field Seminar II.

**SOW 6655 Advanced Intervention Strategies with Children and Adolescents** (3)  
This course will provide concentrated study and

application of models of intervention necessary to develop and implement plans for children, adolescents and families within an integrative practice framework. Prerequisite: SOW 6351. Corequisites: SOW 6535 and SOW 6523.

## School of Public Affairs and Services

<i>Dean</i>	Adam W. Herbert
<i>Associate Dean</i>	Yvonne Bacarisse
<i>Assistant Dean</i>	Regina Shearn
<i>Directors:</i>	
<i>Criminal Justice</i>	Robert E. Snow
<i>Health Services</i>	
<i>Administration</i>	Joseph Patterson
<i>Public Administration</i>	Donald Klingner
<i>Social Work</i>	Paul Kim

## Faculty

Bacarisse, L. Yvonne, M.S.W., A.C.S.W. (*Tulane University*), Associate Dean, SPAS, Associate Professor, Social work  
 Blynn, Esther, M.S.W., A.C.S.W. (*Columbia University*), Assistant Professor, Social Work  
 Clark, Robert S., Ph.D. (*New York University*), Professor, Criminal Justice  
 Davis, Donald, Ed.D. (*University of Minnesota*), Associate Professor, Health Services Administration  
 Dunaye, Thomas M., Dr.PH. (*U.C.L.A.*), Professor  
 Frankenhoff, Charles, Ph.D. (*Georgetown University*), M.P.H. (*Johns Hopkins University*), Associate Professor, Health Services Administration  
 Garrett, James, Ph.D. (*St. Louis University*), Associate Professor, Social Work  
 Hayden, Mary Helen, M.S.W., A.C.S.W. (*Florida State University*), Assistant Professor, Social Work  
 Heise, J. Arthur, Ph.D. (*Syracuse University*), Associate Professor, Public Administration  
 Herbert, Adam W., Ph.D. (*University of Pittsburgh*), Dean and Professor, School of Public Affairs and Services  
 Jones, Rosa L., M.S.W., A.C.S.W. (*Florida State University*), Associate Professor and Director of Field Instruction, Social Work  
 Khan, M. Aman, M.Sc., M.A. (*University of Pittsburgh*) Assistant Professor, Public Administration  
 Kim, Paul K., D.W.S. (*Tulane University*), Professor and Acting Director, Social Work  
 Klingner, Donald G., Ph.D. (*Southern California*), Associate Professor and Director, Public Administration  
 Koppel, Monte H., Ph.D., A.C.S.W. (*New School for Social Research*), Professor, Social Work  
 Kravitz, Sanford L., Ph.D. (*Brandeis University*), Professor, Social Work  
 Lewis, Ralph G., Ed.D. (*New York University*), Associate Professor, Public Administration  
 Lind, Roger, Ph.D. (*University of Michigan*), Professor Social Work

Lynch, Thomas D., Ph.D. (*SUNY, Albany*), Professor, Public Administration  
 Marques, Jose A., M.S.W., A.C.S.W. (*Barry College, Miami*) J.D. (*University of Havana*), Associate Professor and Director of Field Internship, Criminal Justice.  
 Mendez, Carmen, M.P.A., (*Florida International University*), Instructor, Public Administration  
 Park, Myung, Ph.D. (*University of Southern California*), Associate Professor, Public Administration  
 Patterson, Joseph, Dr. P.H. (*UCLA*), Professor

and Director, Health Services Administration  
 Queralt, Magaly, Ed.S. (*Barry College*), Associate Professor, Social Work  
 Rizzo, Ann-Marie, Ph.D. (*Syracuse University*), Assistant Professor, Public Administration  
 Salas, Luis P., J.D. (*Wake Forest University*), Assistant Professor, Criminal Justice  
 Shearn, Regina B., Ph.D. (*Florida State University*), Assistant Dean, SPAS, Associate Professor, Criminal Justice  
 Smith, Betsy A., Ph.D. (*State University of*

*New York at Buffalo*), Associate Professor, Social Work  
 Snow, Robert E., J.D. (*Florida State University*), Associate Professor and Director, Criminal Justice  
 Surrrette, Ray, Ph.D. (*Florida State University*), Assistant Professor, Criminal Justice  
 White, Vandon E., Ph.D. (*Purdue University*), Professor, Health Services Administration  
 Wilbanks, William, Ph.D. (*State University of New York*), Associate Professor, Criminal Justice



# School of Technology

# School of Technology

The School of Technology is composed of 11 departments and programs committed to the development of professionals who will serve the community in a wide variety of fields. In addition, there are three units in the School of Technology solely devoted to research and other creative activities.

Bachelor's Degree Programs are offered in the following fields of study:

- Civil Engineering
- Civil Engineering Technology
- Communication
- Construction
- Architectural Technology
- Interior Design
- Construction Engineering Technology
- Construction Management
- Dietetics and Nutrition
- Electrical Engineering
- Electrical and Mechanical Engineering Technology
- Home Economics
- General Home Economics
- Apparel Management
- Industrial Systems
- Medical Record Administration
- Medical Technology
- Occupational Therapy
- Physical Therapy

Master's Degrees can also be earned in the following fields of study:

- Dietetics and Nutrition
- Environmental and Urban Systems

Undergraduate Professional Certificates are available in

- Food Technology
- Heating, Ventilation and Air Conditioning Design
- Industrial and Labor Relations
- Industrial Safety
- Production and Manufacturing

## PROGRAMS

The programs of the School are directed toward the practical use of scientific, engineering and technical principles to meet the objectives of industry, business, and the public. Many programs offer an experiential component concurrent to classroom instruction. Clinical affiliations and field placements are available in local community agencies and businesses as well as other locations in Florida and throughout the United States.

The School provides each student with the opportunity to develop marketable skills and to obtain an education which all prepare him or her for a rewarding career and personal growth.

Underlying the programs of the School is a recognition of the growing impact of technology upon the quality of life and that the proper application of technology is critical to meeting current and emerging needs of man.

## SPECIAL FEATURES

The School is actively engaged in a number of special programs as a service to the community and the University. One of these activities is a

Technical/Vocational Education program in cooperation with the School of Education. Another is the International Association for Housing Science, an organization with membership from more than twenty nations, dedicated to improving housing technology and production, as well as studying the inter-disciplinary aspects of housing. The Engineering Technology Department has developed and supports environmental research activities. The School provides numerous special courses and training institutes in cooperation with other university organizations. The Technology faculty is actively engaged with business, industry and government seeking the solutions to technical and operational programs. They are participating in a variety of applied research projects in such areas as energy, low-cost housing, transportation, solid waste disposal and water resources.

A Drinking Water Research Center was established within the School in 1976 to conduct research to determine methods for producing high quality drinking water.

A Center for Creative Communications and a Labor Research Center are also affiliated with the School.

## GENERAL REQUIREMENTS FOR A BACCALAUREATE DEGREE

In order to obtain a Bachelor's degree from the School of Technology, each student must satisfy the following minimum requirements:

1. Obtain a minimum of 120 semester credits including transfer credits. Some majors require more than the minimum number of credits.\*
2. Complete at least 30 semester credits in the School of Technology.
3. Attain a minimum grade-point average of 2.0 on all School of Technology courses. A grade of "D" in any course taught by the School of Technology and listed as a major requirement may not be counted for graduation. Those receiving "D" in such courses must repeat them or obtain a waiver from the advisor to substitute another course.
4. Satisfy the general education requirements of the State of Florida for the Bachelor's degree by taking those courses at the community college or by a combination of transfer credit, CLEP credit and course credits awarded by the University.
5. Satisfy the particular requirements for his or her own major and all University requirements for graduation.
6. Complete an approved program of study which must be filed with the advisor by the time the student attains senior status (90 cr.) or at least two semesters prior to application for graduation.
7. Have proficiency in the use of language and mathematics appropriate to his or her program and career objectives.

\*Specific requirements beyond the minimum requirements are described in the sections devoted to the various departments in the School.

## ADMISSIONS AND PROGRAM PLANNING-BACHELOR'S DEGREE. ADMISSION REQUIREMENTS.

All Bachelor's degree programs of the School are designed to integrate the community college graduate or junior-level transfer student into

curricula which have established certain minimum competencies or skills as the requirements for the four-year degree. Consequently, requirements may be met in a variety of ways and through various sequences which are accommodated at the freshman and sophomore level by college parallel (A.A.) and technical (A.S.) programs of the community colleges and by four-year colleges. The School admits to full junior standing a student who meets one of the following requirements:

1. Associate of Arts degree from an accredited community college.
2. Associate of Science degree from an accredited community college in the technical discipline of their proposed upper level major, or equivalent (the student with a non-technical A.S. degree should consult the Dean's Office for assistance and may be admitted to certain programs.)
3. Junior Level (60 semester hr. cr.) in good standing at a four-year college.

Others will be considered as exceptions on an individual basis. A student transferring with the Associate's degree (A.A. or A.S.) is normally awarded 60 transfer credits toward the Bachelor's degree. A transfer student from a four-year college may not receive more than 90 credits of transfer toward the bachelor's degree. The transferability of upper-level technical courses is determined by the advisor and is a part of the establishment of the student's program of study.

A student earning the Associate of Science degree should attempt to obtain as many of the general education requirements as possible at the community college, by careful selection of electives. The college parallel student planning to major in Technology should select a pre-professional or pre-science major or should take math, science, and related electives in order to insure rapid progress after transfer.

## PROGRAM OF STUDIES

The requirements for the various majors in Technology are described in terms of fundamental competencies which may be met through specified courses at the University or demonstrated in other ways. These alternative demonstrations include completion of equivalent courses at other colleges, significant and varied work experiences, and non-traditional learning experiences. Since each student may meet requirements in a unique way, based on his or her individual background and experience, each student is required to arrive at a program of study which establishes the specific requirements of his or her degree. The program of study must be approved by both the advisor and student and must be completed by the time the student reaches senior standing or at least two semesters prior to application for graduation. A student who does not comply with this requirement may delay his or her graduation.

## DEPARTMENT MAJORS

Some departments offer a non-structured major in addition to its prescribed majors. The student selecting a department major develops an individualized program of study with an advisor which becomes the degree requirement after it has been approved by the School. A department major must satisfy all the graduation requirements of the School and University

## Department of Communication

Lillian Lodge Kopenhaver, *Assistant Professor and Acting Chairperson*  
 James E. Couch, *Associate Professor*  
 Eric S. Katz, *Assistant Professor*  
 Mel Kiser, *Assistant Professor*  
 David J. LeRoy, *Professor*  
 David L. Martinson, *Associate Professor*

The Department of Communication offers a baccalaureate degree in communication. A wide variety of experiences are available to students interested in careers in advertising, broadcast management, production and news, print journalism and public relations. Courses are also offered in film, and a graduate program in communication has been initiated.

The department seeks to educate and develop communicators who are able to function responsibly in an increasingly complex society. Therefore, the department stresses the mastery of professional skills and an understanding of communication processes.

Course work in the department emphasizes the social, ethical, economic, philosophical and political aspects of the field, as well as vocational skills development.

LOCATION: Bay Vista Campus

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION

COURSES:

### *Student Entrance Requirements*

Applicants to the Department should have already completed their associate degree at an accredited two-year college, or equivalent course work from the University or another accredited college or university. All such previous course work will be evaluated to ascertain that the applying student has met the University's general education requirements, and deficiencies must be corrected within the student's first two semesters. In all previous course work, the student must have a minimum grade point average of 2.0.

Applicants are expected to have a command of the English language. The applicant must obtain a satisfactory grade on the department's English writing and grammar test and pass the department's typing test. The student must contact the Departmental Office to find out the date the tests will be administered. They are generally given within two weeks prior to the beginning of each term. Students who do not obtain satisfactory grades on either test cannot enroll in Journalism 3100 and must enroll in appropriate workshops and courses offered at either campus.

### *Transfer Credit Limits*

Students entering the program may transfer no more than six (6) semester hours of lower division course work in journalism, telecommunication, public relations, advertising or film. Students may not transfer credits for courses in the core. Under exceptional circum-

stances to his or her major. Academic credit (normally, 3 credits per semester) which counts toward the degree is given for the work periods. The student receives full pay for his or her work in industry. Placement in co-op positions is arranged by the Co-op Program and includes both local and national industrial, business and governmental agencies. A Co-op student normally must agree to spend at least three work periods in industry and can, normally complete the upper-division program within two calendar years. An applicant for the Co-op Program is evaluated by the School of Technology. An interested student should contact the Associate Dean. Because of the requirement for three work periods, a student should enter the program during the first semester of the junior year. Inquiries from lower-division students prior to transfer to the University are particularly encouraged, since work may be arranged immediately upon enrollment.

### EXTERNAL DEGREE

The School participates in the External Degree Program of the University and the External Degree student may enroll in a department major. Because of the technical and laboratory requirements of most programs, the School will consider admission of a student to its External Degree Program only under these conditions:

1. Completion of two years of college, preferably with a technical associate degree.
2. The inability to attend the regular program.
3. Substantial work experience, with increasing responsibility, in the technical discipline of the proposed major.
4. A favorable evaluation of the probability of completing the program and the availability of the necessary resources (at this University and at an external site) for the program.

### ACADEMIC APPEAL PROCEDURE

The School endeavors to provide an atmosphere in which the special needs of each student are served. In the event that a student has difficulty in a class or curriculum matter, this should be immediately brought to the attention of the instructor or advisor involved. If resolution is not possible in this way, the student should call the matter to the attention of the responsible Department Chairperson. If the problem still cannot be resolved, the student may appeal to the Dean of the School by stating the grievance in writing and requesting a review. The Dean may hear an appeal or refer the matter for consideration to an Appeals Committee appointed for that purpose.

### MASTER OF SCIENCE DEGREE PROGRAMS

The School has two approved Master of Science degrees, Environmental and Urban Systems, and Dietetics. Prospective graduate students should see Dietetics and Nutrition or Civil and Environmental Engineering Technology sections in this catalog or contact the coordinator of the M.S. programs in Engineering Technology or in Dietetics and Nutrition for information regarding these programs.

in a planned program. The School assumes no responsibility to apply courses to a department major which are taken prior to formal approval of a program of study. The department major is provided to meet special needs; consequently, most students will be enrolled in the structured majors and the School of Technology does not approve a department major unless special needs exist which it can meet. Some students in Industrial Systems enroll in the department major and receive individualized programs of study. In order to obtain the Bachelor of Science degree in a department major the student must normally complete a program including substantial coursework in mathematics, science and related technology.

### ACADEMIC ADVISORS

A student who has been accepted to a degree program in the School of Technology must obtain and consult an advisor prior to the first class enrollment. An advisor may be obtained by contacting the Office of the Dean or the Chairperson of the Department in which an academic major is desired. Continued contact (at least once per semester) with the advisor is urged in order to review progress and register for each succeeding semester. Such contact is required until an approved program of study is completed. Special problems of the student who is undecided about a technology major may be referred to the Associate Dean.

### CREDIT FOR NON-TRADITIONAL EDUCATIONAL EXPERIENCE

The School will consider awarding credit for experience of three basic types:

- A. Compressed courses or training programs such as college seminars, short courses, company seminars, company schools, union apprenticeship schools, and military technical schools.
- B. Regular courses taken from technical institutes or other institutions where normal transfer credit is not applicable.
- C. Work experience wherein the student gains applicable skills and knowledge.

Such credit may be awarded through examination or evaluation of work products. Evaluation of credit for life experience is, of necessity, a very rigorous process with awards given only for significant experiences that are fully documented and applicable to the student's program. Normally, evaluation is based on equivalency to courses required for graduation and credit is limited to a maximum of 17 Semester hours. A student must be fully accepted to a degree program and must have completed at least two semesters of upper-division work (25 hrs.) prior to evaluation of experience for credit. The student wishing consideration for such credit should discuss it with his or her advisor.

### COOPERATIVE EDUCATION

A Cooperative Education (Co-Op) Program is conducted by the School of Technology in conjunction with the Department of Cooperative Education in the Office of Academic Affairs. In this program, a student spends alternate semesters in school full-time and fully employed in industry in a technical position directly related

stances, the department reserves the right to require an applicant to take JOU 3100, even if the student successfully completed a similar course at another institution.

#### Freshman Admission

Upon admission to the University, freshmen are encouraged to meet with the Chairperson of the Department of Communication to discuss what communication courses they may begin taking at the lower division level.

#### Acceptable Performance

Only grades of C or better in departmental courses shall apply for graduation.

#### Core Course Requirements

In addition to any sequence requirements, each student must also enroll in the following:

- MMC 4200 Mass Communication Law
- MMC 4602 Mass Media and Society

#### News-Editorial (Journalism) Sequence

To prepare students for career mobility, news majors will take courses in both print and broadcast news coverage.

1. Besides the core courses, students are required to take the following  
JOU 3100 News Reporting  
(Grade of C or better is required before admission as News-Editorial major)  
JOU 3101 Advanced News Reporting  
JOU 3200 Editing and Makeup  
JOU 4108 Depth Reporting  
JOU 4302 Specialty Writing  
RTV 4302 Broadcast News Reporting
2. Students must select two of the following:  
ADV 3000 Principles of Advertising  
JOU 3600 Photojournalism  
MMC 4500 History of the Mass Media  
MMC 4609 Public Opinion and the Mass Media  
PUR 3000 Principles of Public Relations  
RTV 3000 Principles of Telecommunications  
RTV 3210 Elements of Telecommunication Production
3. Minor(s)
  - a. In consultation with an advisor, the student must develop a coherent series of courses of 15 to 18 credits to comprise a minor. Upon agreement, the Minor Course Plan shall be placed in the student's file. Students are encouraged to consider minors in International Relations, Political Science, Economics, Management, Finance, Marketing, Criminal Justice, Health Services, Environmental Studies and other areas which will give the student knowledge in a field he or she will be covering as a news professional.
  - b. From the department's approved list of courses, the student must select one course from each of the following subject areas: Statistics, Psychology, Economics, Political Science and Sociology.

#### Telecommunication Management Sequence

1. Besides the core courses, students must complete each of the following:  
MMC 3250 Media Management

- MMC 4253 Advanced Media Management
  - MMC 4420 Research in the Mass Media
  - RTV 3000 Principles of Telecommunication
  - RTV 3210 Elements of Telecommunication Production
  - RTV 3500 Telecommunication Programming Theory
  - RTV 4505 Advanced Programming
2. Select one course from the following:  
ADV 3000 Principles of Advertising  
FIL 3000 Principles of Film  
MMC 4609 Public Opinion and the Mass Media  
MMC 4995 Media Presentations  
PUR 3000 Principles of Public Relations

3. Minor(s)
  - a. Students must select in consultation with their advisor one course from each of the following from the department's approved list: Accounting, Statistics, Sociology and Consumer Behavior.
  - b. Students must minor (for approximately 18 credit hours) in one of the following fields: Management, Marketing, Modern Languages, International Relations, Ethnic Relations or Consumer Affairs.

#### Telecommunication-Production Sequence

1. Besides the core courses, students must enroll in the following courses:  
MMC 3250 Media Management  
RTV 3000 Principles of Telecommunication  
RTV 3100 Writing for the Electronic Media  
RTV 3210 Elements of Telecommunication Production  
RTV 3220 Television Production  
RTV 3500 Telecommunication Programming Theory  
RTV 4206 Advanced Production Techniques in Telecommunication
2. Students must enroll in one of the following:  
ADV 3000 Principles of Advertising  
FIL 3000 Principles of Film  
PUR 3000 Principles of Public Relations  
RTV 4302 Broadcast News Reporting
3. Minor(s)
  - a. Students must select from the department's approved course list one course from each of the following: Aesthetics, Intellectual History, Art History and English.
  - b. Students must minor in one of the following fields: Visual Arts, Performing Arts or Modern Languages, Management, Political Science, History, International Relations and Sociology.

#### Advertising

1. Besides the core courses, students in this sequence are required to take:  
ADV 3000 Principles of Advertising  
ADV 3101 Print Advertising  
ADV 4103 Radio-TV Advertising  
ADV 4300 Media Planning  
MMC 4995 Media Presentations  
RTV 3210 Elements of Telecommunication Production
2. The student must select one of the following:  
FIL 3000 Principles of Film  
JOU 3100 News Reporting

- PUR 3000 Principles of Public Relations
- RTV 3000 Principles of Telecommunication

3. Minor(s)
  - a. Students in this sequence must choose four courses from the department's approved list in the following areas: Accounting, Consumer Behavior, History, Political Science and English.
  - b. Students must also minor in one of the following areas: Consumer Affairs, Marketing, Management, Visual Arts, Performing Arts, Modern Languages and International Relations.

#### Public Relations Sequence

1. Besides the core courses, students are required to take the following:  
JOU 3100 News Reporting  
(Grade of C or better is required before admission as a public relations major)  
JOU 4302 Specialty Writing  
JOU 4307 Publications Editing and Design  
MMC 4609 Public Opinion and the Mass Media  
PUR 3000 Principles of Public Relations  
PUR 4800 Public Relations Campaigns
2. The student must select two of the following:  
JOU 3101 Advanced News Reporting  
JOU 3200 Editing and Make up  
MMC 4500 History of the Mass Media  
MMC 4945 Communication Internship  
PUR 4934 Public Relations Seminar  
RTV 3000 Principles of Telecommunication
3. Minor(s)
  - a. From the Department's approved list of courses, the student must select one course from each of the following subject areas: Statistics, Psychology, Economics, Political Science and Sociology.
  - b. In consultation with an advisor, the student must develop a coherent series of courses of 15 to 18 credits to comprise a minor. Upon agreement, the Minor Course Plan shall be placed in the student's file. Students are encouraged to consider minors in Social Sciences, Business and Modern Languages. Attention should also be given to the certificate programs available in the College of Arts and Science.

#### Internships and Practicums

The Department recognizes two kinds of work experience courses: the internship and the practicum. Internships shall be awarded to give recognition for a student's scholarly achievement and to provide a vehicle for further academic growth. The internship is an intensive, structured work experience that allows the student to acquire and/or develop professional vocational skills. Generally, the internship is enrolled in once for three credits. If extenuating circumstances exist, other arrangements can be made, but no more than three internship credits may apply toward graduation. Those applying for an internship should have a 3.0 GPA on courses taken with the department.

The practicum (MMC 4940) is conceptualized as a career alternative exploration vehicle for students seeking knowledge and experience in a career field that may be of poten-

tial interest. Only three credits of MMC 4940 can apply toward graduation.

Students who desire to take a practicum should consult their advisor and obtain permission from the departmental chairperson to enroll in the course. Currently all internships are developed and supervised by the Departmental Chairperson.

## Master's Degree Program

A Master's degree program in Communication has been initiated to offer added depth in a broad range of special areas to the individuals engaged in the profession. As new technological advances transform the industry, a thorough knowledge of all aspects of mass communications becomes more essential for communicators to attain career goals. This Master's degree program is designed to meet all these needs: of journalism educators, broadcast and print journalists, the international press and public relations and advertising practitioners. For journalism educators, these courses count toward re-certification.

## Course Descriptions

### Definition of Prefixes

ADV — Advertising; FIL — Film; JOU — Journalism; MMC — Mass Media Communication; PUR — Public Relations; RTV — Radio-Television; VIC — Visual Communication.

**ADV 3000 Principles of Advertising** (3)  
Survey of the historical development, economic and social aspects of the field.

**ADV 3101 Print Advertising** (3)  
Requirements necessary for graphic presentations in newspaper and magazines.

**ADV 4103 Radio TV Advertising** (3)  
The theory and practice of producing advertisements for radio and TV.

**ADV 4300 Media Planning** (3)  
Reviews the strategy of planning media purchases in campaigns.

**FIL 3000 Principles of Film** (3)  
Introduces the film industry, with background structure and functions of the feature film.

**FIL 4202 Film Production** (3)  
A course in 16mm film production. Students will participate in an organized film production including budgeting, scripting, field production and editing.

**FIL 4230 Film Animation** (3)  
Traces the development of animated film as both entertainment and persuasive medium.

**FIL 4300 History of Non-Fiction Film** (3)  
Study of the documentary and propaganda film as a communication art form.

**FIL 4408 Contemporary Commercial Film** (3)  
Studies the release cycle of current feature films with attention to the American product.

**FIL 4600 Economic Aspects of Film** (3)  
Survey of economic, legal, logistic considerations in producing and releasing feature films.

**FIL 4940 Film Internship** (3)  
Structured field work in selected film industries. Prerequisite: Senior standing.

**FIL 4941 Film Production Practicum** (3)  
Student pursues a structured work experience at a major production house.

**JOU 3100 News Reporting** (3)  
To teach the skills necessary to recognize and produce a good news or feature story. Experience with news values/judgments, AP style, news lead construction, news writing formats and newsgathering, including working with sources.

**JOU 3101 Advanced News Reporting** (3)  
Controlled field reporting providing experience in source development, interviewing, writing under deadline pressure and regular critique of student works. Prerequisite: JOU 3100.

**JOU 3200 Editing and Makeup** (3)  
Editing news copy for accuracy, brevity and clarity, including practice with AP style, copy and proofreading marks. Learning the role and function of the news editor. Design and layout of newspapers pages, including working with art, photographs and headlines and editing and fitting news copy. Prerequisite: JOU 3100.

**JOU 3600 Photojournalism** (3)  
Study of principles and practices of photographic assignments related to coverage of news and feature events; and methods of selecting final photographs from contact prints.

**JOU 4004 Perspectives in Mass Media** (3)  
Evolution of democratic mass media in their social, political, economic, technical and professional aspects, with special attention given to significant trends and personalities. Prerequisite: Senior status or permission of the instructor.

**JOU 4108 Depth Reporting** (3)  
Actual reporting of area governments and civic affairs. Enhancement of interviewing techniques, investigative skills; includes seminars with politicians, government officials, civic leaders, specialty reporters.

**JOU 4302 Specialty Writing** (3)  
Exploration of a practice in various types of writing, including features, columns, editorials, press releases, brochure copy and other specialized pieces. Prerequisite: JOU 3100.

**JOU 4307 Publications Editing and Design** (3)  
Writing, editing and production of materials in the area of trade, business, industrial and technical press, with special attention given to style and production of tabloid and magazine format publications, brochures and newsletters. Prerequisite: Permission of the instructor.

**JOU 5806 Student Publications Supervision** (3)  
Designed to assist teachers and advisers 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 adviser. In addition, attention is given to matters pertain-

ing to curriculum and methodology for effective journalistic instruction.

**MMC 3250 Media Management** (3)  
Reviews the organization of radio, TV and newspaper enterprises.

**MMC 4200 Mass Communications Law** (3)  
Study of laws that regulate U.S. mass media, interpretations of these laws through recent court decisions, and discussion of the way communicators work within the statutes of their nation and state.

**MMC 4253 Advanced Media Management** (3)  
A senior level course dealing with case studies of media organizations. Prerequisite: MMC 3250.

**MMC 4302 Comparative Systems of Mass Communication** (3)  
An examination of various national and international mass communications systems and the elements which determine the type of systems currently operating throughout the world.

**MMC 4420 Research in the Mass Media** (3)  
Emphasizes audience research for media industries. Deals with both syndicated data and original studies. Prerequisites: Senior standing and one statistics course.

**MMC 4500 History of the Mass Media** (3)  
Development of American media from beginnings in Europe to present day; freedom of the press and its relationships to economic, political and social trends in society.

**MMC 4602 Role of Mass Media in Society** (3)  
Investigation of the role played in the U.S. by the mass communications media as a cultural, social, informational, economic, political and educational force. The interrelationship of all media and their potential impact on the collective population will be studied.

**MMC 4609 Public Opinion and the Mass Media** (3)  
Study of the communication process, persuasion and attitude change. Explores the methods of measuring, analyzing, changing and/or maintaining the public opinion for socially acceptable causes.

**MMC 4613 Effects of the Mass Media** (3)  
Reviews the effects of the media, with special attention to children, minorities and third world countries.

**MMC 4905 Independent Study** (VAR)  
Specialized intensive study in an area of special interest to the student. Consent of faculty instructor is required.

**MMC 4936 Special Topics** (VAR)  
Intensive study for groups of students of a particular topic or limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor or divisional chairperson is required.

**MMC 4940 Media Practicum** (3)  
Structured field-work experience in a media environment.

**MMC 4945 Communications Internship** (3)  
On the job learning activity at selected and approved commercial media. Will include news-



paper, magazine, radio, television and agency placement. Prerequisite: Consent of advisor.

**MCM 5262 New Technologies of Communication** (3)

The principle emphasis is upon new technologies and their utilization by non-profit organizations. Of particular interest are cable television, teletext, satellites, videodisk, and telecommunication trade-offs.

**MCM 5445 Research Methods In The Mass Media** (3)

An advanced course in the design, execution and utilization of research studies by media practitioners with special emphasis on original proprietary studies.

**MCM 5661 Minorities and the Mass Media** (3)  
A critical review of the role of the mass media as it relates to ethnic, religious and social minorities in a pluralistic society.

**MCM 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 communications.

**PUR 3000 Principles of Public Relations** (3)  
An introduction to the theory, history, practice and future of public relations. A comprehensive study of the field.

**PUR 4800 Public Relations Campaigns** (3)  
An advanced course in application of theory to actual implementation of public relations activities, including preparing press kits, press releases, special events, brochures and multimedia presentations. Prerequisites: JOU 4307, PUR 3000, or consent of instructor.

**PUR 4934 Public Relations Seminar** (3)  
Open to public relations emphasis students only. A course designed to allow the advanced public relations student to pursue a specially selected, specific area of public relations (i.e. political, medical, financial, government, corporate, educational, etc.) through in-depth study under a tutorial style of instruction and guidance. Prerequisites: PUR 3000 and PUR 4800, or consent of instructor.

**RTV 3000 Principles of Telecommunication** (3)  
Review of telecommunication industries, organization and practice.

**RTV 4101 Writing for the Electronic Media** (3)  
Emphasis placed on writing for broadcast and full program script preparation.

**RTV 3210 Elements of Telecommunication Production** (3)

Introductory level course on television studio and field production techniques. Major emphasis will be on video field production and editing; composition styles and trends and field production as a distinct form of communication. Students will be required to complete several production assignments.

**RTV 3220 Television Production** (3)  
Greater emphasis on television studio production techniques; composition, script development, direction, lighting, staging, audio and

graphics. Additional emphasis is on video field techniques and incorporation as a studio program element. Students are required to complete several production assignments. Prerequisite: RTV 3210.

**RTV 3500 Telecommunication Programming Theory** (3)

Introductory course in programming, ratings and audience analysis.

**RTV 4206 Advanced Production Techniques in Telecommunication** (3)

A study of the work of the television director. Emphasis on the various aesthetic and psychological factors of television production and their creative application in program production and execution. Prerequisites: Permission of instructor and a grade of B in RTV 3220.

**RTV 4302 Broadcast News Reporting** (3)  
Reporting, writing, and presenting radio and television news programs; analysis of news and public affairs broadcasting; social responsibility for broadcasters. Prerequisite: JOU 3100.

**RTV 4466 Electronic News Gathering** (3)  
Use of ENG in broadcast journalism. Prerequisite: RTV 4302.

**RTV 4505 Advanced Analysis** (3)  
Use of ratings and audience analysis in radio and TV industries.

## Construction Department

*Iraj Majub, Professor and Chairperson*  
*Bhaskar Chaudhari, Professor*  
*Jack Clark, Professor*  
*Okhtay Ural, Professor*

*Jaime Canaves, Assistant Professor*  
*Jaime Canaves, Assistant Professor*  
*Ralph Johnson, Assistant Professor*  
*Hedvika Meszaros, Assistant Professor*  
*Julio Otazo, Assistant Professor*

The Construction Department of the School is dedicated to a multi-disciplinary approach to the construction industry. By selecting from the fields of engineering, architecture, management, and interior design, its programs develop a system of skills applicable to the complex and interrelated problems of development, construction, and structures. As one of the major factors in our economy, the construction industry also plays a direct role in our quality of life and occupies a position of major concern in the curriculum of the University.

The Construction Department has four specific majors: Architectural Technology, Construction Engineering Technology, Construction Management, and Interior Design, in addition to a Master degree in Urban Planning Systems.

Articulation agreements have been made with Broward Community College and Miami Dade Community College (members of the Southeast Florida Educational Consortium) to facilitate the transfer of graduates of appropriate lower division programs to programs at FIU.

## Architectural Technology

This program gives the student a multi-disciplinary knowledge of the major areas related to the practice of Architecture. Emphasis is on the technical as well as the managerial aspects of the architectural project. These aspects include cost estimating and economic planning; the systematic approaches to building design, design development, preparation of working drawings and specifications; areas of field management and office administration; strength of materials; and theory and design of structures. Furthermore, the student is given the option of concentrating on one or more of the above areas by selecting related electives in consultation with his/her advisor. Articulation agreements have been made with the Department of Building Construction at U.F. and the School of Architecture at FAMU for transfer of graduates of this FIU program to master level studies at these institutions.

LOCATION: Tamiami Campus (some courses available at Bay Vista Campus).

DEGREE: Bachelor of Science in Architectural Technology

**LOWER DIVISION PREPARATION:**  
Completion of an Associate's degree program in Architectural Technology or pre-architecture; or academic credit or proven competency in the following areas: algebra and trigonometry (or technical mathematics), physics, construction materials, architectural design, architectural drawings, technical writing, building codes — plus completion of general education requirements.

### UPPER DIVISION PROGRAM:

		Semester Hours
<b>Major Requirements*</b>		<b>59</b>
ARC 3450	Architectural Innov. for Construction	3
ARC 3484	Advanced Architectural Drawing and Design I	4
ARC 3586	Building Systems	3
ARC 3786	Survey of Arch. History	3
ARC 4039	Architectural Design	4
ARC 4270	Professional Office Practice	4
ARC 4335	Site Development	4
ARC 4485	Advanced Architectural Drawing and Design II	4
ARC 4590	Structural Design	4
BCN 3402	Mechanics of Materials	3
BCN 3611	Construction Cost Estimating	3
BCN 3703	Management of Construction Projects	3
BCN 3740	Legal Aspects and Construction Labor Law	3
BCN 3761	Specification Writing	4
BCN 3762	Codes & Specifications	3
BCN 4260	Quality Control in Construction	3
BCN 4561	Environmental Control in Buildings	4

\*or demonstrated competency

*Electives:* Selected with an advisor to meet degree requirements and program objectives (minimum requirement): 3

(Minimum) 62

## Construction Engineering Technology

This program offers a specialized treatment of the construction process. Emphasis is placed on technical courses in fundamentals of construction, management of personnel and equipment, inspections, mechanical and structural design, construction economy, construction materials, and construction methods.

LOCATION: Tamiami Campus and Bay Vista Campus.

DEGREE: Bachelor of Science in Construction Engineering Technology

LOWER DIVISION PREPARATION:

Academic credit or proven competency in the following areas: mathematics through calculus, physics, surveying, construction materials, drawing or drafting, statics.

*Remark:* A student without this preparation may obtain it while completing the upper division program by taking additional electives.

UPPER DIVISION PROGRAM:

*Semester Hours*

<i>Major Requirements*</i>		<i>Semester Hours</i>
ARC 3586	Building Systems	3
ARC 4335	Site Development	4
ARC 4590	Structural Design	4
BCN 3240	Construction Methods and Equipment	3
BCN 3611	Construction Cost Estimating	3
BCN 3703	Management of Construction Projects	3
BCN 3720	Construction Costs and Scheduling	3
BCN 3762	Codes and Specifications	3
BCN 4561	Environmental Control in Buildings	4
BCN 4906	Special Topics (advanced estimating)	3
COP 3112	Introduction to Computers	3
ETC 3210L	Soil Mechanics Laboratory	2
ETC 3220C	Soil Mechanics and Foundations	3
ETC 3322C	Advanced Surveying	3
ETC 3410	Determinate Structural Analysis	3
ETG 3520L	Materials Testing	1
ETG 3530	Strength of Materials	3
ETI 4671	Engineering Economy	3

\*or demonstrated competency

*Electives:* Selected with an advisor to meet degree requirements and program objectives (minimum required): 6

(Minimum) 60

## Construction Management

This program is designed to develop individuals for management, supervisory or

technical positions in the construction industry and related business, and for those who would engage in their own construction-related business activities. Emphasis is on technical and management essentials, such as cost estimating, project field management and operations, methods and equipment, codes and specifications, contract administration, job planning, scheduling, inspections, site development, construction materials, construction economics, cost control, labor relations, and safety.

LOCATION: Tamiami Campus and Bay Vista Campus.

DEGREE: Bachelor of Science in Construction Management

LOWER DIVISION PREPARATION:

Academic credit or proven competency in the following areas: algebra and trigonometry, surveying, construction materials, drawing or drafting.

*Remark:* A student without this preparation may obtain it while completing the upper division program by taking additional electives, in those fields of deficiency.

*Semester Hours*

<i>Major Requirements*</i>		<i>Semester Hours</i>
ARC 4270	Professional Office Practice	4
ARC 4335	Site Development	4
ARC 4590	Structural Design	4
BCN 3240	Construction Methods and Equipment	3
BCN 3402	Mechanics of Materials	3
BCN 3611	Construction Cost Estimating	3
BCN 3640	Economic Planning for Construction	3
BCN 3703	Management of Construction Projects	3
BCN 3720	Construction Costs and Scheduling	3
BCN 3730	Construction Safety	3
BCN 3740	Legal Aspects and Construction Labor Law	3
BCN 3762	Codes and Specifications	3
BCN 4260	Quality Control in Construction	3
BCN 4561	Environmental Control in Buildings	4
BCN 4906	Special Topics (advanced estimating)	3
BUL 4111	Business Law I	3
ETI 4671	Engineering Economy	3

\*or demonstrated competency

*Electives:* Selected with an advisor to meet degree requirements and program objectives (minimum required): 5

(Minimum) 60

## Interior Design

This is an interdisciplinary program integrating areas pertinent to the field of interior environments. It includes considerations in business procedures: commercial residential and institutional design associated with this

profession, and development in the ability to integrate design including basic design elements, space relationships, materials, and interior requirements.

LOCATION: Tamiami Campus and Bay Vista Campus.

DEGREE: Bachelor of Science in Interior Design

LOWER DIVISION PREPARATION:

Completion of an Associate's degree in Interior Design or related area.

UPPER DIVISION PROGRAM:

*Major Requirements:* With the approval of the advisor, students must complete a minimum of 61 credits selected from the following list:

<i>Semester Hours</i>	
<i>Major Requirements*</i>	<i>Semester Hours</i>
ARC 3786	Survey of Architectural History
	3
ARC 4039	Architectural Design
ARC 4270	Professional Office Practice
	4
BCN 3611	Construction Cost Estimating
	3
BCN 3740	Legal Aspects & Constr. Labor Law
BCN 3761	Specifications Writing
BCN 4561	Environmental Control in Building
	4
IND 3020	Introduction to Architectural Interiors & Housing
	3
IND 3210	Advanced Interior Design I
	4
IND 4220	Advanced Interior Design II
	4
IND 4221	Institutional Interiors
IND 4224	Exhibit and Display Design
	3
IND 4311	Media & Methods of Presentation
	3
IND 4905	Independent Study (Thesis)
	3
MAR 3023	Marketing Management or Equiv.
	3
MAR 4503	Consumer Behavior
	3

\*demonstrated competency

*Electives:* Selected with an advisor to meet degree requirements and program objectives (minimum required): 6

(Minimum) 61

## Master of Science in Environmental and Urban Systems

The Urban Planning Systems option of the Master of Science Program in Environmental and Urban Systems is a program dealing with the interdisciplinary nature of built environment, particularly the problems related to housing and urban development. It is designed for those professionals who are already in the field and the new graduates of programs which relate to construction, architecture, construction engineering and urban studies.

LOCATION: Tamiami Campus only.

DEGREE: Master of Science in Environmental and Urban Systems

## Course Descriptions

### Definition of Prefixes

ARC — Architecture; BCN — Building Construction; IND — Interior Design; LAA — Landscape Architecture

**ARC 3127 Graphic Communication (3)**  
To develop the understanding and graphic skills necessary to the conception and communication of design and engineering technology. The course is flexible in order to accommodate different student backgrounds. Basic graphic methods and media including orthographic and isometric projection; one and two-point perspective; composition, lettering and presentation techniques.

**ARC 3210 Architectural Concepts of Construction (3)**  
Introduction to principles of design and perception. Study of user's need relationship with environmental and human factors. Examination of architectural design ideas and their development. Prerequisite: ARC 3466, or equivalent.

**ARC 3450 Architectural Innovations for Construction (3)**  
Specialized study in an area of interest to the student, where architectural design is used with new methods of construction due to advancing technological developments. Drawings and field surveys. Prerequisite: Consent of instructor.

**ARC 3466 Materials and Methods of Construction (3)**  
A study of the types of construction and materials used in buildings. How materials are properly installed and inspected, including the use of special equipment, in accordance to specifications, codes, standards, and agencies' recommendations.

**ARC 3484C Advanced Architectural Drawing and Design I (4)**  
Methodology of planning and design of architectural projects, with special emphasis on working drawings and detail drawings. Prerequisite: ARC 3127 or equivalent.

**ARC 3586 Building Systems (3)**  
Introduction to the problems related to the production of mass housing and applications of "industrialization" to the process of building. Systematic analysis and evaluation techniques of modular construction. Prerequisite: ARC 3466, or equivalent.

**ARC 3786 Survey of Architectural History (3)**  
Comprehensive study of architectural forms, styles and construction techniques throughout history. Prerequisite: ARC 3466, or equivalent.

**ARC 4039 Architectural Design (4)**  
Integrated study of basic design concepts and principles of design. Development of architectural design products, presentation drawings, plans and quantity surveys. Prerequisite: ARC 3127, or equivalent.

**ARC 4270 Professional Office Practice (4)**  
Assignments in office administration, negotiation of contracts, fee structure, client and public

relations. Business organization, procedure scheduling and task allocation within an architectural office. Prerequisite: BCN 3740, or equivalent.

**ARC 4335 Site Development (4)**  
Fundamentals of site planning: physical, economic, social and governmental constraints affecting development zoning; land use controls; subdivision layout; modular design; site characteristics (soil, geology, topography); drainage; access. Design and construction techniques. Prerequisite: Consent of instructor.

**ARC 4485 Advanced Architectural Drawing and Design II (4)**  
New techniques in the preparation of working drawings, detail drawings; inclusion of change orders. Preparation of finish schedules, with correlation to specifications writing. Prerequisite: ARC 3484.

**ARC 4590 Structural Design (4)**  
Elements of structural design in steel, reinforced concrete, and timber, with design specifications per AISC, ACI and NDS. Introduction is prestressed concrete design. Loadings and structural elements commonly encountered in construction will be used for analysis and design. Prerequisite: BCN 3402, or equivalent.

**ARC 5336 Basic Utilities and Housing (3)**  
The study of the importance of basic utilities (such as roads, sewer and water supply systems) in housing planning and construction. A relative cost analysis. Health problems and sociological effects of lack of basic utilities. Innovative concepts to incorporate basic utilities to all housing projects in developing countries. Prerequisite: Consent of instructor.

**ARC 5916 Innovations in Building Technology (3)**  
Experimental approach to new materials and methods applicable to the field of construction. Prerequisite: Consent of instructor.

**BCN 3210 Construction Materials (3)**  
**Lecture/Lab —** A study of the origins, production and uses of construction materials, such as concrete, steel, aluminum, wood, plastics, brick and stone. Includes testing lab, which consists of testing and evaluating properties of construction materials. Prerequisite: Physics.

**BCN 3240 Construction Methods and Equipment (3)**  
Methods, procedures, and equipment used in residential, commercial and heavy construction. Equipping the construction plant. Production value analysis. Work effectiveness studies. Prerequisite: Algebra.

**BCN 3257 Exterior Design (3)**  
Exploration and analysis of the relationship of exterior and interior environment. Emphasis on three dimensional design projects, using basic model making and presentations.

**BCN 3281 Construction Surveying (3)**  
Principles and practices of surveying as it applies to building construction. Prerequisite: Trigonometry or equivalent.

**BCN 3402 Mechanics of Materials (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. Prerequisite: Trigonometry or Technical Math.

**BCN 3611 Construction Cost 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. Prerequisite: ARC 3466 or equivalent. Consent of instructor.

**BCN 3640 Economic Planning for Construction (3)**  
Nature of construction costs, funding sources and arrangements, capital requirements, bonding, insurance, risk and contingency evaluation, general office operations, and bidding procedures. Prerequisites: Physics and BCN 3703, or equivalent.

**BCN 3703 Management of Construction Projects (3)**  
Organization and management theory elements of leadership and human supervision, organization, office operations, labor relations, safety, and work improvement, as they relate to project field operations. Prerequisites: BCN 3720 and BCN 3762, or equivalent.

**BCN 3720 Construction Costs and Scheduling (3)**  
The application of the Critical Path Method and Program Evaluation Review Technique to construction planning, scheduled vs actual job expenditures. Cost forecasting. Development of unit prices from field data. Laboratory is included, which consists of computer applications. Prerequisite: BCN 3611, or equivalent.

**BCN 3740 Legal Aspects of Construction and Labor Law (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. Prerequisite: BCN 3762.

**BCN 3761 Specifications Writing (4)**  
Study of methodology for acquisition of information and transmission of technical and legal requirements for construction projects. Preparation of outline specifications, building description and purchasing specifications. Problems of format, reviewing and updating. Prerequisites: ARC 3466 or BCN 3210 and BCN 3740 or consent of instructor.

**BCN 3762 Codes and Specifications (3)**  
A study of codes required by local, county, and state levels. The writing and reading of specifications: bidding procedures; the relationships between contractors, engineers-architects, owners, subcontractors, and material suppliers. Prerequisite: ARC 3466, or equivalent.

**BCN 4221 Road Construction (3)**  
A study of highway planning pre-construction investigations such as surveys, soil test data and

drawings, types of construction equipment and materials. Familiarization with standard methods required for various governmental agencies. Prerequisite: BCN 3210.

#### BCN 4254 Building Construction

Drawing I (3)

An introductory course in basic drafting and reading drawings. Use of instruments, orthographic projection, lettering, sectional and auxiliary projections and applied engineering geometry are studied. Various technical symbols are studied to facilitate reading of structural, architectural and mechanical drawings. Prerequisite: consent of instructor.

#### BCN 4260 Quality Control in Construction (3)

Quality control as governed by the job inspector, contractor superintendent, architect-engineer, building official, and governmental agencies and requirements. Prerequisite: BCN 3762, or equivalent.

#### BCN 4431 Steel Design (3)

The analysis and design of structural elements and connections for buildings, bridges and specialized structures utilizing structural steel. Both elastic and plastic designs are considered.

#### BCN 4475 Structural Systems (3)

A general study of the methods of structural systems, such as beams, columns, rigid frames, arches, trusses, floors, enclosure systems, and various foundation configurations. The limitations of using various structural materials for the systems will be discussed. Prerequisite: BCN 3402, or equivalent.

#### BCN 4561 Environmental Control in Buildings (4)

A study of concepts and systems for providing optimum thermal, lighting, plumbing, and acoustical conditions, in both commercial and residential buildings. Designed for majors in architecture, interior design, and construction management. Prerequisite: ARC 3466, or equivalent.

#### BCN 4905 Directed Independent Studies (VAR)

Specialized intensive study in an area of special interest to the student. Prerequisite: Consent of instructor.

#### BCN 4906 Special Topics (3)

For a group of students who wish an intensive study of a topic not otherwise offered in the University. Prerequisite: Consent of instructor.

#### 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. Prerequisite: ARC 3586 or BCN 5706.

#### BCN 5706 Interdisciplinary Aspects of Housing (3)

Recognition and definition of all factors which affect the planning, financing, and construction of housing projects. The operations and responsibilities of a multidisciplinary team dealing with the decision process. Prerequisite: Consent of instructor.

#### BCN 5707 Housing and Environment (3)

The impact of housing and construction on a community and environment. The necessity of total planning to protect the environment. Public participation in housing planning. Economics vs. ecology. Prerequisite: None.

#### BCN 5905 Directed Independent Studies (Master's Program) (VAR)

Individual studies under supervision of faculty, tutor, or advisor. Consent of tutor & faculty chairperson required.

#### BCN 5906 Special Topics (Master's Program) (VAR)

Intensive study for small group of students in a particular topic, or a limited number of topics not otherwise offered in the curriculum. Consent of supervisor and department chairperson.

#### 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. Prerequisite: BCN 3706, or equivalent.

#### IND 3020 Introduction to Architectural Interiors & Housing (3)

Application of the elements, principles and introduction to the basic facets of architectural interiors and its relationship to interior environment in general. Prerequisite: ARC 3466 or BCN 3210.

#### IND 3210 Advanced Interior Design I (4)

Consideration and application of design criteria including floor, wall and ceiling materials and treatments, furniture selection and arrangement, illumination, ventilation and selected architectural details for residential spaces. Prerequisite: Junior standing.

#### IND 4220 Advanced Interior Design II (4)

Analysis, synthesis, articulation and design execution of commercial spaces, integrating human factors, environmental-technological systems, activity structure and symbiotic relationships as space design determinates. Consideration of significant aspects of culture design components, and merchandising procedures. Prerequisite: IND 3210.

#### IND 4221 Institution and Industrial Interiors (4)

Analysis and synthesis of institutional functions, administrative controls, resources, constraints and policies in planning economic, behavioral and environmental parameters. Selections and design of selected furnishings and components. Prerequisite: IND 3500.

#### IND 4224 Exhibit and Display Design (3)

Articulation and analysis of exhibit and display planning and design, integrating purpose, perceptual and effectiveness into the design process: emphasis on the coordination of materials, graphic design, color and illumination. Prerequisite: None.

#### IND 4311 Media & Methods of Presentations (3)

Applications of media and materials used in presentation of design concepts and programs

to clients, groups and organizations. Emphasis on various equipment and graphic techniques available, their application and use in simple and detailed communications. Prerequisite: None.

#### IND 4905 Independent Study (Thesis) (VAR)

Simulated conditions of an interior design commission assuming all responsibilities of a professional interior designer, providing all required services including: cost estimate, contract, conceptual design drawings, selection of furniture and accessories, lighting systems, and treatment of walls, floors and ceilings. Prerequisite: Completion of Interior Design curriculum.

#### LAA 3350 Landscape Design I (3)

Application of Basic Design principles to the design of landscape and garden. A general survey of design elements, restraints, plant materials and other garden materials will aid the student to develop projects in a laboratory environment. Prerequisite: ARC 3127

#### LAA 3712 History of Landscape (3)

A survey of landscape history throughout the ages. From the gardens of Mesopotamia, Roman and Islamic periods, the Monastery and Castle gardens of middle ages and the Renaissance, to the influence of Oriental gardens and the modern era. Prerequisite: Consent of instructor.

## Dietetics and Nutrition

Nancy Wellman, *Associate Professor and Chairperson*

Penelope Easton, *Professor*  
Susan Himburg, *Associate Professor and Director, Coordinated Undergraduate Program*

Katharine Curry, *Professor and Associate Dean*

Rasheed Khan, *Associate Professor*  
Sarah Blackburn, *Assistant Professor*

The Department offers a major leading to a baccalaureate degree with a concentration in general dietetics, and courses in nutrition for allied disciplines and students interested in nutrition. The Department also offers a Master of Science degree in dietetics with areas of concentration in clinical and community dietetics or dietetic management. The undergraduate programs are designed to assist the student to gain basic practitioner knowledge and skills. The graduate program prepares the student to assume leadership responsibilities in health care institutions, community health agencies, or private practice. The graduate program allows for concentration in research or field application.

#### Undergraduate Programs

The coordinated undergraduate program meets both academic and experience requirements of the American Dietetic Association for active membership.

The University student must make formal application to the Department for the clinical portion of the program by March 15 before Fall

admission. This special application form can be obtained from the Department. Students must enroll in DIE 3005 — Orientation to Dietetics the summer prior to Fall admission. Students will be provisionally admitted in August based on satisfactorily completing the Fall Semester. Clinical courses are sequential and require two years to complete. Clinical experiences are available in several hospitals and other health agencies. Students must satisfactorily complete a written comprehensive exam to graduate from the program. A graduate of the above program is awarded a Bachelor of Science degree.

With special planning and advisement, a program of study leading to the Bachelor of Science degree in Dietetics and Nutrition without clinical experience may be arranged. This program will meet Plan IV requirements of The American Dietetic Association.

## General Dietetics

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Science in Dietetics and Nutrition

LOWER DIVISION PREPARATION:

The student desiring to major in general dietetics should have completed the following: (1) general education requirements (if not included in the lower division general education coursework, at least one course each in psychology, sociology, economics, two courses in English composition or technical writing); (2) two courses in inorganic chemistry with labs; (3) organic chemistry, two term course with lab or one term complete course with lab; (4) one course in business management; (5) one course in basic foods and one course in quantity foods; (6) one course in basic nutrition; and (7) microbiology.

UPPER DIVISION PROGRAM:

*Semester Hours*

*Major Required Courses:* 72

NOTE: Courses designated below with an asterisk (\*) comprise the clinical component, and must be taken in the order listed. Clinical experiences are supervised by the course instructors. Clinical stations are located in appropriate hospitals, health agencies and school food service programs. Courses marked with an asterisk (\*) are open only to students in the coordinated clinical program. Applied courses and practicum must be taken concurrently with the related dietetics courses.

*Junior Year Summer Term*

DIE 3005 Orientation to Clinical Dietetics\* 2

*Fall Term*

HUN 4410 Nutrition: Infancy — Adolescence 3

DIE 3317 Dietetics in Community Health 3

DIE 3355 Dietetics in Community Health Practicum\* 4

FSS 3316 Food Science for Institutions 3

*Spring Term*

DIE 3125 Management of Dietary Systems 3

DIE 3175 Management of Dietary Systems Practicum\* 6

DIE 3245	Diet Therapy I	3
DIE 3275	Applied Diet Therapy	2
FOS 4041	Food Science	3
<i>Summer Term</i>		
DIE 4435	Dietetic Instruction and Counseling	3
DIE 4436	Dietetic Instruction and Counseling Lab	1
<i>Senior Year Fall Term</i>		
DIE 4246	Diet Therapy II	3
DIE 4277	Diet Therapy II Practicum*	7
DIE 4365	Dietetic Management of Nutrition Programs	3
DIE 4377	Dietetic Management of Nutrition Programs Practicum	2
HUN 4241	Nutrition II	3
<i>Spring Term</i>		
DIE 4536	Advanced Clinical Practicum*	15
DIE 4506	Seminar in Dietetics and Nutrition	3

*Other Requirements:* One course in biochemistry; one course in human physiology; plus any lower division requirements not completed.

*Recommended Electives:* Selected courses in the following areas; education, statistics, social work, health science, adult education, business, anthropology, sociology, computer science.

*Graduate Program*

The Department of Dietetics and Nutrition offers a graduate program leading to the Master of Science degree in Dietetics, with a sub-specialty in either Clinical and Community Dietetics or Dietetic Management. Students enrolled in this program may prepare themselves for positions of responsibility in health care institutions, community health agencies, or private practice. The program allows for concentration in nutrition research or applied nutrition. The program is designed to meet the needs of the professional practitioner of dietetics. Graduate assistantships are available.

Admission to the program requires completion of The American Dietetic Association Plan IV academic requirements. Interested students with undergraduate degrees in related fields may be eligible for enrollment in the graduate program upon completion of graduate course prerequisites. All students must complete ADA academic requirements prior to completion of the Masters of Science degree. An appointment should be made with the Department Chairperson to discuss exceptions and unusual circumstances whereby several graduate courses may count doubly in meeting Master of Science degree requirements and ADA academic requirements.

Minimum entrance requirements, under current Board of Regents policy, must be met. This includes a combined score of 1000 on the Verbal and Quantitative Aptitude Tests of the Graduate Record Examination or at least a "B" (3.0 on a 4 point scale) average in all upper level division work. Application procedure for admission to the program will be found in the discussion of University procedure for admission to graduate study in the current catalog. A personal interview or suitable letters of reference will be re-

quired for admission.

Students who are candidates for the Master of Science degree in Dietetics must complete a minimum of 37 semester hours of graduate study and 30 hours of this must be completed at the University. All of the work must be of recent enough date to be relevant to the field of nutrition today.

The student's program will be planned to be consistent with his/her career goals and in consultation with his/her assigned faculty advisor. The proposed program of study will be filed in the office of the Chairperson of the Department of Dietetics and Nutrition by the end of the student's first semester of full-time study.

Retention in the Master of Science in Dietetics program requires maintenance of a "B" grade point average. Completion of the program will be documented by oral and written examinations.

*Course Requirements For M.S. in Dietetics Semester Hours*

*Research (8-14)*

\*,\*\*DIE 6568 Research Methods in Dietetics 3

\*,\*\*DIE 6578 Field Research Methods in Dietetics

OR

HUN 6558 Laboratory Research Methods in Dietetics 2

Statistics at the Graduate Level 2-3

DIE 6971 Thesis in Dietetics 6

*Scientific Knowledge (5-8)*

\*,\*\*DIE 6937 Graduate Seminar in Dietetics 2

\*HUN 5245 Nutrition and Biochemistry

OR

HUN 6247 Nutritional Pathophysiology 3

\*FOS 6044 Advanced Food Science 3

*Application to Discipline (6-12)*

\*DIE 5247 Diet in Disease Prevention and Treatment

OR

DIE 6593 Special Topics in Dietetics 3

\*\*DIE 6128 Advanced Management of Dietary Systems 3

\*HUN 6521 Advanced Community Nutrition

OR

HUN 6408 Nutrition During the Life Cycle 3

HUN 5123 Ethnic Foods and Nutrition 3

HUN 5611 Nutrition Education in the Community 3

HUN 5621 Food, Nutrition and Communication 3

*Practice (3-6)*

\*\*DIE 6368 Advanced Techniques in Dietetic Practice 3

DIE 6908 Supervised Field Study in Dietetics 3

\*Required for Clinical/Community Track

\*\*Required for Administrative Track

## Course Descriptions

### Definition of Prefixes

DIE — Dietetics; FOS — Food Science; FSS — Food Service Systems; HUN — Human Nutrition

### Undergraduate

**DIE 3005 Orientation to Dietetics** (2)  
Survey of role and responsibilities of the dietitian. Legal and ethical considerations necessary for the student dietitian in clinical experiences. Educational and personal qualifications for specialization in dietetics. Prerequisite: Organic Chemistry or permission of Chairperson.

**DIE 3125 Management of Dietary Systems** (3)  
Survey of various types of institutional food service systems. Will cover management concepts in planning, implementing and evaluating food service systems. Prerequisites: Basic Management, Quantity Food Preparation.

**DIE 3175 Management of Dietary Systems Practicum** (6)  
Provides for developing skills as listed for DIE 3125. Clinical assignments will be made in several food service institutions in this area. Clinical component: open only to a student in the Coordinated Undergraduate Program. Prerequisite: DIE 3355.

**DIE 3245 Diet Therapy I** (3)  
Techniques of adjusting nutrients and food intake to accommodate medical treatments and previous nutrition. Menu writing and analysis, translation of dietary prescriptions, techniques of dietary instruction, dietary histories. Prerequisites: HUN 3122, DIE 3317, HUN 4410, Physiology.

**DIE 3275 Applied Diet Therapy** (2)  
Observation and participation in dietary treatment activities. In clinical institutions and simulated settings, application of menu writing, techniques of diet history and instruction. Corequisite: DIE 3245.

**DIE 3317 Dietetics in Community Health** (3)  
Study of community agencies available for nutrition guidance for differing age groups. Emphasis on nutritional and educational needs of clients. Prerequisites: HUN 3122, DIE 3005. Prerequisite or Corequisite: HUN 4410.

**DIE 3355 Dietetics in Community Health Practicum** (4)  
Observation and participation in activities of community agencies. Nutrition education and counseling experiences. Clinical component: open only to a student in the Coordinated Undergraduate Program. Corequisite: DIE 3317.

**DIE 4195 Special Problems in Dietetic Administration** (1-3)  
In-depth study of a problem in dietetic administration chosen to coincide with a student's interest and career goals. Student will develop objectives stated in behavioral terms and demonstrate skills in information gathering, analysis and technical writing.

**DIE 4246 Diet Therapy II** (3)  
In-depth study of the complex dietetic problems accompanying metabolic disorders with consid-

erations of medical and individual needs. Prerequisites: Biochemistry, Physiology, DIE 3245 or equivalent. Majors only

**DIE 4277 Diet Therapy II Practicum** (7)  
Participation in activities in clinical affiliations focusing on nutritional assessment, planning, treatment and follow-up of patients. Clinical component: open only to a student in the Coordinated Undergraduate Program. Corequisite: DIE 4246.

**DIE 4296 Special Problems in General Dietetics** (1-3)  
In-depth study of a problem in general dietetics chosen to coincide with student's interest and career goals. Student will develop objectives stated in behavioral terms and demonstrate skills in information gathering, analysis and technical writing.

**DIE 4365 Dietetic Management of Nutrition Programs** (3)  
Advanced concepts of managerial functions of a dietitian working as an institutional consultant, a member of a community nutrition program, a private therapeutic consultant (or) (as well as) full time institutional food service administrator will be covered. Advanced standing required. Prerequisites: DIE 3125 or permission of the instructor, basic competency in management principles.

**DIE 4377 Dietetic Management of Nutrition Program Practicum** (2)  
Observation and participation in community agencies, institutions and simulated setting for the development of entry level competencies in the management of nutrition and food service programs. Corequisite: DIE 4365.

**DIE 4435 Dietetic Instruction and Counseling** (3)  
Motivational methods and instructional techniques will be practiced in simulation activities for development of entry level competencies. Advanced standing in dietetics required. Pre or Corequisite: DIE 3245.

**DIE 4436 Dietetic Instruction and Counseling Lab** (1)  
Will provide small group video tape recording practice in dietetic instruction and counseling. To be taken with DIE 4435. Prerequisite: Advanced standing in dietetics.

**DIE 4506 Seminar in Dietetics and Nutrition** (3)  
Study of current dietetic and nutrition problems, and research findings. Open to students with Senior standing only.

**DIE 4536 Advanced Clinical Practicum in Dietetics** (15)  
In-depth study combining theoretical concepts and clinical experience. Learning experience will be planned cooperatively by the student, campus instructor and clinical instructor to meet individual needs and goals of the student. Prerequisite: DIE 4246 and DIE 4277 and permission of Director of the Coordinated Undergraduate Program. Clinical component: open only to a student in the Coordinated Undergraduate Program.

**FOS 3004 Food and the Consumer** (3)  
Study of concerns of purchasing, storage and preparation of food. Consideration of current life style which influences food choices. Designed to give the student skills in purchasing and preparing foods to meet personal, social and physical needs. Demonstration Laboratory included.

**FOS 3021 Fundamentals of Food** (3)  
Study of selection, processing and preparation of food with attention to quality and nutrient retention. Includes equipment choices for food preparation in small quantities. Laboratory included. (Recommended for non-majors).

**FOS 4041 Food Science** (3)  
Physical and chemical changes in food occurring as a result of various methods of processing, preparation, and storage of foods. Prerequisites: Organic Chemistry, HUN 3122, FOS 3021 and FSS 3215, or equivalents.

**FSS 3215 Meal Management and Service** (3)  
Development of skills in basic techniques of purchasing, preparation and service of food for individuals and small groups. Includes laboratory and experiences in demonstration techniques. Prerequisites or corequisites: HUN 3122 and FOS 3021 or equivalent or permission of instructor, preparation in basic foods.

**FSS 3316 Food Science For Institutions** (3)  
Course will emphasize proper food handling in institutional settings with use of sound management principles closely coordinated with food sciences advances and government regulations. Laboratory and field trips will be used to strengthen theoretical concepts. No prerequisites.

**HUN 3017 Nutrition for Health Professionals** (3)  
Study of basic nutrients and nutritional interrelationships with emphasis on normal nutritional needs for achieving and maintaining health. No prerequisites.

**HUN 3122 Nutrition and Culture** (3)  
Nutrients and their interrelationships in reference to food habits and the needs of various population groups. Introduction to the impact of culture in nutrition and the study of personal food pattern development. Recommended for non-majors.

**HUN 3201 Principles of Nutrition** (3)  
Nutrients and their inter-relationships, requirements of individuals and food sources. Investigates current controversies, fads/falacies and health related issues. Recommended for non-majors.

**HUN 3240 Metabolic Aspects of Nutritional Status** (3)  
Course will emphasize the nutritional components of food and metabolic aspects of nutrients. The interaction of nutrients and their complete degradation and utilization to meet the metabolic demands of the body. Prerequisites: 9 semester hours chemistry and HUN 3122, or equivalent.

**HUN 4241 Nutrition II** (3)  
Roles of nutrients in metabolic processes. Effects of excesses and deficiencies. Prerequisites:

Organic Chemistry, Physiology and HUN 3122 or equivalent.

**HUN 4410 Nutrition: Infancy Through Adolescence** (3)  
Study of nutrient needs of women of childbearing years and infants and children. Group feeding programs, government agencies, for children and adolescents. Nutrition education materials and strategies in various economic and cultural groups. Prerequisite: HUN 3122.

#### Graduate

**DIE 5247 Diet in Disease Prevention and Treatment** (3)  
Critical study — historical, current, and experimental. Standards of dietetic practice developed and analyzed. Prerequisites: Completion of American Dietetic Association PLAN IV and permission of Departmental Chairperson.

**DIE 5926 Workshop in Dietetics and Nutrition** (1-3)  
Short term intensive development of selective subject matter in dietetics, nutrition or nutrition education techniques and methods. Prerequisites vary according to subject.

**DIE 6128 Advanced Management of Dietary Systems** (3)  
Application of management and organizational theory to dietetic systems in health and community institutions. Completion of ADA PLAN IV (with two management courses) and permission of instructor.

**DIE 6368 Advanced Techniques in Dietetic Practice** (3)  
Course will cover 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 4436 or equivalent.

**DIE 6568 Research Methods in Dietetics** (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. Prerequisite: Admission to Master of Science in Dietetics program and permission of instructor.

**DIE 6578 Field Research Methods in Dietetics** (2)  
Application of field research methods in interpreting and designing research studies. Introduction to interdisciplinary research approaches. Prerequisites: DIE 6568 and consent of Department Chairperson.

**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: Consent of the Chairperson of the Department.

**DIE 6908 Supervised Field Study in Dietetics** (3)  
Pre-planned practical experience at the professional level in an area of dietetics. Critical written evaluation by the student, developed with frequent consultation and supervision of instructor. Prerequisites: DIE 6578, 25 hours of

graduate study and permission of instructor.

**DIE 6937 Graduate Seminar in Dietetics** (1)  
An exploration of current issues in the field of dietetics and nutrition. Topics are chosen by the class and instructor(s). Each student has an opportunity to lead the discussion. One hour required of all graduate students. Student may repeat up to 3 hours.

**DIE 6938 Special Topics in Dietetics** (3)  
In-depth study of historical, epidemiological prevention and treatment aspects of topics related to dietetics. Prerequisites: PLAN IV ADA, competence in topic covered, admission to graduate program.

**DIE 6971 Thesis in Dietetics** (3-6)  
Prerequisite: DIE 6578 or HUN 6811, 25 hours of graduate study and permission of Director of Thesis.

**FOS 6044 Advanced Food Science**  
In-depth study of the various components of foods and the effect of different methods of processing on their physical and chemical characteristics. Prerequisites: ADA PLAN IV and permission of the instructor.

**HUN 5123 Ethnic Influences of Nutrition and Food Habits** (3)  
Systematic study of the food habits of various cultural groups. Emphasis is 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 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: ADA PLAN IV and permission of instructor.

**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. Prerequisite: Recent courses in nutrition education or permission of instructor.

**HUN 5621 Food, Nutrition and Communication** (3)  
Covers concepts and techniques for effective professional communication with individuals, groups and other professionals. Emphasis is on differences in approach to communication in small groups versus mass media. Prerequisites: Advanced standing, competency in food and nutrition knowledge.

**HUN 5890 Recent Research in Dietetics** (3)  
Updating of dietetic information. Study of current food, management and/or nutrition research. Prerequisite: Competency in foods and nutrition. Recommended for non-majors.

**HUN 6247 Nutritional Pathophysiology** (3)  
Systems of the body in relation to the pathological conditions allied to digestion, absorption, metabolism, and other states in which nutrition plays a part in etiology or treatment. Prerequisite:

sites: ADA PLAN IV and permission of instructor.

**HUN 6408 Nutrition During the Life Cycle** (3)  
In-depth study of nutrient needs of individuals and groups at different stages of life. Emphasis on nutrient inter-relationships and effects of deficiencies and excesses on metabolism. Prerequisite: HUN 4241 or equivalent.

**HUN 6521 Advanced Community Nutrition** (3)  
In-depth study of assessment of nutrition in population groups and needs of public for nutrition information. Emphasis on nutrition consultation for health professionals and dietary care. Prerequisite: DIE 3317 or equivalent.

**HUN 6811 Laboratory Research Methods in Dietetics** (2)  
Laboratory application of research methods in dietetics. Prerequisites: DIE 6568 and consent of department Chairperson.

## Electrical and Mechanical Engineering Technology Department

James Story, *Associate Professor and Chairperson*  
Manuel Cereijo, *Associate Professor and Coordinator*  
Wunnava Subbarao, *Associate Professor*  
Rene Leonard, *Associate Professor*  
Sergio Alcorta, *Associate Professor*  
Ian Radin, *Associate Professor*

The student who wishes to enter a position which emphasizes the practical application of engineering concepts in areas such as manufacturing, production, design, installation, operation, administration, service and sales will be served by the programs of the Engineering Technology Departments. Its programs are designed to give each student technical and organizational knowledge which satisfies the needs of industry, business and government in many rewarding technical careers. The graduate of an Engineering Technology Bachelor's degree program is a technical problem solver, with the skills and training necessary for independent action as a part of the engineering team.

The objectives of the programs include: proficiency in the use of the scientific method; the capability to analyze problems through calculus; the application of processes, equipment procedures and methods to industrial problems; the knowledge of a field of specialization including the underlying sciences; individual judgment, initiative and resourcefulness; capability of establishing an effective rapport with workers, scientists, managers and customers; and effective communication skills.

Two majors are offered in the Department: Electrical Engineering Technology and Mechanical Engineering Technology.

The Electrical Engineering Technology major is professionally accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

## Electrical Engineering Technology

This program offers specialization in the application of electronic concepts, including circuit analysis and design, communications, power, process control, digital systems and related topics.

LOCATION: Tamiami Campus only

DEGREE: Bachelor of Science

### LOWER DIVISION PREPARATION:

Completion of a community college associate's program in electronics technology, electrical technology, or pre-engineering; or the equivalent at a four-year institution. An entering student with an *Associate of Science* degree in Technology should have completed algebra and trigonometry, physics, DC and AC circuits, transistor theory and circuits, semi-conductor devices and digital circuits prior to transfer. Pre-Engineering (Associate of Arts) or other transfer students should have completed mathematics through calculus, physics (with calculus) and other sciences at the lower division. The student whose background does not include all of these skills (in *either* Technology or pre-Engineering) may be admitted with deficiencies which must be made up while enrolled at the University.

### UPPER DIVISION PROGRAM:

		Semester Hours
<i>Core Courses (AA in Pre-Engineering)</i>		12
ETE 3030L	Electronics Lab	1
ETE 3034C	Circuit Analysis with Calculus	3
ETE 3035C	Elec. Cir. Lab & Comp.	2
ETE 3101	Electronics with Calculus	3
ETE 3142	Solid State Devices	3
<i>Core Courses (As in Electronic Technology)</i>		
MAC 3411	Calculus I	3
MAC 3412	Calculus II	5
PHY 3040C	Physics	3
PHY 3041C	Physics	3
<i>Common Core Courses</i>		70
ETE 3620C	Logic Design	3
COP 3112	Introduction to Computers I	3
ETE 3121C	Advanced Circuit Analysis	3
ETE 3565C	Introduction to Electrical Power	3
ETE 3323C	Practical Linear Systems Analysis	3
ETE 3421C	Modern Communication Technology	3
ETE 4123C	Electronic Circuit Analysis	3

ETE 4161C	Integrated Circuits Analysis & Application	3
ETI 4671	Engineering Economy	3
ETE 3526C	Electric Machinery	3
ETE 3661C	Advanced Computer Systems	3
ETC 4170C	Passive and Active Filters	3
ETE 4325C	Advanced Control Systems	3
ETE 3353	Report & Technical Writing	3
<i>Specialization</i>		9

*Minimum Upper Division Required Hours* 63

*Specialization:* of the following areas:

<i>Digital Systems</i>		
ETE 4621C	Advanced Logic Design	3
ETE 4669	Microcomputers I	3
ETE 4683C	Microcomputers II	3
<i>Electrical Power</i>		
ETE 4563C	Electrical Systems in Ind.	3
ETE 4565C	Electrical Power Systems I	3
ETE 4567C	Electrical Power Systems II	3
<i>Electronic Communications</i>		
ETE 3422	Transmission Systems for Communication	3
ETE 4426C	Advanced Communication Systems	3
ETE 4171C	Advanced Filter Design	3

<i>Process Control</i>		
ETE 4324C	Process Control Instrumentation	3
ETE 4665C	Digital Process Control Systems	3
ETE 4666C	Control System Design	3
<i>Mechanical</i>		
EVS 3215C	Applied Hydraulics	3
ETM 3205	Thermodynamics I	3
BCN 3402C	Mechanics of Materials	3

Including both lower and upper division coursework, each student must complete a minimum of 24 semester hours in communications, social science and humanities, and a minimum of 24 semester hours in basic science and mathematics.

## Mechanical Engineering Technology

This program offers specialization in the application of energy, materials, mechanics, and design to industrial problems.

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Science

### LOWER DIVISION PREPARATION:

Academic credit or proven competency in the following areas: mathematics through calculus, physics, engineering drawing, statics, manufac-

turing processes, FORTRAN.

*Remarks:* A student without this preparation may obtain it while completing the upper division program by selection of additional electives.

### UPPER DIVISION PROGRAMS:

		Semester Hours
<i>Major Requirements:</i>		64
ETG 3520L	Materials Testing Lab	1
ETG 3530	Strength of Materials	3
BCN 3560	Mechanical Systems in Construction	3
ETI 4671	Engineering Economy	3
ETG 3510	Dynamics	3
ETM 3801	Basic Materials	3
ETM 3510	Mechanical Design I	3
ETM 3205	Thermodynamics I	3
ETM 4225	Energy Systems	3
ETM 4720	Air Conditioning & Refrigeration Prin.	3
ETM 4221L	Mechanical Laboratory	2
ETM 4652L	Instruments and Measurements Laboratory	2
ETM 4643L	Air Conditioning and Refrigeration Laboratory	2
ETE 3030	Survey of Electronics	3
ETM 3111	Solar Energy Design	3
ETE 3565C	Introduction to Electrical Power	3
EVS 3215C	Applied Hydraulics	3
ENC 3353	Report & Technical Writing	3
ETM 4238	Heat Transfer	3
ETM 4206	Thermodynamics II	3

*\*Electives:* (Must be selected from one subject specialization) 9

*Minimum Upper Division Required* 64

### \*Specializations

<i>A. Heating, Ventilating &amp; Air Conditioning</i>		
ETE 4563C	Electrical Systems in Industry	3
ETM 4750	Air Conditioning Design I	3
ETM 4752	Air Conditioning Design II	3
<i>B. Power &amp; Energy</i>		
ETI 3312	Fluid Mechanics	3
ETM 5515	Solar Energy Technology and Applications	3
ETM 4560	Mechanical Power Theory	3
ETE 3526C	Electrical Machinery	3
ETE 4565C	Electrical Power Systems II	3
<i>C. Manufacturing &amp; Design</i>		
ETI 3110	Quality Control	3
ETI 3661	Plant Layout	3
ETI 3645	Production in Planning & Control	3
ETI 4660	Material Handling	3
ETM 4511	Mechanical Design II	3

Including both lower and upper division coursework, each student must complete a min-



imum of 24 semester hours in communications, social science, and humanities, and a minimum of 24 semester hours in basic science and mathematics (general education requirements.)

## Professional Certificate Program

### Heating, Ventilating, and Air Conditioning Design

The purpose of this Professional Certificate program is to produce a learning experience that will enhance the design capabilities of professionals in the field. Emphasis will include engineering science background as well as practical applications of systems design.

The Certificate will be awarded to a student who successfully demonstrates competency in:

ETM 3205	Thermodynamics I	3
BCN 3560	Mechanical Systems in Construction	3
ETM 4720	Principles of Air Conditioning & Refrigeration	3
ETM 4225	Energy Systems	3
ETM 4750	Air Conditioning Design I	3
ETM 4221L	Mechanical Laboratory I	2
ETM 4642	Air Conditioning Design II	3
ETM 4643L	Air Conditioning & Ref'g Laboratory	2
ETI 4671	Engineering Economy	3

## Course Descriptions

### COMPUTER ENGINEERING TECHNOLOGY

#### Definition of Prefixes

ETE — Engineering Technology; Electrical; COP — Computer Programming.

**ETE 3620C Logic Design** (3)  
Karnaugh maps and Quine McCluskey reduction techniques, study of analytical and empirical tools necessary to design with digital IC's, combinational logic, and sequential circuits are considered (includes lab). Prerequisite: Boolean Algebra.

**ETE 3650C Computer Hardware Fundamentals** (3)  
Analysis of computer elements and systems composed of flip-flops registers, counters, adders, etc., study of basic arithmetic unit, core memory system, control units and organization of these units into a system (includes lab). Prerequisite: Boolean Algebra.

**ETE 3661C Advanced Computer Systems** (3)  
Study of hardware computer systems and components in a laboratory environment, arithmetic and memory system, complete minicomputer, digital communications system, digital modem input-output interface (includes lab). Prerequisite: ETE 3620C.

**ETE 4621C Advanced Logic Design** (3)  
Analysis, design and optimization of combinational systems, and interactive networks; study

of digital systems such as multiplexers, D/A and A/D converters, digital multimeters, modems, arithmetic circuits, etc. Prerequisite: ETE 3620C.

**ETE 4669 Micro Computers I** (3)  
Lecture/Lab — Including hardware, organization, interfacing, system components, application, design and selection. System development and usage through software. Prerequisites: COP 3110 and ETE 3661C.

**ETE 4683C Microcomputers II** (3)  
This course will emphasize design & applications of digital systems using specific microcomputers from an equipment designer's point of view. Hardware, software, & system design concepts will be considered including hands-on hardware and software projects. Prerequisite: ETE 4669 or equivalent.

### COOPERATIVE EDUCATION

#### Definition of Prefixes

ETG — Engineering Technology: General.

**ETG 3949 Cooperative Education Technology** (3)  
Supervised full-time work semester for technology cooperative education students. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

**ETG 4949 Cooperative Education Technology** (3)  
Supervised full-time work semester for technology cooperative education students. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

### ELECTRICAL ENGINEERING TECHNOLOGY

#### Definition of Prefixes

ETE — Engineering Technology; Electrical; COP — Engineering Technology: General; BCN — Building Construction.

**BCN 3521 Electrical Systems in Construction** (3)  
A survey of electrical and lighting requirements for residential, industrial, and commercial buildings. Emphasis on estimating circuits, power requirements, layout constraints, etc. No prerequisites.

**ETE 3030 Survey of Electronics** (3)  
The basic principles of AC and DC circuits, solid state devices, and fundamental electronic circuits. This course is intended for students outside of the Electrical Engineering Technology major with no prior knowledge of electronics (includes lab).

**ETE 3030L Electrical and Electronic Laboratory** (1)  
Introduction to laboratory equipment and techniques for pre-engineering students. Includes laboratory experiments on AC and DC circuits, electronic equipment and circuits. Instrumentation such as meters, oscilloscopes, generators, etc. Corequisite: ETE 3101.

**ETE 3034C Circuit Analysis with Calculus** (3)  
Introduction to AC and DC circuit analysis. Use

of complex algebra and phasors. Loop and node analysis. Resonance circuits. Introduction to three phase circuits. Transient analysis of first and second order circuits using calculus. Prerequisite: MAC 3412 or equivalent.

**ETE 3035C Electric Circuits Lab and Computations** (3)  
Introduction to laboratory equipment and circuit experiments. Oscilloscopes, meters, generators, power supplies, resistor, capacitor, and inductor circuits, both DC and AC. Part of the course is devoted to working problems assigned in the co-requisite course ETE 3034C. Corequisite: ETE 3034C.

**ETE 3101 Electronics with Calculus** (3)  
Introduction to electronic circuit elements and analysis using calculus. Diode and transistor principles and circuits. Survey of pulse and digital circuits and various semiconductor devices. Prerequisite: ETE 3034C or equivalent. Corequisite: ETE 3030L.

**ETE 3121C Advanced Circuit Analysis** (3)  
This course provides the student with a basic knowledge of Laplace transforms for practical applications in networks and systems. Complex frequency poles and zeros concepts and applications, transformed networks. Fourier transform and signal spectra are also covered. Prerequisite: ETE 3034C or equivalent. Corequisites: MAC 3412 and ETE 3101.

**ETE 3142 Solid State Devices** (3)  
Study of virtually all modern semiconductor devices with applications, MOSFET, photodetectors, thyristors, unijunction transistors, special diodes, etc. (includes lab). Prerequisite: ETE 3101 or equivalent.

**ETE 3323C Practical Linear Systems** (3)  
Basic concepts and application of linear systems, feedback systems, stability analysis, Bode plots and root-locus techniques. Prerequisite: ETE 3121C.

**ETE 3421C Communication Systems** (3)  
Definitions, basic concepts and application of analog and digital modulation techniques. Modulators for generating various signals and demodulators for information recovery are studied. Quantization. Decoding. Effect of noise in communication systems. Prerequisite: ETE 3034C or equivalent.

**ETE 3422 Transmission Systems for Communication** (3)  
Use of Smith Chart. Different transmission lines and microwave channels. Laboratory experiments using spectrum analyzers to study AM, FM and pulse modulation system. Simulation of transmission lines. Prerequisite: ETE 3421C.

**ETE 3426C Electric Machinery** (3)  
Analysis of rotating electric machinery with emphasis on industrial applications (includes lab). Prerequisite: ETE 3565C, or equivalent.

**ETE 3565C Introduction to Electrical Power** (3)  
Structure of electrical power systems. Major components and modern energy systems. Magnetism and magnetic circuits. Mutual induction and self-induction. Three-phase circuit analysis and per unit calculations. Transformers and

transformer connections. Energy conversion. Power system loads and statistical load-forecasting. Calculation of cost of electrical energy. Prerequisite: ETE 3034C or equivalent.

**ETE 4123C Electronic Circuit Analysis (3)**  
Analysis and design of electronic circuits using bipolar transistors. FET's and MOSFET's. Application of frequency response techniques to the analysis and design of feedback amplifiers, tuned amplifiers, oscillators, modulators and demodulators, power amplifiers etc. Introduction to integrated circuits. Prerequisites: ETE 3121C and ETE 3142 or equivalents.

**ETE 4161C Integrated Circuits Analysis and Application (3)**  
Application of state-of-the-art integrated circuits. Comparison of different IC's from the SSI, MSI, and LSI areas. Design and characteristics of linear and digital integrated circuits. Prerequisites: ETE 4123C & ETE 3620.

**ETE 4170C Passive and Active Filters (3)**  
Practical application of passive and active filters to communication and process control systems, laboratory applications. Prerequisite: ETE 3121C.

**ETE 4171C Advanced Filter Design (3)**  
This course puts together theories, techniques and procedures which can be used to design & implement analog and digital filters. Prerequisite: ETE 4170.

**ETE 4324C Process Control Instrumentation (3)**  
Servomechanisms analysis and design. Sensors, transducers, recorders, error detecting devices and other electronic and electromechanical components of control systems. Basic lab experiments on servomotors, tachometers, synchros, operational amplifiers as components and systems. Use of analog computer. Prerequisite: ETE 3323C.

**ETE 4325C Advanced Control Systems (3)**  
Practical design of control systems. Industrial applications. Design and hardware implementation of industrial controllers. Control algorithms. Use of root-locus and Bode plots. Includes lab. Prerequisite: ETE 3323C.

**ETE 4426C Advanced Communication Systems (3)**  
Study of advanced communication systems and techniques. Emphasis is placed on the study of digital and FM systems. Phase-lock techniques, noise analysis, threshold data, and transmission are among the subjects extensively covered (includes lab). Prerequisite: ETE 3421.

**ETE 4563C Electrical Systems in Industry (3)**  
Design of electrical systems for industrial, commercial and residential buildings in accordance with the National Electric Code. Prerequisites: ETE 3030 or ETE 3034C.

**ETE 4565C Electrical Power Systems I (3)**  
Power network concepts. AC & DC transmission power transmissions, power transmission lines, power network representations, basic network solutions, symmetrical fault studies, symmetrical components. Prerequisite: ETE 3565C, or instructor's consent.

**ETE 4567C Electrical Power Systems II (3)**  
Unsymmetrical faults and loads; the bus impedance matrix solutions for fault studies. Control of voltage, watts, vars. Load flow, economic dispatch and system stability. Prerequisite: ETE 4565C, or instructor's consent.

**ETE 4665C Digital Process Control Systems (3)**  
Study of digital process control systems. Time frequency response to discrete systems. Digital controllers. Application of industrial processes. Laboratory work with digital components and systems (includes lab). Prerequisite: ETE 3323C.

**ETE 4666C Control System Design (3)**  
State of the art design of analog and digital control systems. Controllers, control algorithms, hardware implementation. Use of analog computer & microprocessors. Prerequisite: ETE 4325. Corequisite: ETE 4665C.

**ETG 4905 Independent Study (1-3)**  
Specialized intensive study in an area of special interest to the student. Consent of faculty instructor required.

**ETG 4930 Special Topics (1-3)**  
For a group of students who wish an intensive study of a topic not otherwise offered in the University. Consent of faculty supervisor and Department Chairperson is required.

#### MECHANICAL ENGINEERING TECHNOLOGY

**Definition of Prefixes**  
BCN — Building Construction; COP — Computer Programming; ETG — Engineering Technology; General; ETI — Engineering Technology; Industrial; ETE — Engineering Technology; Electrical; ETM — Engineering Technology; Mechanical; MAC — Mathematics; Calculus.

**BCN 3560C Mechanical Systems in Construction (3)**  
A survey of plumbing, heating, air conditioning and ventilation systems for building.

**ETG 3510 Dynamics (3)**  
Study of the motion of particles and members applied to technical problems. Impact momentum and mechanical energy. Prerequisites: MAC 3412, and ETG 3502, or equivalent.

**ETI 341C Manufacturing Processes I (3)**  
An introduction into the processes used to convert raw materials into finished products. Includes information on casting, forging, machining, and forming.

**ETM 311J Solar Energy Design (3)**  
Review of theory and technical aspects of solar energy principles and their use in practical engineering design.

**ETM 331Z Fluid Mechanics (3)**  
A study of the development, transmission and utilization of power through fluid power circuits and controls. Prerequisite: MAC 3412

**ETM 3510 Mechanical Design I (3)**  
Design analysis of elementary machine members including shafting, springs, screws, belts, clutches, brakes, chains, welds, and rivets. Pre-

requisites: ETG 3510, ETG 3530, or equivalent.

**ETM 3801 Basic Materials (3)**  
A study of ferrous and nonferrous metals and alloys. Includes atomic structure, bonding, and arrangement of atoms; phase diagrams; reactions within solid materials, and the interrelation of these to show how structure determines the properties of a material.

**ETM 3205 Thermodynamics I (3)**  
Fundamental concepts of basic thermodynamics, including thermodynamic properties and processes, first and second laws of thermodynamics and application of the principles to energy conversion systems, introduction to heat transfer. Prerequisite: MAC 3412.

**ETM 4206 Thermodynamics II (3)**  
Continuation of the basic course in thermodynamics with particular attention to combustion processes, thermodynamic aspects of fluid flow, compressible flow, steam & vapor power cycles. Prerequisite: ETM 3205.

**ETM 4205L Applied Thermodynamics Laboratory (2)**  
Conduction, convection and radiation experiments, regeneration, stirring and air standard power cycles, combustion processes. Prerequisite: ETM 3205.

**ETM 4221L Mechanical Laboratory I (2)**  
The most modern available testing equipment is used for experiments in hydraulics, fluid power equipment, internal combustion engines including the Stirling Cycle Hot Air Engine, gas turbines, steam turbines, boilers, centrifugal and axial fans, rotary and sliding van compressors, convection and radiation and solar energy.

**ETM 4225 Energy Systems (3)**  
Review of theory and engineering aspects of conventional energy conversion systems, fuels and combustion, fossil fuels, and nuclear power plants. Mechanical engineering aspects of direct energy conversion. Prerequisite: ETM 3205, or equivalent.

**ETM 4511 Mechanical Design II (3)**  
Continuation of the design analysis of elementary machine members, including lubrication, bearings, and gearing. Introduction to advanced analysis techniques. Prerequisite: ETM 3510.

**ETM 4643L Air Conditioning and Refrigeration Laboratory (2)**  
Experiments in air conditioning, refrigeration, reverse cycle and strip heating, water cooling towers, automotive air conditioning absorption refrigeration, and solar energy applications to heating and cooling. Prerequisite: ETM 3205.

**ETM 4652L Instruments and Measurements Laboratory (2)**  
A practical study of common instrumentation elements and measurement systems used in mechanical applications. Prerequisite: ETE 3030 or equivalent.

**ETM 4720 Air Conditioning Refrigeration Principles (3)**  
The theory, operation and control of heat pump cooling and heating, chemical absorption cooling and steam jet refrigeration systems. Prerequisite: ETM 3205.

**ETM 4750 Air Conditioning Design I** (3)  
Psychrometry comfort; mechanical refrigeration; heat pumps; load calculators; cooling coil performance; heating and humidification; air distribution duct design fans. Prerequisite: ETM 4720.

**ETM 4752 Air Conditioning Design II** (3)  
Air conditioning systems; piping, pumps, hydraulics; chillers, boilers, piping and combinations; cooling towers; heat recovery systems; automatic control; instruments. Prerequisite: ETM 4750.

**ETM 4238 Heat Transfer** (3)  
Fundamental concepts of conduction, convection and radiation heat transfer, including practical numerical analysis in addition to conventional analytical and empirical methods. Prerequisites: MAC 3412, and ETM 3205.

**ETM 4560 Mechanical Power Theory** (3)  
A study in the theory and application of different mechanical power systems. Includes internal combustion engines, gas turbines, steam systems, & other specialized systems. Prerequisites: ETM 3205.

**ETM 5515 Solar Energy Technology and Applications** (3)  
Basic principles of solar radiation, transmission and absorption. Flat plate, passive and focusing collectors. Thermal storage applications to water heaters, air conditioning, power generation, swimming pool heating and process heat supply, and their economies. Prerequisites: ETM 4225, ETM 3111.

## Civil Engineering Technology

*LeRoy E. Thompson, Professor and Chairperson*  
*Jimmy D. Hahs, Associate Professor*  
*Vasant Surti, Professor*  
*Jose T. Villate Associate Professor*

This program emphasizes a broad range of knowledge and skills necessary to participate in major projects, such as construction, design and analysis of highways, waterways, buildings, transportation facilities, public works and development. The program is professionally accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

Academic credit or proven competency in the following areas: mathematics through calculus, physics, surveying, construction materials, engineering drawing, statics, and introduction to computers.

**Remark:** A student without this preparation may obtain it while completing the upper division program, by taking additional electives.

UPPER DIVISION PROGRAM:

*Major Requirements* \*:

		<i>Semester Hours</i>	
SUR 3140C	Advanced Surveying	3	48
BCN 3762	Codes and Specifications	3	
ETG 3510	Dynamics	3	
ETG 3520L	Materials Testing	1	
ETG 3530	Strength of Materials	3	
ETC 3210L	Soil Mechanics Laboratory	1	
ETC 3220	Soil Mechanics and Foundations	3	
ETC 3410	Determinate Structural Analysis	3	
ETC 3420	Indeterminate Structural Analysis	3	
ETC 4440	Steel Design	3	
ETC 4450	Reinforced Concrete Design	3	
ETC 4502	Geometric Design of Highways	3	
ETC 4541	Traffic & Transportation Engineering Technology	3	
ETI 4671	Engineering Economy	3	
EVS 3215	Applied Hydraulics	3	
EVS 3216L	Fluids Laboratory	1	
EVS 3264C	Water Resources	3	
EVS 4204C	Water and Wastewater Treatment	3	

\*Or demonstrated competency

*Electives:* Specialization selected by the student or courses selected with an advisor to meet objectives

(minimum) 60

Including both lower and upper division course work, each student must complete a minimum of 23 semester hours in communications, social science, and humanities, and a minimum of 23 semester hours in basic science and mathematics.

SPECIALIZATIONS:

Four specializations are available to the majors in Civil Engineering Technology, should they choose not to select the above general program with elective courses. These specializations give the Civil Engineering Technology student the opportunity to pursue an area of specialization in Environmental, Planning, Transportation, or Structures.

LOWER DIVISION PREPARATION:

In addition to the required preparation for the general upper division program of Civil Engineering Technology, the student should have academic credit or proven competency in chemistry and biology for the Environmental specialization. A student without such preparation may correct any of the deficiencies while pursuing the program by taking additional courses:

ENVIRONMENTAL		
EVS 3360	Air Resources	3
EVS 4233C	Unit Operations I	3
EVS 4234C	Unit Operations II	3
EVS 4463C	Water Supply Systems	3

PLANNING

ETC 3570	Introduction to Transportation Systems	3
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URP 3000	Urban Planning Concepts	3
URP 4011	Planning Implementation	3
URP 4021	Urban Land Use Planning	3
<b>TRANSPORTATION</b>		
ETC 3570	Introduction to Transportation Systems	3
ETC 4560	Transportation Planning	3
URP 3000	Urban Planning Concepts	3
URP 4021	Urban Land Use Planning	3
<b>STRUCTURES</b>		
ETC 4222	Foundation Design & Construction	3
ETC 4429	Computer Applications in Structural Analysis & Design	3
ETC 4460	Timber Design	3
ETC 5422	Advanced Structural Design, OR	3
ETC 5470	Pressressed Concrete Design	3

## Master of Science in Environmental and Urban Systems

### Admissions Requirements

The applicant must meet the general University admission requirements and should have completed an undergraduate major in environmental or urban systems, engineering, the natural sciences or a related field. Students who do not meet the stated criteria may be considered for admission if they have completed certain prerequisites and have work experience or other qualifications in the field. Additional courses may be required for some areas of specialization.

### Degree Requirements

To be eligible for a Master's degree in the area of Environmental and Urban Systems, a student must:

1. Satisfy all University requirements for a Master's degree.
2. Meet any undergraduate deficiencies, the requirements of the core, and complete a specific program of study.
3. Complete a minimum of 36 semester hours of graduate level courses. (Not more than 6 graduate credit semester hours can be transferred from other accredited institutions.)
4. Achieve a "B" average or better in all graduate work.
5. Complete an acceptable graduate thesis. The M.S. in Environmental and Urban Systems consists of 36 semester hours of graduate credit.

Four options are offered: Environmental Quality, Urban Planning Systems, Aquatic Re-

sources, and Air Resources. A Transportation track is available within Urban Planning Systems.

## Course Descriptions

### CIVIL ENGINEERING TECHNOLOGY

#### Definition of Prefixes

ETC — Engineering Technology: Civil; ETG — Engineering Technology: General.

**BCN 3210C Construction Materials** (3)  
Lecture/Lab — A study of the origins, production and uses of construction materials, such as concrete, steel, aluminum, wood, plastics, brick and stone. Includes testing lab, which consists of testing and evaluating properties of construction materials. Prerequisite: Physics.

**ETC 3210L Soil Mechanics Laboratory** (1)  
Laboratory experiments in identification, properties and behavior of soils. Prerequisite or corequisite: ETC 3220.

**ETC 3220 Soil Mechanics and Foundations** (3)  
Identification and properties of soils. Behavior of soils relating to design and construction of foundations for structures and pavements. Prerequisite: ETC 3530, or equivalent.

**SUR 3001C Surveying** (3)  
Lecture/Lab — Computations and field procedures associated with measuring of distances and angles, using tape, level and transit. Laboratory included with field measurements. Prerequisite: Trigonometry.

**SUR 3140C Advanced Surveying** (3)  
Lecture/Lab — Computations and field procedures for earthworks and horizontal and vertical curves. Applications in establishing horizontal and vertical control in boundary determination, mapping, photogrammetry. Laboratory is included which consists of field measurements, layouts and computations. Prerequisite: SUR 3001C or equivalent.

**SUR 3400C Land Surveying** (3)  
The theory and practice of land surveying, including computations, procedures, platting, records, land descriptions, legal aspects, control requirements, urban surveys, coastal boundary surveys, astronomical observations, U.S. Government and State requirements. Cadastral surveying and professional registration. Prerequisite: SUR 3001C.

**ETC 3410 Determinate Structural Analysis** (3)  
Analysis of statically determinate structural systems by analytical methods. Reactions: shear, axial and moment diagrams, truss analysis, influence lines: moving loads. Distortion methods of moment area, conjugate beam, elastic weights, and virtual work. Prerequisite: ETC 3530 or equivalent.

**ETC 3420 Indeterminate Structural Analysis** (3)  
Analysis of indeterminate structural systems. Development and use of theorems of moment area, conjugate beam, elastic weights, virtual work. Slope deflection and moment distribution methods. Moving loads and influence lines. Introduction to stiffness method and flexibility methods. Application of matrix methods. Prerequisite: ETC 3410.

**ETC 4222 Foundations Design and Construction** (3)

Use of soil mechanics and subsurface construction theory and practice for design and construction of foundations for buildings and other engineering facilities. Topics include shallow and deep foundations, excavation, bracing and retaining structures. Prerequisite: ETC 3220.

**ETC 4429 Computer Applications in Structural Analysis and Design** (3)

Discussion and application of various available computer programs and equipment for structural analysis and design. Application of the stiffness method and the flexibility method of structural analysis. Prerequisites: ETC 3420, ETC 4450, ETC 4440, and Introduction to Computers.

**ETC 4440 Steel Design** (3)  
The analysis and design of structural elements and connections for buildings, bridges and specialized structures utilizing structural steel. Both elastic and plastic designs are considered. Prerequisite: ETC 3410.

**ETC 4450 Reinforced Concrete Design** (3)  
The analysis and design of reinforced concrete beams, columns, slabs, retaining walls and footings. Both the working and ultimate strength design methods will be discussed, with primary emphasis corresponding to recent ACI Building Code. Prerequisite: ETC 3410.

**ETC 4460 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: BCN 3402C or ETG 3530 or equivalent.

**ETC 4502 Geometric Design of Highways** (3)  
Route surveys by ground and aerial method; reconnaissance, preliminary and location surveys; geometric properties of highway surveys; spiral theory; design controls for both vertical and horizontal alignments. Applications of various available computer programs and equipment to the design of highways. SUR 3140C and Computer Programming or equivalent.

**ETC 4541 Traffic and Transportation Engineering Technology** (3)  
Characteristics of traffic, roadway, vehicular and human factors. Design, development regulations in modern transportation systems. Stream of flow, capacity, parking, accident analysis and intersection characteristics. Prerequisites: Computer programming and Calculus.

**ETC 5422C Advanced Structural Design** (3)  
The design of structural systems to formalize the student's knowledge of the behavior of individual components into a final integrated structure. Continuous span and simple span highway bridges, culverts, retaining walls, rigid frames, multistoried buildings and similar problems of interest to the student. Prerequisites: ETC 4440 and ETC 4450.

**ETC 5470 Prestressed Concrete Design** (3)  
The behavior of steel and concrete under sus-

tained load. Analysis and design of pre-tensioned and post-tensioned reinforced concrete members, and designing these members into the integral structure. Prerequisite: ETC 4450.

**ETC 5507C 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 AASHTO design guidelines. Design project required. Prerequisite: ETC 4502.

**ETC 5514 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: ETC 3220 and ETC 4450.

**ETG 3502 Statics** (3)  
Study of forces acting on bodies, including coplanar and non-coplanar forces, concurrent and non-concurrent forces, friction forces and hydrostatic forces and properties of cross-sections and bodies. Prerequisites: Physics and Calculus.

**ETG 3520L Materials Testing Lab** (1)  
A laboratory study of principle materials with particular attention to their mechanical properties and significance for engineering uses. Prerequisite or corequisite: BCN 3402C or ETG 3530 or equivalent.

**ETG 3530 Strength of Materials** (3)  
Axial, torsional, shear, bending and combined stress and strain analysis: mechanical properties and applications for static, dynamic, fatigue and creep conditions. Prerequisite: ETG 3502 or equivalent.

**ENVIRONMENTAL AND URBAN SYSTEMS**  
Definition of Prefixes  
EVS — Environmental Science; ETC — engineering Technology: Civil; URP — Urban and Regional Planning; OCB — Oceanography-Biological.

**ETC 3570 Introduction to Transportation Systems** (3)  
Role of transportation in urban and regional development; elements of the transportation system; characteristics and design considerations of various modes; the travel way; facilities; control and guidance; selected design standards and technology; operational characteristics; planning techniques.

**ETC 4560 Transportation Planning** (3)  
Principles of transportation planning; origin-destination studies; methodology used in generating transportation plans; techniques for predicting and evaluating the consequences of various alternatives; transportation planning for Dade County. Prerequisite: ETC 3570.

**ETC 5572 Transportation Systems Modeling & Analysis** (3)  
Modeling and analysis techniques in transportation. Linear Programming, queueing theory, decision making techniques. Prerequisite: Computer programming or consent of Instructor.

**ETC 5573 Urban Mass Transit and Transportation Planning (3)**

Models of urban growth, population forecasts, trip generation, trip distribution and trip assignment models, model split, system evaluation, transit marketing. Prerequisite: ETC 4541.

**ETC 5925C Urban Traffic Workshop (3)**

Selected laboratory problems related to urban traffic. Prerequisite: ETC 4541 or consent of Instructor.

**ETC 5926 Applied Statistics in Traffic and Transportation (3)**

Civil and Environmental Engineering statistical methods as applied to traffic and transportation are covered. Topics include: significance tests, standard distributions, analysis of variance, and regression analysis. Prerequisite: Graduate standing.

**ETC 6571 Urban Traffic Characteristics (3)**

Speed and Volume studies, stream characteristics, traffic flow theory, accident characteristics. Prerequisite: ETC 4560 or Consent of Instructor.

**EVS 3100 Introduction to Environmental and Urban Systems (3)**

This course is designed for non-majors as an integrated approach to the role of technological man in the biosphere. Emphasis is on methods for the environmental quality improvement of land, air, water, transportation, and planning systems.

**EVS 3215C Applied Hydraulics (3)**

A course to provide background in basic hydraulic technology. The fundamental theorems are studied and then applied to the collection and distribution of water and the collection and treatment of wastewaters.

**EVS 3216L Fluids Laboratory**

(1) Demonstrations, experiments, and analyses of basic fluid phenomena and principles. Prerequisite: Admission requirements to programs.

**EVS 3219C Limnology (3)**

Biological, chemical and physical aspects of freshwater lentic and lotic ecosystems. Emphasis is on the freshwater systems of South Florida.

**EVS 3264C Water Resources (3)**

Study of the hydrologic cycle; ground and surface water occurrence and quality; sanitary protection of surface and groundwater; sources of pollution; water quality management; multiple uses of water and reuse; determination of municipal, industrial, and agricultural water requirements.

**EVS 3268C Marine Technology**

(3) Technological aspects of ocean systems. Prerequisite: EVS 3219 or consent of Instructor.

**EVS 3360 Air Resources (3)**

An introductory course on characteristics of the earth's atmosphere and aspects of air pollution. Classification and sources of air pollutants. Effects of air pollutants on health, vegetation and property. Control measures, legislation and projections.

**EVS 3420C Environmental Instrumentation (3)**

A lab/field course for the critical evaluation of basic instrumental methods of environmental sampling and analysis. Includes field sampling (sample preparation and storage), laboratory skills, and legal considerations.

**EVS 3428 Environmental Management (3)**

The wise use of land and water for parks and recreational areas. Environmental design and need for green spaces. Ecologically safe methods for the control of vegetation and insects.

**EVS 3601C Environmental Health (3)**

The effects of environmental pollutants on man's health and the quality of life.

**EVS 4204C Water and Wastewater Treatment (3)**

Quantity, quality, treatment and distribution of drinking water, physical, chemical, and biological principles of wastewater treatment. Laboratory and Field Trips. Prerequisite: Senior Standing.

**EVS 4233C Unit Operations I (3)**

Principles of wastewater treatment. Physical and biological unit treatment operations, including sludge digestion, Significance of laboratory tests. Laboratory work and occasional field trips required. Prerequisite: EVS 3215.

**EVS 4234C Unit Operations II (3)**

A continuation of EVS 4233, incorporating chemical unit operations including effluent disinfection. Laboratory work and occasional field trips required. Prerequisite: EVS 4233C.

**EVS 4463C Water Supply Systems (3)**

Development of water supplies. Treatment of water including disinfection techniques. Distribution systems. Laboratory work. Prerequisites: EVS 3264C and EVS 4233C, or consent of instructor.

**EVS 4905 Independent Study (1-3)**

Individual research studies available to academically qualified students. Consent of Instructor required.

**EVS 4930 Special Topics (1-3)**

Study of specific aspects (of environmental technology or urban systems) not available through formal course study. Open to academically qualified students. Consent of instructor required.

**EVS 5218 Advanced Hydraulics (3)**

An advanced course in hydraulics. Topics include open channel flows, spillways, stilling basins, energy-dissipating devices, rheology, and principles of fluidics. Prerequisite: EVS 3215, or consent of Instructor.

**EVS 5235C Wastewater Collection and Treatment (3)**

Wastewater collection systems. Integration of unit operations into the planning and design of treatment plants, including sludge handling and disposal. Prerequisites: EVS 4233 and EVS 4234, or consent of instructor.

**EVS 5242 Water Quality Management (3)**

Predicting and evaluating the effects of human activities on streams, lakes, estuaries and

groundwaters; and the relation of human activities to water quality and protection of water resources. Prerequisite: EVS 4234, or consent of instructor.

**EVS 5261 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. Prerequisite: EVS 3219, or consent of instructor.

**EVS 5267 Water Quality Indicators (3)**

Ecological studies of micro and macro-organisms which are indicators of water quality. Emphasis on bioassays and early warning systems. Prerequisite: EVS 5261, or consent of instructor.

**EVS 5361 Air Sampling and 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. Prerequisite: EVS 3360 or EVR 4231.

**EVS 5362 Air Pollution Control (3)**

Air pollution control — devices, principles, efficiencies, costs. Gas scrubbers, electrostatic precipitators, thermal deposition, filters, condensers, after-burners. By-product recovery. Stoichiometry of combustion mixtures and basic industrial plant designs are discussed. Prerequisite: EVS 3360 or EVR 4231.

**EVS 5369 Air Quality Management (3)**

A course in air resources designed to review the administrative, legislative and regulatory process in air pollution control. Agencies, surveillance networks, data, criteria for establishing standards, regulations and educational programs.

**EVS 5421C Industrial and Environmental Toxicology (3)**

Introduction to toxicological studies in the urban environment. Prerequisite: EVS 3601C, or consent of instructor.

**EVS 5425C Vector and Pest Control (3)**

Effects and management of public health vectors and communicable diseases. Prerequisite: EVS 3601C, or consent of instructor.

**EVS 5426C Advanced Environmental Instrumentation (3)**

A laboratory oriented course, dealing with the most sensitive and sophisticated instruments used in environmental analysis. Covers theory of specialized laboratory procedures and instruments, optics, electronics, design, cost, versatility, and operational instrument parameter considerations. Assigned projects. Prerequisite: EVS 3420C, or consent of instructor.

**EVS 5682 Solid Waste Management (3)**

In-depth study of the solid waste problem. Topics include municipal, industrial, and agricultural generation of wastes; municipal collection systems; methods of disposal, hazardous wastes, and energetic considerations in the recovery and recycle of wastes.

**EVS 5741 Noise** (3)  
Fundamentals of sound and noise. Health hazards and other effects. Case studies — measurement and noise control in transportation, environment, construction and industry. Abatement laws and ordinances in Dade County and worldwide.

**EVS 5905 Independent Study** (1-3)  
Individual research studies available to academically qualified students on graduate status.

**EVS 5930 Special Topics** (1-3)  
Specific aspects of environmental technology and urban systems not available through formal course study. Open to academically qualified students only.

**EVS 6050 Environmental and Human Factors** (3)  
Effects, assessment and control of physical and chemical factors in the natural and man-made environments, including noise, electromagnetic radiation, air and water pollution, public and occupational health, vector control, communicable diseases. Prerequisite: Program admission requirements.

**EVS 6051C Advanced Unit Operations I** (3)  
Theory and design of physical, chemical, and biological unit operations as applied to the advanced treatment of water and wastewater. Prerequisite: EVS 5242.

**EVS 6052C Advanced Unit Operations II** (3)  
A continuation of EVS 6051C including the reuse of treated wastewaters and of sludges. Prerequisite: EVS 6051C.

**EVS 6053C Advanced Treatment Systems** (3)  
Integration of unit operations into advanced treatment systems for waters and wastewaters. Prerequisite: EVS 6052C.

**EVS 6054 Aquatic Reclamation** (3)  
Evaluation of techniques to improve the water quality of lakes, canals and rivers. Cultural eutrophication corrective measures are emphasized. Prerequisites: EVS 3219, EVS 5267, or consent of instructor.

**EVS 6269C Industrial Wastewater Treatment** (3)  
Characteristics and composition of industrial wastewaters. Sampling techniques and analyses. Water conservation and reuse. Joint industrial-municipal collection and treatment of wastewaters. Prerequisite: EVS 6053C.

**EVS 6422 Environmental Assessment** (3)  
An examination of alternative techniques useful for the analysis and evaluation of environmental impacts of man's activities. Prerequisite: URP 6821.

**EVS 6424 Air-Land Interface Studies** (3)  
An environmental evaluation of the relationship between the atmosphere and the continental surfaces in a non-urban or natural system. Prerequisite: EVR 5236, or consent of instructor.

**EVS 6603 Advanced Industrial and Environmental Toxicology** (3)  
A continuation of EVS 5421. Investigation of toxic substances in air, water, and food in the industrial environment. Prerequisite: EVS 5421 or consent of instructor.

**EVS 6939 Seminar** (1-3)  
The course consists of oral presentations made by students, guests and faculty members on current topics and research activities in environmental and urban systems.

**EVS 6970 Thesis** (6)

**OCB 4702 Aquatic Products** (3)  
Commercial products, already developed, which may be obtained from aquatic systems. Prerequisite: EVS 3268, or consent of instructor.

**OCB 6631 Air-Water Interface Studies** (3)  
Mechanisms of materials transfer from water bodies to the atmosphere and from the atmosphere to the water will be discussed. Prerequisite: EVS 3360.

**URP 3000 Urban Planning Concepts** (3)  
Planning fundamentals; objectives and scope of urban planning; theories of land use patterns; population studies; cohort survival technique; employment studies; economic studies; estimating demand for various land usage; physical, social, political and managerial conditions; comprehensive plan and its elements, aesthetics and design concepts for communities; implementation tactics.

**URP 4011 Planning Implementation** (3)  
Planning law and administration; practice in formulation of zoning ordinance; land subdivision, urban renewal; trends and innovations in control of growth — case studies in U.S.A.; critical path method (CPM); planning, programming, budgeting systems (PPBS) and capital improvement programs. Prerequisite: URP 3000.

**URP 4021 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: URP 3000.

**URP 4030 Analysis of Technological Systems** (3)  
Fundamental concepts of systems analysis; types of systems; input-output relationship; positive and negative feedback control; generation of system alternatives; tradeoff and sensitivity analysis; elementary optimization techniques.

**URP 5400 Urban and Regional Analysis** (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. Prerequisite: Computer Programming or consent of instructor.

**URP 5425 Environmental Planning** (3)  
Ecological principles necessary to preserve a quality environment are presented by means of planning policies, processes and environmental indicators. Emphasis will be placed on the impact of growth on environmental quality. Prerequisites: EVS 3360, URP 3000 and EVS 3264.

**URP 6423 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. Prerequisite: Computer Programming, or consent of instructor.

**URP 6821 Urban Systems 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: Computer Programming or consent of the instructor.

## Home Economics

Betty Morrow, Associate Professor and Chairperson

Robert Merkel, Associate Professor  
Adele Smith, Associate Professor  
Penelope Storm, Associate Professor  
Greta Howard, Assistant Professor  
Susan James, Assistant Professor

The Department of Home Economics offers two undergraduate degrees as well as graduate courses to serve other programs in the University.

### Apparel Management Degree

The Department of Home Economics offers a baccalaureate degree in Apparel Management. The Apparel Management program offers specialties in design, manufacturing, or merchandising management. All majors are required to obtain vocational experience through the completion of career traineeships.

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Science

LOWER DIVISION PREPARATION:

Required: General education requirements for Associate of Arts degree; Associate in Fashion Design for those entering that specialty.

Recommended: Courses in fashion, accounting, marketing, economics, art, psychology, and management.

### Apparel Design Management

The program is open only to students who have completed an Associate degree in fashion design. It is planned for those desiring careers in the apparel industry in line coordination, production control or supervision, as well as design.

Semester Hours

<i>Core Courses:</i>			14
CTE 3401L	Survey of Textiles	4	
CTE 3761	Fashion Production and Distribution	3	
CTE 4442L	Textile & Apparel Testing	3	
HME 3210	Personal and Career Management	3	
HOE 3010	Orientation	1	
<i>Specialization:</i>			41
	Math or Statistics Course	3	
COA 3410	Consumer Resources	3	
CTE 3602	Fashion and Culture	4	

CTE 3735	Advanced Fashion Illustration	3
CTE 3742L	Commercial Pattern Analysis	2
CTE 3743L	Pattern Grading Analysis	2
CTE 3762L	Cutting Analysis and Material Utilization	3
CTE 3763L	Machine Evaluation and Selection	3
CTE 4723L	Fashion Design Seminar I	4
CTE 4724L	Fashion Design Seminar II	4
CTE 4764L	Industrial Apparel Assembly and Quality Control	3
CTE 4765	Apparel Production Planning and Costing	4
ETI 4681	Industrial Supervision	3
<i>Career Traineeship</i>		6
CTE 4880	Apparel Field Experience	6

## Apparel Manufacturing Management

This specialty provides an overview of typical operations in apparel production, as well as supervisory and management skills necessary to oversee these operations. The program utilizes the resources available in the South Florida apparel industry.

	<i>Semester Hours</i>	
<i>Core Courses:</i>	14	
CTE 3401L	Survey of Textiles	4
CTE 3761	Fashion Production and Distribution	3
CTE 4442L	Textile and Apparel Testing	3
HOE 3010	Orientation	1
HME 3210	Personal and Career Management	3
<i>Specialization:</i>	38	
COP 3172	Basic Programming for Business	3
STA 4664	Statistical Quality Control	3
CTE 3742L	Commercial Pattern Analysis	2
CTE 3743L	Pattern Grading Analysis	2
CTE 3762L	Cutting Analysis and Material Utilization	3
CTE 3763L	Machine Evaluation and Selection	3
CTE 4764L	Industrial Apparel Assembly and Quality Control	3
CTE 4765L	Apparel Production Planning and Costing	4
CTE 4766L	Apparel Work Measurement	3
ETI 3661	Plant Layout	3
ETI 3670	Industrial Financial Decisions	3
ETI 4671	Engineering Economy	3
ETI 4681	Industrial Supervision	3
<i>Career Traineeship:</i>	6	
CTE 4880	Apparel Field Experience	6
<i>Advised Elective</i>	3	

## Apparel Merchandising Management

The Apparel Merchandising specialization is designed for students seeking management careers in the fashion industry in buying, coordination, advertising, customer relations, operations, visual merchandising, manufacturing and merchandise management.

	<i>Semester Hours</i>	
<i>Core Courses:</i>	14	
CTE 3401L	Survey of Textiles	4
CTE 3761	Fashion Production and Distribution	3
CTE 4442L	Textile and Apparel Testing	3
HOE 3010	Orientation	1
HME 3210	Personal and Career Management	3
<i>Specialization:</i>	39	
COA 3410	Consumer Resources	3
COC 3300	Introduction to Computers and Computer Applications	3
CTE 3303	Clothing and Consumer	2
CTE 3303L	Clothing and Consumer Lab	2
CTE 3602	Fashion and Culture	4
CTE 3852L	Visual Merchandising	3
CTE 4821	Quantitative Decisions in Fashion Retailing	3
CTE 4827	Fashion Buying and Merchandising Strategies	3
CTE 4890	Fashion Merchandising Career Seminar	1
FAD 3232	Relationships Marketing	3
MAR 3023	Management	3
MAR 4153	Retail Management	3
MAR 4154	Cases in Retail Management	3
MAR 4303	Advertising Management	3
<i>Career Traineeship:</i>	6	
CTE 4880	Apparel Field Experience	6
<i>Advised Elective</i>	3	

## Home Economics Degree

The Department of Home Economics offers a baccalaureate degree in Home Economics. Those desiring management careers in business, industry or government may specialize in Management and Consumer Affairs, Clothing and Textiles, Family and Child Development, and Food and Nutrition, or they may choose a General Home Economics program. All majors are required to obtain vocational experience through the completion of a career traineeship. LOCATION: Tamiami Campus only. DEGREE: Bachelor of Science. LOWER DIVISION PREPARATION: Required: General education requirements. Recommended: Courses in home economics, fashion, chemistry, economics, art, communication and business management.

## Clothing and Textiles

Students interested in working in fabric retailing as pattern company representatives or clothing construction instructors for business, or in specialized areas such as custom dressmaking and tailoring, would choose this area of specialization.

	<i>Semester Hours</i>	
<i>Core Courses:</i>	20	
CHD 3220	Child Development: Infancy and Early Childhood	3
COA 3410	Consumer Resources	3
FAD 4230	Family Life Cycle	3
FOS 3004	Food and Consumer	3
HHD 4420	Home Furnishings and Equipment	4
HME 3210	Personal and Career Management	3
HOE 3010	Orientation	1
<i>Specialization:</i>	31	
CHM 3030	Survey of General Chemistry and Lab	4
CHM 3200	Survey of Organic Chemistry and Lab	4
CTE 3310L	Principles of Clothing Construction	3
CTE 3401L	Survey of Textiles	4
CTE 3602	Fashion and Culture	4
CTE 3761	Fashion Production and Distribution	3
CTE 4340L	Advanced Clothing Construction	3
CTE 4352L	Tailoring	3
CTE 4741L	Pattern Alterations	3
<i>Career Traineeship</i>	6	
CTE 4880	Apparel Field Experience	6
<i>Advised Electives:</i>	6	

## Management and Consumer Affairs

This specialization earns an Academic Certificate from the Institute of Consumer Affairs as well as a B.S. from the School of Technology. It is intended to lead to careers as consumer consultants, counselors or representatives in business or governmental agencies. A separate track is available for students desiring to work with special groups such as the elderly or the handicapped.

	<i>Semester Hours</i>	
<i>Core Courses:</i>	20	
CHD 3220	Child Development: Infancy and Early Childhood	3
COA 3410	Consumer Resources	3
FAD 4230	Family Life Cycle	3
FOS 3004	Food and Consumer	3
HHD 4420	Home Furnishings and Equipment	4
HME 3210	Personal and Career Management	3
HOE 3010	Orientation	1
<i>Specialization:</i>	39	
COA 3130	Personal and Family Economics	3
COA 4440	Consumer Counseling	3
COA 4460	Consumer and Technology	3

COA 5450	Consumer Legislation	3
CTE 3303	Clothing and the Consumer	2
CTE 3303L	Clothing and the Consumer Lab	2
CTE 3401L	Survey of Textiles	4
FAD 4340	Family Development: Adulthood and Aging	3
HHD 3151	Housing: Shelter and the Consumer	3
MAN 3010	Organization and Management	3
PAD 3034	Public Policy and Administration	3
SOP 4645	Consumer Psychology	3
SOP 4649	Experimental Consumer Psychology	4
<b>Career Traineeship:</b>		
COA 4942	Career Traineeship in Consumer Affairs	6

## Family and Child Development

Graduates from this program are prepared to enter professions which require a breadth of knowledge related to families and children, such as day care management, parent education, nursery school teaching, or employment in federal and state agencies serving the family.

<b>Core Courses:</b>		<b>Semester Hours</b>
CHD 3220	Child Development: Infancy and Early Childhood	3
COA 3410	Consumer Resources	3
FAD 4230	Family Life Cycle	3
FOS 3004	Food and Consumer	3
HHD 4420	Home Furnishings and Equipment	4
HME 3210	Personal and Career Management	3
HOE 3010	Orientation	1
<b>Specialization:</b>		<b>31</b>
CHD 4230	Child Development: Later Childhood	3
CHD 4830	Child Care Services	3
CTE 3602	Fashion and Culture	4
FAD 3232	Relationships	3
FAD 3253	Parenting	3
FAD 4340	Family Development: Adulthood and Aging	3
FAD 4800	Management of Human Care Programs	3
FAD 4940	Human Development Practicum	3
HUN 3122	Nutrition and Culture	3
HUN 4410	Nutrition Infancy through Adolescence	3

<b>Career Traineeship:</b>		
HOE 4940	Career Traineeship in Home Economics	6

**Advised Elective** 3

## Food and Nutrition

This specialization provides professional preparation for a home economist who desires career opportunities related to food and nutrition, but who does not desire to become a dietitian.

<b>Core Courses:</b>		<b>Semester Hours</b>
CHD 3220	Child Development: Infancy and Early Childhood	3
COA 3410	Consumer Resources	3
CTE 3303	Clothing & Consumer	2
CTE 3303L	Clothing & Consumer Lab	2
FAD 4230	Family Life Cycle	3
FOS 3004	Food and Consumer	3
HHD 4420	Home Furnishings and Equipment	4
HME 3210	Personal and Career Management	3
HOE 3010	Orientation	1
<b>Specialization:</b>		<b>29</b>
CHM 3030	Survey of General Chemistry and Lab	4
CHM 3200	Survey of Organic Chemistry and Lab	4
HUN 3122	Nutrition and Culture Food and Nutrition Courses	15
MAN 3010	Organization and Management	3
<b>Career Traineeship</b>		<b>6</b>
HOE 4940	Career Traineeship in Home Economics	6
<b>Advised Elective</b>		<b>3</b>

## General Home Economics

This specialization is for those students who desire to become Home Economists, but have no definite career goals related to one area of the field, and do not plan to teach in the secondary schools.

<b>Core Courses:</b>		<b>Semester Hours</b>
CHD 3220	Child Development: Infancy and Early Childhood	3
COA 3410	Consumer Resources	3
FAD 4230	Family Life Cycle	3
FOS 3004	Food and Consumer	3
HHD 4420	Home Furnishings and Equipment	4
HME 3210	Personal and Career Management	3
HOE 3010	Orientation	1
<b>Specialization:</b>		<b>52</b>
Orientation		1
Clothing and Textiles courses		9
Family and Child Development courses		12
Food and Nutrition courses		9
Housing courses		9
Consumer Management courses		12
<b>Advised Electives</b>		<b>9</b>

## Course Descriptions

- CLOTHING AND TEXTILES**  
**Definition of Prefix**  
**CTE — Clothing and Textiles**
- CTE 3310L Principles of Clothing Construction** (3)  
 Includes experience and understanding of basic principles of clothing construction and leads to more advanced techniques and learnings. Course individualized according to student's needs and expertise.
- CTE 3303 Clothing and Consumer** (2)  
 Study of various topics pertaining to the consumer and clothing choices including wardrobe inventory, optical illusions, fashion terminology, and success dressing. Corequisite: CTE 3303L.
- CTE 3303L Clothing and Consumer Lab** (2)  
 Evaluation of apparel construction methods. Includes construction of a simple garment. Corequisite: CTE 3303.

- CTE 3401L Survey of Textiles** (4)  
 Study of the physical properties of textile fibers, yarns, fabrics, color applications, and finishes, as they relate to care, performance, and consumer satisfaction. Identification and analysis of fibers and fabrics will be emphasized.
- CTE 3602 Fashion and Culture** (4)  
 Study of evolution of apparel and its relationship to psychological, sociological, technological, historic and cultural factors.
- CTE 3735L Advanced Fashion Illustration** (3)  
 Advanced illustration work in rendering fabric drapery characteristics, construction details, color and texture. Prerequisite: One fashion illustration course.
- CTE 3742L Commercial Pattern Analysis** (2)  
 Overview of theory, geometric principles and methods of pattern making for apparel and allied products. Development of a set of patterns. Corequisite: CTE 3743L.
- CTE 3743L Pattern Grading Analysis** (2)  
 Overview of theory, principles and methods used in commercial pattern grading in accordance with accepted size ranges and specifications. Corequisite: CTE 3742L.
- CTE 3761 Fashion Production and Distribution** (3)  
 Study of apparel industries, with supervised observation of various aspects of production and distribution.
- CTE 3762L Cutting Analysis and Material Utilization** (3)  
 Overview of cutting operations including fabric inspection, scaling, marking, spreading, cutting, and costing. Effective material utilization emphasized.
- CTE 3763L Machine Evaluation and Selection** (3)  
 Study of thread, needles, stitch and seam formation as it relates to apparel products. Survey of industrial sewing and pressing equipment and attachments. Cost considerations and payback periods examined.
- CTE 3815 Apparel Retail Operations** (3)  
 Study of the non-merchandising functions of an apparel store such as advertising, control, personnel, customer services, distribution. Includes guest presentations on maintenance, warehousing and security.
- CTE 3852L Visual Merchandising** (3)  
 Study and application of the principles and techniques of creative "in store" and window displays. Field work included.
- CTE 4340L Advanced Clothing Construction** (3)  
 Additional experience in handling special fabrics, pattern and garment fitting; and application of principles and techniques of clothing construction. Prerequisite: CTE 3310L or equivalent.
- CTE 4352L/5354L Tailoring** (3)  
 Application of custom tailoring techniques to construction of suit or coat, with emphasis on fabric selection and pattern alteration. Graduate students will have additional requirements. Prerequisite: CTE 4340L or equivalent.



- CTE 4421L/5421L Creative Textiles** (3)  
Application of textiles principles to designing and constructing textile fabrics. Includes macramé, batik, tie-dyeing, weaving, knitting, and crocheting. Graduate students have additional requirements.
- CTE 4442L Textile and Apparel Testing** (3)  
Fundamentals of the commercial testing methods used to evaluate fabric and garment performance. Includes statistical analysis of test results. Prerequisite: CTE 3401L or equivalent.
- CTE 4723L/4724L Advanced Design Seminar 1 and II** (8)  
Workroom atmosphere in which apparel design majors produce a line within given restrictions and industrial standards using draping and/or flat pattern methods. Prerequisite: A.S. degree in Fashion Design or equivalent.
- CTE 4741L/5741L Pattern Alterations** (3)  
Stresses importance of pattern selection for individual figure types, and pattern alteration for special fitting problems. Students will construct a garment, make sample pattern alterations for special fitting problems, and alter a ready-made garment. Graduate students will have additional requirements. Prerequisite: CTE 3310L or equivalent.
- CTE 4764L Industrial Apparel Assembly and Quality Control** (3)  
Analysis of the theory and methods of the assembly of apparel and allied products. Several apparel products are evaluated to determine construction sequence, machinery requirements, cost control, and quality specifications.
- CTE 4765L Apparel Production Planning and Costing** (4)  
Integrates all phases of apparel production by planning the best production cycle for an apparel item from receipt of raw materials to finished product. Topics include pay systems, work-in-process control, production scheduling and costing techniques. Prerequisites for Apparel Manufacturing majors: CTE 3763L and CTE 4764L.
- CTE 4766L Apparel Work Measurement** (3)  
In-depth study of procedures used to establish piece work rates for sewing operations by using time study and M-T-M methods. Includes incentive systems, follow-up studies and how to set an apparel plant on a piece work system. Prerequisites: CTE 3763L and CTE 4764L or equivalent.
- CTE 4821 Quantitative Decisions for Fashion Retailing** (3)  
Review of basic retailing math, and application of financial management principles, with emphasis on relationships between sales volume, stock turnover, expenses and profits.
- CTE 4822 Quantitative Decisions II** (3)  
Further exploration of financial management in apparel sales organizations based on dollar and unit figures. Emphasis on profit influences. Prerequisite: CTE 4821 or equivalent.
- CTE 4827 Fashion Buying and Merchandising Strategies** (3)  
Study of major considerations involved in buying and marketing of fashion merchandise.
- Includes development of merchandise assortment plans, with emphasis on effective store distribution. Prerequisite: CTE 4821.
- CTE 4831 Apparel Inventory Management** (3)  
Study of management of fashion merchandise to increase sales and profit. Includes use of computer hardware and software to aid inventory control and decision-making. Special factors of distribution and stock control for chain and branch stores, as well as warehouse operations will be studied. Prerequisite: CTE 4827 or equivalent.
- CTE 4851 Fashion Promotion** (3)  
Study of processes and actions that move fashion merchandise including evaluation of their effectiveness to the retailer. Includes guest presentations in advertising, display, public relations.
- CTE 4853 Advanced Visual Merchandising** (3)  
Seminar and field work in assisting with visual displays for product promotion. Prerequisite: CTE 3852L or equivalent.
- CTE 4880 Apparel Field Experience** (3-6)  
Supervised "on-the-job" training and periodic seminars. Consent of faculty instructor required.
- CTE 4890 Fashion Merchandising Career Seminar** (1)  
Exploration of local fashion-related career opportunities and proficiencies required for these positions. Guest speakers utilized.
- CTE 4905/5905 Independent Study** (1-3)  
Specialized intensive study of a topic not otherwise offered in the University. Consent of faculty supervisor and department chairperson is required.
- CTE 4930 Special Topics** (1-3)  
For groups of students who wish an intensive study of topics not otherwise offered in the University. Consent of faculty supervisor and department chairperson is required.
- CTE 5345 New Trends in Clothing Construction** (3)  
Study of the latest techniques for sewing today's fabrics, including some factory methods. Prerequisite: CTE 4340L or equivalent.
- CTE 5355L Tailoring Menswear** (3)  
Application of tailoring techniques commercially used in the production of menswear, through the construction of a knit jacket and trousers. Prerequisite: CTE 4340L or equivalent.
- CTE 5422L Recent Developments in Textiles** (3)  
Exploration into recent developments in textile fibers and fabrics. Laboratory exercises in textile-testing procedures.
- CTE 5746L Pattern Design** (3)  
Principles of pattern fitting will be explored, through the construction of basic sloper. Samples of various pattern design techniques will be constructed. Students will design and construct at least one garment. Prerequisite: CTE 4741L or CTE 4340L.
- CTE 5880 Apparel Field Experience** (3-6)  
Supervised field placement in local apparel settings for professionals in apparel careers. Permission of chairperson required.
- CTE 5930 Textiles and Clothing Seminar** (1-3)  
By permission of instructor only.
- CTE 5990 Apparel Shop Entrepreneurship** (3)  
Planning and management of small apparel manufacturing or retail organizations. Includes development of a mock apparel shop.
- CTE 5930 Textiles and Clothing Seminar** (1-3)  
By permission of instructor only.
- FAMILY AND CHILD DEVELOPMENT**  
**Definition of Prefixes**  
CHD — Child Development; FAD — Family Development
- CHD 3220 Child Development: Infancy and Early Childhood** (3)  
Systematic study of total developmental process in the child from conception through early childhood emphasizing the effects of home and family environment. Includes observational experiences. Prerequisite: DEP 3001, or equivalent.
- CHD 4230 Middle Childhood and Adolescent Development** (3)  
Extension of the study of developmental patterns of children, with emphasis on physical, intellectual, social and emotional maturation through adolescence. Analysis of environmental and home influences.
- CHD 4830/5830 Child Care Services** (3)  
Analysis of methods for meeting the needs of parents and children using child care facilities. Emphasis on nurturing interaction with children, effective utilization of equipment, materials and community resources, and parent education. Observation/participation experiences provided. Graduate students will have additional requirements.
- CHD 4905/5906 Independent Study** (1-3)
- CHD 5264 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 4320, or equivalent.
- CHD 5930 Special Topics in Child Development** (1-3)  
Special offerings of child development topics not covered in depth in the regular curriculum. Requires permission of instructor.
- FAD 3232 Relationships** (3)  
Emphasizes attitudes, feelings, communication, life styles in varying interpersonal relationships. Includes human sexuality component.
- FAD 3253 Parenting** (3)  
Overview of changing concepts of parenthood and childhood. Explores contemporary issues concerning parenting with emphasis on maximizing human potential of parents and children. Open to non-majors. Recommended prerequisite: DEP 3001.

**FAD 4230 Family Life Cycle** (3)  
Study of the characteristics, problems, potentials and adjustments unique to the various stages of the family life cycle, including ethnic and cultural influences on family life patterns. Includes field component with community agencies serving families.

**FAD 4340/5341 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.

**FAD 4800 Management of Human Care Programs** (3)  
Organization, management and administration of programs providing care services traditionally met within the family such as child care and day care for the elderly. Emphasis on use of family members and community resources for program enrichment.

**FAD 4905/5905 Independent Study in Family Development** (1-3)  
Individually selected program of supervised study in a special area of Family Development.

**FAD 4930 Special Topics** (1-3)  
For groups of students who wish an intensive study of topics not otherwise offered. Consent of faculty supervisor and department chairperson is required.

**FAD 4940 Human Development Practicum** (2-3)  
Experience in observing and working with individuals, in one or more phases of the human life cycle. Students may select a day care center, public school, nursing home, hospital or other community service agency. Prerequisites: CHD 3220, 4230, FAD 4230, or equivalent.

**FAD 5255 Parent-Child Interaction** (3)  
Effects of varying environments on members of households, interpersonal relationships, family values, life style, and interaction between members.

**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.

**FAD 5450 Human Sexuality Workshop** (3)  
Provides a cognitive overview of human sexuality. Main emphasis is on the affective dimension — an exploration of one's attitudes and values related to his or her sexuality and that of others.

#### GENERAL HOME ECONOMICS

Definition of Prefix:  
HOE — Home Economics; General

**HOE 3010 Orientation** (1)  
Introduction to the specialities in the Home Economics Department and orientation to the university. Includes personal assessment of basic skills needed for academic and vocational success.

**HOE 3949 Cooperative Education in Home Economics** (3-6)  
Supervised full time work for Home Economics students. Limited to students admitted to the Co-op Program with consent of advisor. Evaluation and report required.

**HOE 4930 Special Topics** (1-3)  
For groups of students who wish an intensive study of topics not otherwise offered. Consent of faculty supervisor and department chairperson is required.

**HOE 4940 Career Traineeship in Home Economics** (3-6)  
Community based, supervised practical experience in a home economics-related career, to provide opportunity for career exploration in chosen field, and application of knowledge to practical situations. Permission of instructor required.

#### MANAGEMENT AND CONSUMER AFFAIRS

Definition of Prefixes  
COA — Consumer Affairs; HME — Home Management & Equipment; HHD — Housing & Home Design.

**COA 3130 Personal and Family Economics** (3)  
Examination of factors related to achieving personal and family goals through systematic financial planning. Overview of management by objectives, credit, insurance, investment, home-ownership, and taxation, with opportunities for personal and family application.

**COA 3410 Consumer Resources** (3)  
Evaluation of information needed to make effective consumer choices. Includes sources of consumer help and protection, pertinent legislation, and ecological conditions with which consumer interacts. Experiences provided in product and service comparison.

**COA 4440 Consumer Counseling** (3)  
Application of consumer and management knowledge and skills to helping individuals and families make financial decisions. Case study approach used. For those who anticipate careers in helping professions involving consumer and credit services. Prerequisites: COA 3410, HME 3210, and permission of instructor.

**COA 4460 Consumer and Technology** (3)  
Study of the interrelationship of the consumer and the industrial/business community, including the roles and responsibilities of each. Special topics include the effect of decisions on product cost, life styles and the environment, as well as the role of government in the marketplace.

**COA 4942 Career Traineeship in Consumer Affairs** (3-6)  
Community based, supervised practical experience in consumer-related career to provide exploration and application opportunities. Permission of instructor required.

**COA 5450 Consumer Legislation** (3)  
Designed to provide those presently working in the consumer field, or preparing for a career related to consumer affairs, with current information on legislation affecting the consumer. Utilizes professionals in the community.

**HHD 3151 Housing: Shelter and Consumer** (3)  
Shelter alternatives and their effect on family and community. Analysis of types of housing and financing plans currently available to consumers.

**HHD 4420 Home Furnishings and Equipment** (4)  
Principles involved in the construction, selection, operation, and care of furnishings and equipment and their relationship to their environmental use. Prerequisite: IND 3020, or equivalent.

**HME 3210 Personal and Career Management** (3)  
Application of management principles to personal and family living, as well as career effectiveness. Emphasis on planning and organizational skills as assets in the business world as well as tools with which to promote personal and family satisfaction. Open to non-majors.

**HME 4230 Management of Personal and Family Resources** (3)  
Application of management principles to personal and family decisions including human and non-human resources. Opportunity for community observation of management decisions made by persons of various ethnic groups and/or life styles and an analysis of the effect of these decisions on family relationships and personal success.

**HME 4905/5905 Independent Study** (1-3)  
Individually selected program of supervised study in a specific area of home management or family economics. Prerequisite: Permission of instructor.

**HME 4940 Career Traineeship in Management** (3-6)  
Community based, supervised practical experience in observing and providing helping experience to persons with special management problems such as the elderly, the handicapped and/or those with limited resources. Prerequisites: COA 3130, COA 3410, HME 4230, or equivalent.

**HME 5225 Problems of Home Management in Contemporary Society** (3)  
Influence of diversified cultural impact on management life styles, with emphasis on problems of management of resources. Discussion of problems related to one parent homes, retirement, poverty, death, working parents, migrant families, and other human situations. Prerequisites: COA 3410, HME 4230, or instructor's approval.

**HME 5250/EEEX 5771 Independent Living for the Handicapped** (3)  
Explores the special home and personal living skills required in order for persons with mental and physical limitations to achieve their maximum independence. Suitable for students in psycho-educational services, health, physical education and recreation, social work, home economics or anyone planning to work with the elderly or handicapped. Approved for certification for teachers of the mentally retarded.

**HME 5940 Workshop in Home Management and Family Economics** (1-3)  
Short term study of special facets, issues and

trends of home management and family economics.

## Apparel Manufacturing Management Certificate Program

*Director: Adele Smith (Home Economics) Coordinating Committee: Gabriel Aurioles (Industrial Systems), and Betty Morrow (Home Economics).*

LOCATION: Tamiami Campus only.

A Professional Certificate is offered in Apparel Manufacturing Management acknowledging that students have demonstrated manufacturing management competencies specifically related to the apparel industry. This Certificate is primarily designed to meet the needs of those presently employed in the apparel industry who desire the management skills necessary for career effectiveness and mobility. The courses are planned and taught under the guidance of an advisory committee of local leaders in the apparel industry.

A Certificate in Apparel Manufacturing Management will be awarded upon satisfactory completion of twenty credits as listed in the Certificate requirements. These courses may be taken by Special Students with the advice of the Certificate Program Director. Students should complete an application form at the time of their first course registration.

## Course Descriptions

### Definition of Prefixes

CTE — Clothing and Textiles

### Required Courses:

**Remarks:** It is recommended that the courses be completed in the order listed.

**CTE 3742L Commercial Pattern Analysis (2)**  
Overview of geometric principles, and methods of pattern making for apparel and allied products. Development of a set of industrial patterns. Corequisite: CTE 3743L.

**CTE 3743L Pattern Grading Analysis (2)**  
Overview of theory, principles and methods used in commercial pattern grading in accordance with accepted size ranges and specifications. Corequisite: CTE 3742L.

**CTE 3762L Cutting Analysis and Material Utilization (3)**  
Overview of apparel cutting operations, including fabric inspection, scaling, marking, spreading, cutting, and costing. Effective material utilization emphasized.

**CTE 3763L Machine Evaluation and Selection (3)**  
Study of thread, needles, stitch and seam formation as it relates to apparel products. Survey of industrial sewing and pressing equipment and attachments. Cost considerations and payback periods examined.

**CTE 4766L Apparel Work Measurement (3)**  
In-depth study of procedures used to establish piece work rates for sewing operations by using time study and M-TM methods. Includes incentive systems, follow-up studies and how to set an

apparel plant on a piece work system. Prerequisites: CTE 3763L and CTE 4764L or equivalent.

**CTE 4764L Industrial Apparel Assembly and Quality Control (3)**  
Analysis of the theory and methods of the assembly of apparel and allied products. Several apparel products are evaluated to determine construction sequence, machinery requirements, cost control, and quality specifications.

**CTE 4765 Apparel Production Planning and Costing (4)**  
Integrates all phases of apparel production by planning the best production cycle for an apparel item from receipt of raw materials to finished product. Topics include pay systems, work-in-process control, production scheduling and costing techniques. Prerequisites for Apparel Manufacturing majors: CTE 4763L and CTE 4764L.

## Industrial Systems Department

*Margaret Wilson, Assistant Professor and Acting Chairperson.*

*Gabriel G. Aurioles, Associate Professor*  
*Sybil de Groot, Professor*  
*Evodio Llevada, Assistant Professor*  
*Neil Hout-Cooper, Assistant Professor*  
*John Remington, Associate Professor*

The individual who wishes to acquire a technical supervision and management background which emphasizes industrial operations will be served by the Industrial Technology major.

The Department offers a major in Industrial Technology with several identified areas of technical study designed for the student desiring a career in business, labor, industry or aviation. Technical coursework may be in the areas of Air Traffic Control, Pilot/Aviation Administration, Industrial Safety, Industrial Technology, or Labor Studies.

Industrial Technology is defined as a profession in which an understanding of the technical terminology of industry provides a capability of performing technical liaison between management, engineer, scientist, technician, craftsman and customer. The work of the industrial technologist has some characteristics of Engineering Technology and many of the qualities associated with management.

The objectives of the department are: to develop an understanding of the technical aspects of industry; to become familiar with terminology used in industry and business; to develop supervisory skills involving specialized knowledge, analytical ability and management tools; to develop leadership skills; to effect individual judgment and initiative; to establish effective communications with scientists, managers, engineers, customers and workers.

Each Industrial Technology major must complete the required departmental core courses (24 semester hours) and the coursework required by

one area of technical study. Any General Education Deficiencies will be in addition to the 60 semester hours required at the upper division level.

The following departmental core courses are required of all students obtaining the Industrial Technology degree.

Core Courses:	Semester Hours
ETD 4525	Engineering Design Graphics I or an Engineering Drawing course at the junior college level. 3
ETI 3603	Industrial Operations 3
ETI 3670	Industrial Financial Decisions 3
ETI 4633	Introduction to Labor Studies 3
ETI 4671	Engineering Economy 3
ETI 4681	Industrial Supervision 3
STA 3132	Business Statistics 3
	Computer language course 3

(Selected from COP 3112, COP 3170, or COP 3172.)

## Industrial Technology

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science

Lower Division Preparation:

A.A. or A.S. degree.

Upper Division Program:

(Industrial Technology)

Core Courses	Semester Hours
Area of technical study	30
MAC 3233	Calculus* 3
PHY 3050	Physics w/o Calculus* 3
ETI 3110	Quality Control 3
ETI 3444	Automation 3
ETI 3645	Production Planning and Control I 3
ETI 4683	Human Factors Engineering 3
ETI 3646	Production Planning and Control II 3
ETI 4613	Methods Analysis 3
ETI 4650	Industrial Information Systems 3
ETI 4660	Materials Handling 3

Approved Electives 6

**Remarks:** \*Completion at Lower Division level with a grade of "C" or better is accepted; to be substituted with ETE 4562 Electrical/Electronic Power Systems and/or ETM 4407L Mechanical Power Systems.

or

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science

Lower Division Preparation:

To enter this technical area, the student must be selected by the Federal Aviation Administration. The Bachelor's degree is the result of a cooperative program between Miami-Dade Community College or Broward Community College and the University.

*Upper Division Program*

**Air Traffic Controller**

Core Courses: 24

Area of Technical study: 30

ETG 3949	Cooperative Education Technology	3
ETG 4949	Cooperative Education Technology	3
ETI 3700	Safety in Industry	3
ETI 4620	Value Analysis	3
ETI 4632	Personnel Relations	3
ETI 4660	Materials Handling	3
ETI 4683	Human Factors Engineering	3
TRA 4411	Airport Management	3
TRA 4412	Air Carrier Management	3

ETI 4907	Directed Individual Study in Labor Studies	3
ETI 4994	Contemporary Labor Issues	3

*Approved Electives:* 15

or

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science

*Lower Division Preparation:*  
A.A. or A.S. degree.

*Upper Division Program:*  
(Industrial Safety)

Core Courses: 24

Area of technical study: 30

BCN 3730	Construction Safety	3
ETI 3700	Safety in Industry	3
ETI 4470L	Industrial Research and Development	3
ETI 4613	Methods Analysis	3
ETI 4620	Value Analysis	3
ETI 4632	Personnel Relations	3
ETI 4650	Industrial Information Systems	3
ETI 4683	Human Factors Engineering	3
ETI 4708	Health Hazards in Industry	3
HES 4432	Safety Management	3

industry's need for technologically skilled individuals in Production and Manufacturing. The Certificate includes courses designed to give the student knowledge of processes, cost, planning and control in addition to electives in specialized subjects.

The Certificate will be awarded to any student who successfully completes a specified 18 credit program, with a grade of "C" or better.

*Approved Electives* 6

or

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science

*Lower Division Preparation:*  
The community college requirements for A.A. or A.S. for Pilots or Aviation Administration.

*Upper Division Program:*  
Career Pilot/Aviation Administration

Core Courses: 24

Area of technical study: 30

ENC 3343	Basic Technical Writing	3
ETE 4562	Electrical/Electronic Power Systems	3
ETI 3661	Plant Layout	3
ETI 4033	Industrial Research and Development	3
ETI 4620	Value Analysis	3
ETI 4660	Materials Handling	3
ETI 4683	Human Factors Engineering	3
ETI 4708	Health Hazards in Industry	3
TRA 4411	Airport Management	3
TRA 4412	Air Carrier Management	3

*Approved Electives* 6

**INDUSTRIAL SYSTEMS**  
Definition of Prefixes  
BCN — Building Construction; ETC — Engineering Tech.; Civil; ETD — Engineering Tech.; Drafting; ETE — Engineering Tech.; Electrical; ETG — Engineering Tech.; General; ETI — Engineering Tech.; Industrial; ETM — Engineering Tech.; Mechanical; FOS — Food Sciences; GRA — Graphics; ART; HES — Health, Education & Safety; OTH — Occupational Therapy; STA — Statistics.

**BCN 3702C Construction Technology (3)**  
Laboratory experiences of basic production, management and personnel practices as they relate to construction systems and projects.

**BCN 3730 Construction Safety (3)**  
Introduces occupational safety hazards associated with the construction industry. Emphasis placed on recognition, evaluation and control of safety hazards particularly as they relate to the Occupational Safety and Health Act.

*Approved Electives* 6

or

LOCATION: Tamiami Campus Only

DEGREE: Bachelor of Science

*Lower Division Preparation:*  
A.A. or A.S. degree.

*Upper Division Program:*  
(Labor Studies)

Core Courses: 24

Area of technical study: 21

BCN 4741	Industrial and Labor Relations Law	3
ETI 3695	Collective Bargaining in Industrial Systems	3
ETI 3700	Safety in Industry	3
ETI 4634	Labor and Industrial Dispute Resolution	3
ETI 4635	Administration of Labor Organizations	3

**Professional Certificate**

**Industrial Safety**

The objective of the Professional Certificate Program in Industrial Safety is to present an integrated learning experience that will provide the student with a minimum level of expertise in the specialized area of Occupational Safety. Particular emphasis will be placed on application, interpretation and administration of the Federal Occupational Safety and Health Act and other regulations in an industrial setting. The certificate is intended to provide skills which will be directly applied in industry.

The Certificate will be awarded to any student who successfully completes a specified 18-credit program, with a grade of "C" or better.

**BCN 4741 Industrial and Labor Relations Law (3)**  
Studies the history and current functioning of labor law with special emphasis upon the private sector.

**BCN 4251C Architectural Drafting (3)**  
Laboratory experiences in designing structures, developing working drawings and specifications for constructed projects. Includes development of site, foundation, floor, elevations, plumbing plans, and specifications.

**Industrial and Labor Relations**

The objective of the Professional Certificate Program in Industrial and Labor Relations is to produce options to both baccalaureate degree seeking students and pre and post baccalaureate students in the fields of Labor Studies, Industrial Personnel Operations and Collective Bargaining and Labor-Management Relations.

The Certificate will be awarded to any student who successfully completes a specified 18 credit program, with a grade of "C" or better.

**Production and Manufacturing**

The objective of the Professional Certificate Program in Production and Manufacturing is to provide students desiring professional work in the field of Production and Manufacturing with a sequence of courses which will update those students already employed and will satisfy local

**ETC 4252L Construction Processes (3)**  
Laboratory experiences in the principles and practices of the construction trades. Includes concrete and plaster trades, electrical, plumbing, carpentry, iron work, sheetmetal, roof and finishing trades in setting foundations, erecting structures, installing mechanical and electrical systems, applying surface material and finishing.

**ETD 4525C Engineering Design Graphics I (3)**  
Laboratory experiences in the principles and practice of idea development and expression through free hand sketching and conventional instrument drafting. A beginning course for students with no prior drafting experience.

**ETD 4526C Engineering Design Graphics II (3)**  
Laboratory experiences in the principles and practices of product design and communication. Includes conventions, projections, and dimensions and problems of making drawings for product production. Prerequisite: ETD 4525C.

**ETE 4562 Electrical/Electronic Power Systems (3)**  
Introductory course designed primarily for the novice in electricity/electronics. Laboratory ex-

perience consists of planned activities centered about electrical/electronic instrumentation and power systems.

**ETG 3810 New Venture Formation** (3)

Introduction to the main issues facing the would-be businessman. Topics include operational, marketing, and financial needs of the new enterprise. Emphasis on matching student's capabilities with specific project. Open to all University students.

**ETG 3949 Cooperative Education Technology** (3)

Supervised full-time work semester for technology cooperative education students. Limited to students admitted to the Co-op program with consent of advisor. Evaluation and reports required.

**ETG 4811 Technological Entrepreneurship** (3)

A project oriented course designed specifically for those students or members of the community who wish to start a new business venture. Completion of the course requires an actual business start, spin-off or expansion of an existing one.

**ETG 4815 Inventions and Innovations** (3)

Introduction to the innovation process. Specifically designed for students or members of the community interested in patenting and invention or developing an idea. Exploration and design are encouraged. Topics include patent application, licenses and business plans.

**ETG 4949 Cooperative Education Technology** (3)

Supervised full-time work semester for technology cooperative education students. Limited to students admitted to the Co-op program with consent of advisor. Evaluation and reports required.

**ETI 3110 Quality Control** (3)

Modern concepts for managing the quality function of industry to maximize customer satisfaction at minimum quality cost. The economics of quality, process control, organization, quality improvement, and vendor quality.

**ETI 3417C Manufacturing Technology** (3)

Laboratory experiences of basic manufacturing, management, personnel, and production practices as they relate to products and processes. Safety procedures.

**ETI 3444 Automation** (3)

A study of the technology of automation including the economics of management policies for the major industrial changes influencing automation planning. Prerequisite: ETI 4650.

**ETI 3603 Industrial Operations** (3)

The industrial structure is studied to see how the various areas and functions are related to each other. The material covered should give the student an overview of the operations of the organization and an understanding of the fundamental principles of management which lead toward effective coordination and control.

**ETI 3645 Production Planning and Control I** (3)

Introduction to production planning and control concepts including their function within total planning, forecasting, estimating, processing in-

structions, and manpower allocations. Prerequisites: Statistics and Computer Programming.

**ETI 3646 Production Planning and Control II** (3)

The functions of a production planning and control organization at work. Topics in the area of inventory control, scheduling, dispatching and flow control. Prerequisite: ETI 3645.

**ETI 3661 Plant Layout** (3)

To effect the coordination of the physical plant facilities to combine the man, materials and machines necessary for operation in the most economical arrangement. Prerequisite: ETI 4660.

**ETI 3670 Industrial Financial Decisions** (3)

The accounting process and use of financial techniques and data in planning, controlling, and coordinating industrial activities. This course is intended to familiarize the student with accounting concepts, analytical methods, and use of accounting information for purposes of operation and control.

**ETI 3682 Applied Synecology** (3)

A systematized approach to the definition and solution of industrial problems resulting from human interactions. This course provides a uniform methodology for resolving one of a manager's most time consuming and frustrating tasks, resolution of people problems. No theory or explanation of human behavior is involved.

**ETI 3695 Collective Bargaining in Industrial Systems** (3)

A comprehensive study of collective bargaining with emphasis upon the private sector. Included will be negotiations and scope of contracts, day-to-day contract administration, and major bargaining issues.

**ETI 3700 Safety in Industry** (3)

Introduces occupational safety and health hazards associated with mechanical systems, materials handling, electrical systems, and chemical processes. Illustrates controls through engineering revision, safeguarding and personal protective equipment. Emphasis placed on recognition, evaluation and control of occupational safety and health hazards.

**ETI 4421C Materials Processing** (3)

Laboratory experiences in the principles and practices of separating, forming, and combining techniques to produce components, subassemblies, assemblies and finished products. Includes a variety of materials, equipment and fabrication techniques.

**ETI 4452 Maintenance Planning** (3)

A study of the maintenance function in the industrial setting, including the planning and implementation of preventative maintenance techniques.

**ETI 4470L Industrial Research and Development** (3)

Laboratory experiences in formulating, researching, designing, and developing prototypes of constructed and manufactured products and processes. Prerequisite: BCN 3702 or ETI 3417C.

**ETI 4521 Forms Control and Design Technology** (3)

(This is the new required course for the Certificate Program: Business Forms Technology. Classroom and laboratory experience in planning, decision making and implementation of a Forms Control and Design system. Includes data analysis, estimating, impact, elements and design, lithographic technology and communications.

**ETI 4613 Methods Analysis** (3)

Analysis and design of improved methods. Procedures to utilize resources optimally by time standardization, work measurement, flow and operation analysis, activity sampling, predetermined motion time systems, work simplification and job enrichment principles.

**ETI 4620 Value Analysis** (3)

How to increase the value of products or services by holding quality while reducing costs, holding costs while increasing quality, or both, with emphasis on material shortages. Specific steps of value analysis used to improve industrial problem solving.

**ETI 4632 Personnel Relations** (3)

A study of the functions of personnel relations. Topics covered include determining job requirements, manpower requirements, selection, interviewing and counseling, tests, training, morale and motivation, job evaluation, wage classification, merit rating, and union-management relations. Prerequisite: ETI 4681.

**ETI 4633 Introduction to Labor Studies** (3)

History and development of the labor movement, with emphasis on union development as a response to industrialization and technological change. Includes the structure and functioning of modern unions, the development of modern technology, the industrial working class, and the impact of the rural-urban shift of labor.

**ETI 4634 Labor Dispute Resolution** (3)

Theory and practice of dispute resolution in industry arbitration processes, grievances, mediation, factfinding and conciliation. Arbitration of industrial claims and disputes, commercial arbitration. Prerequisite: ETI 4633.

**ETI 4635 Administration of Labor Organizations** (3)

Administration of labor organizations; labor policies and practices; legal requirements and financial administration of unions. Prerequisite: ETI 4633.

**ETI 4650 Industrial Information Systems** (3)

Introduction to systems concepts. Planning design and implementation of information systems, decision-making with systems, and system organization.

**ETI 4660 Materials Handling** (3)

A survey of materials handling elements, the unit load, packaging, bulk handling, and the economics of materials handling. Improvement of existing handling methods, justification for handling equipment, special handling techniques, and the management of the materials handling division in the industrial organization.

**Prerequisites:** Statistics and Computer Programming.

**ETI 4671 Engineering Economy (3)**

The study of the economics of decision-making in business and industry. Includes an analysis of the concepts of break-even, least cost and the differences between alternatives when related to the time value of money. Budgeting, labor and cost control, relative to the industrial engineering technologist, is also considered.

**ETI 4681 Industrial Supervision (3)**

Overview of the supervisor's functions, responsibility, and over-all role in management in industry.

**ETI 4683 Human Factors Engineering (3)**

Examination of the ways to fit jobs and objects better to the nature and capacity of the human being. Lectures will review man's performance capability, singly and in groups, in interacting with his work environment. Stresses the practical application of human factors principles.

**ETI 4690 Industrial Sales (3)**

Fundamentals of technical sales. Analysis of buyer's needs. Experiments, trial runs and demonstrations. The sale of machinery, raw materials and technical services. Credit and financing considerations. Measures of performance. Case studies.

**ETI 4691 Women in Industry (3)**

Development of supervisory and technical skills for women in industrial operations. Practice in planning, organizing, decision-making, and employee direction, with particular emphasis on the woman as supervisor, manager or in the technical professions.

**ETI 4692 Women in the Labor Movement (3)**

The role of women in the work force and in unions with historical, social, and economic emphasis.

**ETI 4694 Contemporary Labor Issues (3)**

Studies of contemporary labor issues selected from such areas as collective bargaining, arbitration, mediation, legislation, regulative and administrative law, employment discrimination, and union grievance.

**ETI 4708 Health Hazards in Industry (3)**

A continuation of Safety in Industry. An introduction to OSHA regulations on health hazards. Noise, radiation and dust problems in industry. Special hazards with solvents, asbestos, lead, silica, and other chemicals. OSHA compliance procedures. Prerequisite: ETI 3700

**ETI 4905 Independent Study (1-3)**

Specialized intensive study in an area of special interest to the student. Consent of instructor and department chairperson required.

**ETI 4907 Directed Individual Study in Labor Studies (3)**

Supervised reading and/or field research and training.

**ETI 4930 Special Topics (3)**

For a group of students who wish intensive study of a topic not otherwise offered in the University. Consent of faculty supervisor and department chairperson required.

**ETM 4407L Mechanical Power Systems I (3)**

Laboratory experiences in the theory of operation and related maintenance of single and multiple cylinder reciprocating engines. Includes introductory experience with mechanical, fluid, and pneumatic power systems.

**ETM 4408 Mechanical Power Systems II (3)**

Advanced laboratory experiences with reciprocating engines. Introductory study of turbine, diesel, and rotary engines. Introductory study of aircraft structures and basic aerodynamics. Prerequisite: ETM 4407.

**ETM 4823C Materials of Industry (3)**

Laboratory experiences in the theory and practice of characteristics of materials of industry. Includes test and measurement of stress, strain, torsion, tensile strength, fatigue, and hardness of metals, wood, fabrics, ceramics and synthetics.

**FOS 4411 Food Engineering (3)**

Engineering concepts applied to food processing. Material and energy balance. Basic unit operations used in food processing to include fluid flow, mass and heat transfer. Specific applications and problems.

**FOS 4421C Food Processing I (3)**

Basic principles of food preservation from raw material to storage stability of finished products. Quality assurance and new product development.

**FOS 4422C Food Processing II (3)**

Role of additives in food processing. Packaging materials. Principles of distribution and marketing. Plant site location. Field trips and case studies.

**GRA 3506C Reprographics (3)**

Laboratory experiences in the theory and practice of communicating through graphics; includes experiences in copywriting, editing, image generation, image assembly, photo conversion, image carrier preparation, transfer, and finishing.

**GRA 4120 Photographics (3)**

Laboratory experiences in the theory and practice of photography as used in visual communications. Develops proficiencies in camera work, developing, and printing.

**GRA 4507 Planographic Processes (3)**

Laboratory experiences in the theory and practice of offset lithography. Emphasis will be directed toward skill development in design and copy preparation, process photography, stripping, platemaking, and duplicator operation.

**HES 4432 Safety Management (3)**

Basic concepts of safety management. Fundamentals of loss control, policies, accountability, measurement and appraisal of the safety function in industry. The technique of operations review. Systems safety. Motivation. Products Safety. Case studies. Prerequisites: BCN 3730 and ETI 4708.

**OTH 3123 Technology for Occupational Therapy (3)**

The basic properties of woods and metals and

the techniques used by occupational therapists in planning a project based on a hypothetical patient's problem.

**STA 4605 Applied Systems Research (3)**

Basic industrial research techniques, operational production problems, matrix applications, inventory control, network analysis. Prerequisites: STA 3161, MAS 3103.

## Medical Records Administration Major

Florence C. Amato, R.R.A., Ph.D., *Associate Professor and Director*  
Juanita Pursel, R.R.A., *Assistant Professor*

The major in Medical Records Administration provides the student with management skills necessary for key members of the modern health care team, contributing to serving the health care needs of individuals and of the community. This is accomplished through development of patient information systems which enable patients to be cared for adequately, medicine to be taught, research to be conducted, epidemics to be controlled, drugs to be tested, and health care statistics to be compared. Specific skills include those needed for acquisition of complete medical data on each patient cared for by the medical team, for planning of systems for record retention and retrieval, and for management of those systems by the departmental staff.

The Medical Record Administration Program is accredited by the Committee on Allied Health Education and Accreditation of the American Medical Association in collaboration with the Council on Education of the American Medical Record Association. Graduates are eligible to take the National Registration Examination, satisfactory completion of which allows one to become a Registered Record Administrator.

DEGREE: Bachelor of Science in Medical Records Administration

Required Courses: Anatomy and Physiology including Laboratory, Statistics and Microbiology.

UPPER DIVISION PROGRAM:

		<i>Semester Hours</i>
<i>Major Required Courses:</i>		
MRE 3001	Medical Terminology	3
MRE 3002C	Medical Word Processing	2
MRE 3110C	Medical Records Administration I	4
HSC 3152	Legal Aspects of Medical Records	3
MRE 3401	Fundamentals of Medical Science	3
MRE 3800	Directed Practice I	1
MRE 3202C	Coding and Indexing Procs	4

MRE 3205C	Medical Records Administration II	4
MRE 3402	Fundamentals of Medical Science II	3
MRE 4403	Fundamentals of Medical Science III	3
MRE 3810	Directed Practice II	1
MRE 4400	Medical Record Consulting	3
MRE 4410	Medical Records Administration III	3
MRE 4830	Directed Practice III	1
MRE 4312C	Medical Records Administration IV	4
MRE 4344	Medical Record Administration V	3
MRE 4831	Directed Practice IV	1
MRE 4304	Problems in Medical Records Administration	3
MRE 4835	Internship Medical Records Management	3
<b>Support Courses:</b>		
	HCA 3501, 4203, 4710; COP 3172; CIS 3300; MAN 4301.	18

by medical specialties. Typical chart data will be included, with representative information characteristic of history and physical examination, laboratory, x-ray data, and nursing notes. Specialties covered are internal medicine, pediatrics, obstetrics and gynecology. Prerequisites: Anatomy and Physiology.

#### MRE 3402 Fundamentals of Medical Science II (3)

A systematic review of organ systems, arranged by medical specialties. Typical chart data will be included, with representative information characteristics of history and physical examination, laboratory, x-ray data, and nursing notes. Specialties covered are general surgery, neurosurgery, neurology, and orthopedics. Prerequisites: Anatomy and Physiology.

#### MRE 4403 Fundamentals of Medical Science III (3)

A systematic review of organ systems, arranged by medical specialties. Typical chart data will be included, with representative information characteristic of history and physical examination, laboratory, x-ray data, and nursing notes. Specialties covered are endocrinology, otorhinolaryngology, ophthalmology, oncology, genetics and anesthesiology. Prerequisites: Anatomy and Physiology.

#### MRE 3800 Directed Practice I (1)

Orientation of the student to the hospital medical records department and adjunct diagnostic or therapeutic units, including the outpatient department, emergency room, admitting office, x-ray, pharmacy, physical therapy, laboratory, and pathology department.

#### MRE 3810 Directed Practice II (1)

Orientation of the student to medical records department functions. Rotation of the student through technical functions of the department, following the flow of the patient's record after discharge. Includes the discharge procedure; analysis, coding and indexing systems; statistical reporting; correspondence; control of the incomplete medical record; and processing of the completed record.

MRE 4400 Medical Record Consulting (3)  
Standards and procedures for long term, ambulatory care, home health, mental retardation, mental health, and other health care records.

#### MRE 4410 Medical Records Administration III (3)

Medical care evaluation, including organizational structures, methods and procedures in compliance with the Joint Commission on Accreditation of Hospitals, AOA, Medicare and PSRO.

#### MRE 4304 Problems in Medical Records Administration (3)

Through illustrative case reports, group discussions, role playing, oral reports, lectures, buzz sessions, and review of the literature, students explore effective methods for identifying and arriving at satisfactory solutions to specific types of problems they may expect to encounter in the administration of medical record services.

#### MRE 4312C Medical Records Administration IV (3,1)(4)

Management of a medical records system in any type of health care facility, including hospital and ancillary records, nursing care facilities, clinics and HMO; planning, organizing, acting and controlling. Laboratory accompanying.

#### MRE 4344 Medical Record Administration V (3)

Physical planning of Department, purchase specifications, proposal writing and cost justification. Prerequisite: MRE 4312C.

#### MRE 4830 Directed Practice III (1)

This directed practice centers on utilization review procedures for hospitals and M.E.C. studies.

#### MRE 4831 Directed Practice IV (1)

Observation of the management of a hospital medical records department, with emphasis on administrative and medical staff relationships, including policy and procedure manuals, job descriptions and evaluation, budgeting and cost controls, and medical staff committees.

#### MRE 4835 Internship in Medical Records Management (3)

Management in a medical records department for five weeks, under the supervision of a Registered Record Administrator.

MRE 4905 Directed Independent Study (1-3)  
Individual conferences, assigned readings and reports on investigations in Medical Records.

#### MRE 4932 Special Topics (3)

Designed to address topics not otherwise offered in the curriculum but specific to Medical Record Administration. Topics to be announced yearly.

#### MRE 3949 Cooperative Education in Medical Record Administration (3)

Supervised work in Medical Records taking part in the University Cooperative Education Program. Prerequisite: Admission to Co-op Education.

#### MRE 4949 Cooperative Education in Medical Record Administration (3)

Supervised work in Medical Records taking part in the University Cooperative Education Program. Prerequisite: MRE 3949.

## Course Descriptions

#### MRE 3001 Medical Terminology (3)

Provides the student with basic medical language skills, including pronunciation, spelling, and definitions necessary for communication in the medical world.

#### MRE 3002C Medical Word Processing (2)

Comprehension in transcription of medical records, including history and physical reports, x-ray, operative, and pathology reports.

#### MRE 3110C Medical Records Administration I (3,1)(4)

Introduces the student to the historical development of medical record science. Role and function of the medical records administrator. Professional ethics. Flow of the medical record from patient admission to completion of the record after discharge. Numbering and filing systems. The medical record; content and format, value and standards for health care facilities. Laboratory accompanying.

#### HSC 3152 Legal Aspects of Medical Records (3)

Consideration of Medical Record as legal document to include general introduction to law, release of information and legal actions.

#### MRE 3202C Coding and Indexing Procedures (3,1)(4)

Special registries; nomenclatures, coding and indexing; ICD — 9 — CM; Application of indexes to research. Laboratory accompanying.

#### MRE 3205C Medical Records Administration II (3,1)(4)

Presents an in-depth study of hospital statistics. Covers sources, definitions, collection, and reporting of data in the medical records department of health care facilities. Laboratory accompanying.

#### MRE 3401 Fundamentals of Medical Science I (3)

A systematic review of organ systems, arranged

## Medical Technology

Janet L. Zins, *Associate Professor and Chairperson*  
 Sylvia L. Smith, *Associate Professor*  
 Barbara V. Anderson, *Assistant Professor*  
 Pamela J. Staton, *Assistant Professor*

The program offered by the Department provides opportunities for the student to learn the scientific principles which are basic to the development, performance, evaluation, and control of laboratory tests by the medical technologist in health evaluations and patient management.

The program is approved by the National Accrediting Agency of Clinical Laboratory Sci-

ences, the American Medical Association, and the American Society of Clinical Pathologists. A graduate of the program is eligible to apply for examination and certification by the Board of Registry as a Medical Technologist, MT (ASCP); by the National Certification Agency for Medical Laboratory Personnel as a Clinical Laboratory Scientist, CLS (NCA); and for licensure as a Medical Technologist by the State of Florida.

LOCATION: Tamiami Campus only.

DEGREE: Bachelor of Science in Medical Technology

**LOWER DIVISION PREPARATION:**

The student seeking admission to the program should have: (1) completed a minimum of 60 semester hours in an accredited two or four year institution, (2) completed all of the general education requirements, (3) earned a cumulative grade point average of 2.5 (on a scale of 4.0), (4) earned a minimum cumulative grade point average of 2.0 (on a scale of 4.0) in required science courses, (5) completed the following preparatory courses: two semesters of general biology with laboratory, two to three semesters of general chemistry with laboratory, two semesters of organic chemistry with laboratory, one semester of quantitative analysis chemistry with laboratory, one semester of general microbiology with laboratory, two semesters of pre-calculus mathematics (algebra and trigonometry). (Survey or introductory courses in science and mathematics are not acceptable.)

**UPPER DIVISION PROGRAM:**

The University-integrated "2+2" program is approved for thirty students per year. Students are usually admitted to the program in Fall Semester, but may be admitted on an individual basis in any semester providing pre-requisite and co-requisite courses have been completed. It is recommended that applications for Fall Semester be received by April 15 but applications will be processed throughout Summer Semester. An interview may be required. The medical technology professional courses and hospital clinical practice are open only to majors in the program (or by permission of instructor). Entrance to clinical practice depends upon satisfactory evaluation of the student's record by the faculty.

Alternate laboratory experience or clinical practice may be arranged on an individual basis for (1) graduates of NAACLS-approved MLT programs; (2) students certified as MLT (ASCP); (3) students who have had experience in a clinical laboratory; and, (4) students who have had military laboratory training.

Medical technology community service courses are taught for the continuing education of community clinical laboratory personnel.

**Required Courses**

	<i>Semester Hours</i>
<i>Junior Year</i>	
<i>Fall Semester</i>	
MLS 3030C Introduction to Medical Technology	1
MLS 3065C Clinical Instrumentation	3
MLS 4405 Clinical Microbiology	2

MLS 4405L Clinical Microbiology Laboratory	3
MLS 4120 Clinical Microbiology Correlations	1
BCH 3033 Introduction to Biochemistry/ Biomolecules	4
	14

*Spring Semester*

MLS 4625 Clinical Chemistry Methods	3
MLS 4625L Clinical Chemistry Laboratory	6
MLS 4140 Clinical Chemistry Correlations	1
MLS 4505C Clinical Immunology	3
MLS 4334C Clinical Coagulation	2
PCB 3233 Immunology	3
	18

*Summer Semester*

MLS 4306 Clinical Hematology	3
MLS 4306L Clinical Hematology Laboratory	3
MLS 4110 Clinical Hematology Correlations	1
MLS 3430 Medical Parasitology	2
MLS 3430L Medical Parasitology Laboratory	1
MLS 4460C Advanced Microbiology	3
MLS 4755C Laboratory Statistics and Quality Control	2
	15

*Senior Year*

<i>Fall Semester</i>	
MLS 4535 Immunohematology	3
MLS 4535L Immunohematology Laboratory	3
MLS 4130 Immunohematology Correlations	1
MLS 4334C Clinical Coagulation Laboratory	2
MLS 4700 Laboratory Management	1
MLS 4630C Advanced Clinical Chemistry	3
MLS 4032C Orientation to Clinical Rotation	1
MLS 4934 Seminar I	1
	15

*Spring Semester*

MLS 4820L Clinical Practice/ Chemistry	4
MLS 4821L Clinical Practice/ Microbiology	4
MLS 4822L Clinical Practice/ Hematology	4
MLS 4823L Clinical Practice/ Blood Bank & Immunology	4
MLS 4935 Seminar II	1
	17
	76

MLS 3030C Introduction to Medical Technology	(1)
Introduction to the profession of medical technology, history, ethics, employment opportunities. Instruction in blood collection techniques. Certification and licensure requirements.	

MLS 3240 Medical Mycology	(2)
Study of the essential procedures and criteria in the identification of pathogenic fungi. Recognition of fungal contaminants commonly encountered in clinical specimens. Actinomycetes. Antimycotic agents. Mycoserology. Stains, reagents and media.	

MLS 3240L Medical Mycology Laboratory	(1)
Laboratory to accompany MLS 3240.	

MLS 3430 Medical Parasitology	(2)
Classification, morphology and life cycles of medically significant parasites. Emphasis is on microscopic identification, specimen preservation, and infection control.	

MLS 3430L Medical Parasitology Laboratory	(1)
Laboratory to accompany MLS 3430.	

MLS 3605C Clinical Instrumentation	(3)
Fundamentals of clinical laboratory instrumentation including basics of electricity and electronics, preventive maintenance and quality control procedures will be emphasized.	

MLS 3700 Management Procedures for Laboratory Employees	(1)
Job descriptions, salary schedules, equipment and reagent purchasing, quality assurance programs, work-load recording methods. Individualized projects adapted to meet the needs of facility where student is employed. Prerequisite: one year of clinical laboratory experience.	

MLS 3750 Laboratory Quality Control, Safety, and Instrument Maintenance	(3)
Course designed for the working technologist who wishes to protect himself, his co-workers, and others in his environment from the hazards inherent in laboratory operations, and who wishes to present better evidence of compliance with the various inspection and accreditation organizations which now inspect laboratories. Prerequisite: one year of clinical laboratory experience.	

MLS 4032C Orientation to Clinical Rotation	(1)
Introduction to hospital environment and patient care. Medical ethics. Clinical facilities tour. Required laboratory tests for entrance into clinical rotation will be completed.	

MLS 4110 Hematology Correlations	(1)
Present diseases associated with abnormal findings in laboratory tests performed in hematology, coagulation, urinalysis, and clinical microscopy. Assist in correlating two or more laboratory procedures which might reinforce the likelihood of specific diseases being identified by laboratory methods.	

MLS 4120 Microbiology Correlation	(1)
Medical aspects of infections caused by bacterial, viral, rickettsial, and mycotic pathogens.	

**Course Descriptions**

Definition of Prefixes  
 MLS — Medical Laboratory Science



**In vivo effect of antimicrobial therapy. Hospital infection control.**

**MLS 4130 Immunohematology Correlations (1)**  
Laboratory identification of venereal diseases. Blood Bank regulations in protection of donor and recipient. Blood component therapy selection for specific conditions. Problems of the patient immunized through transfusion therapy.

**MLS 4140C Clinical Chemistry Correlations (1)**  
Biochemical tests used in diagnosis and treatment of metabolic disorders. Carbohydrate and protein metabolism, acid-base balance, enzymes, testing for organ function.

**MLS 4150 Selected Topics in Clinical Correlations (1)**  
Current topics in Clinical Correlations of particular significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

**MLS 4160L Individualized Study in Clinical Correlations (VAR)**  
Introduction to problems in Clinical Correlations requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

**MLS 4190 Diagnostic Histology (1)**  
Control slides; special stains; preparation of tissues for EM; identification of significant tissue features for preparation of surgical slides. For experienced histotechnologists.

**MLS 4306 Clinical Hematology (3)**  
A basic course in the origin of erythrocytes and white blood cells, their morphology and function. The study of urine, its formation and microscopic morphology.

**MLS 4306L Clinical Hematology Laboratory (3)**  
Laboratory to accompany MLS 4306, dealing with manual and automated procedures for determining complete blood and platelet counts. Urinalysis and clinical microscopy.

**MLS 4307L Directed Study in Hematology (VAR)**  
Selected laboratory techniques to accompany MLS — 4306. For M.L.T.'s.

**MLS 4320C Advanced Hematology (2)**  
Study of abnormal blood cells present in peripheral smear and bone marrow. Special tests performed in hematology and coagulation. Hematology automation. Lectures and laboratory.

**MLS 4325 Selected Topics in Hematology (1)**  
Current topics in Hematology of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

**MLS 4327L Individualized Study in Hematology (VAR)**  
Introduction to problems in Hematology requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual inter-

est. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

**MLS 4334C Clinical Coagulation (2)**  
A basic course in the study of coagulation factors, platelets, the fibrinolytic system, platelet aggregation and the laboratory exercises that complement the lectures.

**MLS 4405 Clinical Microbiology (2)**  
Diagnostic microbiological procedures. Study of clinically significant organisms. Isolation media and biochemical tests for identification. Recognition of normal flora. Anaerobic procedures. Viruses, Fungi, Rickettsiae. Serological typing. Antibiotic sensitivity tests. Prerequisite: General Microbiology.

**MLS 4405L Clinical Microbiology Laboratory (3)**  
Laboratory to accompany MLS 4405. Isolation and identification of normal and pathogenic flora from genuine and simulated clinical specimens. Identification of clinically significant fungi.

**MLS 4406L Directed Study in Clinical Microbiology (VAR)**  
Selected laboratory techniques to accompany MLS — 4405. For M.L.T.'s.

**MLS 4460C Advanced Microbiology (3)**  
Lectures and laboratory. Identification of rare pathogens. Virology — tissue culture techniques. Mode of action and bacterial resistance to antibiotics. Fluorescent antibody techniques. Immunodiffusion. Immunoelectrophoresis. Seniors only.

**MLS 4465 Selected Topics in Microbiology (1)**  
Current topics in Microbiology of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

**MLS 4467L Individualized Study in Clinical Microbiology (VAR)**  
Introduction to problem in Clinical Microbiology requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

**MLS 4505C Clinical Immunology (3)**  
Study of immunological procedures employed by the clinical laboratory for the diagnosis of diseases such as rheumatoid arthritis, infectious mononucleosis, syphilis, etc.

**MLS 4530C Advanced Immunohematology (1)**  
In depth study of Transfusion Therapy, the use and preparation of blood components, and special problems in blood banking. Lectures and laboratory. Seniors only.

**MLS 4535 Immunohematology (3)**  
Fundamentals of Blood Banking including blood grouping, compatibility testing, antibody identification, blood group systems, hemolytic disease of the newborn and blood components. Prerequisites: Immunology and Clinical Immunology.

**MLS 4535L Immunohematology Laboratory (3)**  
Laboratory to accompany MLS-4535.

**MLS 4536L Directed Study in Immunohematology (VAR)**  
Selected laboratory techniques to accompany MLS-4535. For M.L.T.'s.

**MLS 4551L Individualized Study in Immunohematology (VAR)**  
Introduction to problems in Blood Banking requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

**MLS 4555 Selected Topics in Immunohematology (1)**  
Current topics in Blood Banking of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

**MLS 4625 Clinical Chemistry Methods (3)**  
Medical laboratory procedures for analysis of carbohydrates, proteins, lipids, enzymes, electrolytes. Renal and liver function profiles. Basic instrumentation. Automated analysis with emphasis on continuous flow. Quality control. Prerequisites: Clinical Instrumentation and Biochemistry.

**MLS 4625L Clinical Chemistry Laboratory (6)**  
Laboratory to accompany MLS 4625.

**MLS 4626L Directed Study in Clinical Chemistry (2)**  
Selected laboratory techniques to accompany MLS-4625. For M.L.T.'s.

**MLS 4630C Advanced Chemistry (3)**  
Lecture and Laboratory. Topics to be covered include analysis of thyroid hormones, estrogens, adrenal hormones and metabolites, radioimmunoassay and radioisotope measurement, amniocentesis, toxicology, multichannel analyzers, and gas chromatography. Seniors only.

**MLS 4635 Selected Topics in Clinical Chemistry (1)**  
Current topics in Clinical Chemistry of particular clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

**MLS 4637L Individualized Study in Clinical Chemistry (VAR)**  
Introduction to problems in Clinical Chemistry requiring research or independent study. Special work, laboratory and/or lecture as determined by advisor in accord with the student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

**MLS 4700 Laboratory Management (1)**  
Personnel handling, laboratory records, equipment and reagent purchasing, laboratory computerization, quality assurance programs, workload recording programs, scheduling and methods of laboratory self-evaluation. Seniors only.

**MLS 4755C Laboratory Statistics and Quality Control (2)**  
Lecture topics to be covered include basic laboratory statistics, linear regression and correlation analysis, quality control charting tech-

niques, new method evaluation, problem solving using computer programs.

**MLS 4820L Clinical Practice/Chemistry (4)**  
Practical experience in a hospital chemistry laboratory. All Medical Technology courses must be completed before students will be permitted to register for clinical practice.

**MLS 4821L Clinical Practice/Microbiology (4)**  
Practical experience in a hospital microbiology laboratory.

**MLS 4822L Clinical Practice/Hematology (4)**  
Practical experience in a hospital hematology laboratory.

**MLS 4823L Clinical Practice/Blood Bank and Immunology (4)**  
Practical experience in a hospital blood bank and immunology laboratory.

**MLS 4934, 4935 Seminar I, II (1)**  
Two semesters are required. Preparation and presentation of literature review and individualized projects. Instructional methods. Supervisory techniques. Seniors only.

## Occupational Therapy

Reba L. Anderson, Associate Professor and Chairperson  
Suze Dudley, Assistant Professor  
Shirley Stirling, Assistant Professor

Occupational therapy is a health profession concerned with promoting the quality of life of individuals. Therapeutic techniques are directed toward restoration, reinforcement and enhancement of participation in life. Occupational therapy may be indicated for persons whose life has been interrupted by disease or injury, or those who suffer from developmental delays or problems associated with aging.

The occupational therapist assesses the client's abilities to carry out tasks and activities necessary for productive living. Working collaboratively with the client and considering his personal goals, lifestyle and environment, the therapist develops an intervention program designed to help restore the greatest possible functional capacity. During the treatment or rehabilitation process, the client actively engages in a directed program of purposeful, meaningful activities designed to increase his level of functioning. The occupational therapist works collaboratively with the client, other health professionals on the health care team, and community agency personnel. Occupational therapists serve a wide variety of individuals in all age ranges and work in settings such as community agencies, sheltered workshops, hospitals, schools, extended care facilities and rehabilitation centers. There is an increasing demand for occupational therapists and excellent opportunities exist for career advancement.

If you are interested in working with clients who have special problems, assisting them to reach their maximum potential, then perhaps

occupational therapy would be the profession for you. Qualities that are necessary to be a successful therapist include the ability to work with others, look at the totality of human performance, think creatively, problem solve, and direct the actions of others. In order to be admitted to the program in occupational therapy, applicants must meet the requirements for admission to the University, have a cumulative G.P.A. of 2.5 or better, and have completed required prerequisites and 60 semester hours of acceptable academic credit. Applicants must apply both to the University and to the Occupational Therapy Department. Enrollment is limited and one class is selected each academic year to begin fall semester. The program is accredited by the American Occupational Therapy Association/American Medical Association.

LOCATION: Tamiami Campus only

DEGREE: Bachelor of Science in Occupational Therapy

### LOWER DIVISION PREPARATION:

*Required Courses:* Biological and/or physical sciences — 6 semester hours to include 3 semester hours of biology with lab. Recommended courses: zoology with lab, anatomy and physiology. Social Behavioral Sciences — 12 semester hours to include: psychology — 6 semester hours. Recommended courses: Theories of Personality, Dynamics of Behavior. Human Growth and Development — 3 semester hours. Sociology / Anthropology — 3 semester hours. Statistics — 3 semester hours.

### UPPER DIVISION PROGRAM:

*Required Courses:* Semester Hours

		<i>Junior Year</i>	
<i>Fall Semester</i>			
OTH 3000	Professional Development	3	
OTH 3012L	Therapeutic Communication	2	
OTH 3123L	Tools and Materials	2	
OTH 3160C	Adaptive Living Skills	2	
PCB 3702	Intermediate Human Physiology	3	
ZOO 3731	Human Anatomy	3	
ZOO 3731L	Human Anatomy Lab	1	
		<b>16</b>	

<i>Spring Semester</i>			
OTH 3327	Issues in Psychosocial Dysfunction for Occupational Therapists	3	
OTH 3328	Foundations of Psychiatric Occupational Therapy Theory	2	
OTH 3413	Applied Kinesiology	2	
OTH 3413L	Applied Kinesiology Lab	1	
OTH 3520C	Developmental Theory I	3	
OTH 3811L	Psychiatric Skills Lab for Occupational Therapists I	1	
ZOO 4743	Neuroscience	3	
ZOO 4743L	Neuroscience Lab	1	
		<b>16</b>	

<i>Summer Semester</i>		
OTH 3815	Field Work Experience Level I	3
OTH 3007	Medical Terminology	1
		<b>4</b>

### Senior Year

<i>Fall Semester</i>		
OTH 4320	Psychiatric Occupational Therapy Theory and Evaluation	2
OTH 4321	Psychiatric Occupational Therapy Treatment I	2
OTH 4321L	Psychiatric Occupational Therapy Treatment I Lab	1
OTH 4411	Pathology and Medical-Surgical Disorders	3
OTH 4421C	Biomechanics in Rehabilitation	3
OTH 4422C	Evaluation and Treatment of Central Nervous System Dysfunction	4
		<b>15</b>

<i>Spring Semester</i>		
OTH 4112L	Therapeutic Media	3
OTH 4170L	Therapeutic Techniques in Physical Disabilities	2
OTH 4210	Developmental Theory II	2
OTH 4342	Psychiatric Occupational Therapy Treatment II	2
OTH 4342L	Psychiatric Occupational Therapy Treatment II Lab	1
OTH 4761	Professional Issues in Occupational Therapy	3
Elective	In Clinical Specialization	3
		<b>16</b>

<i>Summer Semester (May, June, July)</i>		
OTH 4850	or	
OTH 4851	Field Work Experience	12
<i>Fall Semester (August, September, October)</i>		
OTH 4850	or	
OTH 4851	Field Work Experience	12
		<b>24</b>

## Course Descriptions

**Definition of Prefixes**  
OTH — Occupational Therapy; PCB — Biological Sciences; ZOO — Biological Sciences.

**OTH 3000 Professional Development (3)**  
History and theory of the discipline of occupational therapy, includes an introduction to clinical and community practice environments.

**OTH 3007 Medical Terminology (1)**  
A self-instructional program of medical terminology.

**OTH 3008C Fundamentals of Human Performance** (2)

An introduction to the human body, its structure and function with an emphasis on visual assessment and palpation to evaluate physical dysfunction.

**OTH 3012L Therapeutic Communication** (2)

Major focus of this course is on several modes of facilitating communication and opportunities for self-knowledge. Interpersonal Process Recall format is followed.

**OTH 3123L Tools and Materials** (2)

The basic properties of woods and metals and the techniques used by occupational therapists in planning a project based on a hypothetical patient's problem.

**OTH 3160C Adaptive Living Skills** (2)

Evaluation and adaptation of environments within which typical occupational therapy clients interact; specific limiting factors of general disabilities; variety of techniques and aids which compensate or adapt for loss.

**OTH 3327 Issues in Psychosocial Dysfunction for Occupational Therapists** (3)

The analysis and identification of patterns of behavior and functional performance pertinent to occupational therapy practice in psychiatry.

**OTH 3328 Foundations of Psychiatric Occupational Therapy Theory** (2)

An overview of past and current theories influencing the practice of occupational therapy in psychiatry.

**OTH 3413 Applied Kinesiology** (2)**OTH 3413L Applied Kinesiology Lab** (1)

A course providing learning experiences to develop skills in palpation, goniometry, manual muscle testing and motion analysis of normal subjects.

**OTH 3520C Developmental Theory I** (3)

Occupational therapy evaluation, treatment and management of developmental disabilities from birth through adolescence.

**OTH 3811L Psychiatric Skills Lab for Occupational Therapy I** (1)

An experiential course directed toward integration and application of treatment modalities and principles for occupational therapists in psychiatry.

**OTH 3815 Field Work Experience Level I** (3)

Pre-clinical experience in an approved training center.

**OTH 4112L Therapeutic Media** (3)

The study of selected major crafts as therapeutic modalities.

**OTH 4170L Therapeutic Techniques in Physical Disabilities** (2)

Upper extremity prosthetic and orthotic devices are investigated. Presentation includes the biomechanics, anatomy, materials and appliances necessary for fabrication, pre- and post-prosthetic and orthotic evaluation, checkout procedures and training methods.

**OTH 4210 Developmental Theory II** (2)

The application of developmental theory to the occupational therapists' evaluation, treatment and management of adults and the aged.

**OTH 4320 Psychiatric Occupational Therapy Theory and Evaluation** (2)

An in-depth study of occupational therapy theorists and evaluations pertinent to the practice of occupational therapists in psychiatry.

**OTH 4321 Psychiatric Occupational Therapy Treatment I** (2)**OTH 4321L Psychiatric Occupational Therapy Treatment I, Lab** (1)

A study of group process and the occupational therapist's use of groups and purposeful activity in psychiatric practice.

**OTH 4342 Psychiatric Occupational Therapy Treatment II** (2)

Occupational therapy treatment approaches for clients exhibiting maladaptive behavior patterns.

**OTH 4342L Psychiatric Occupational Therapy Treatment II Lab** (1)

Laboratory to accompany OTH 4342.

**OTH 4411 Pathology and Medical-Surgical Disorders** (3)

Brief review of organ systems, and primary diseases that affect each organ, with specific emphasis on the disabilities that would result from such diseases. Prerequisite: Anatomy, physiology.

**OTH 4421C Biomechanics in Rehabilitation** (3)

The analysis and application of biological and physical principles to the evaluation and treatment of patients with physical disabilities.

**OTH 4422C Evaluation and Treatment of Central Nervous System Dysfunction** (4)

Occupational Therapy evaluation and treatment of central nervous system dysfunction for clients of all ages.

**OTH 4761 Professional Issues in Occupational Therapy** (3)

Professional issues facing occupational therapists including the role of research, organizational systems, and advocacy.

**OTH 4813L Psychiatric Skills Lab for Occupational Therapy II** (1)

Continuation of OTH 3811L.

**OTH 4850 Field Work Experience** (12)

Three months internship in a clinical setting.

**OTH 4851 Field Work Experience** (12)

Three months internship in a clinical setting.

**OTH 4852 Field Work Experience** (VAR)

Internship in a specialized treatment area.

**OTH 4904 Independent Study** (VAR)

To be arranged with instructor according to the student's specialty.

**OTH 5329 Current Trends in Mental Health as Related to Occupational Therapy Practice** (VAR) (1-3)

Advanced study of occupational therapy practice in mental health.

**OTH 5405C Analysis of Therapeutic Procedures in Physical Dysfunction** (3)

A lecture/lab course designed to introduce advanced students to theory based assessment, problem identification and treatment for the physically disabled adult.

**OTH 5600 The Study of Gerontology as Related to Occupational Practice** (1-3)

A study of the impact of advances in the field of gerontology, and current legislation affecting the profession.

**OTH 5760 Current Research in Occupational Therapy** (3)

Review of statistical concepts and research procedures in the clinical setting, with in-depth study of the current status of research in occupational therapy.

**OTH 5905 Independent Study** (VAR)

## Physical Therapy

Burton J. Dunevitz, *Associate Professor*  
Elizabeth O. Cormack, *Assistant Professor*  
Awilda R. Haskins, *Assistant Professor*

The program received full five year accreditation in 1978 from the American Physical Therapy Association. The emphasis is placed upon a student-centered approach whereby individuals progress through a variety of learning experiences designed to develop their evaluative and applied therapeutic skills in the treatment of musculoskeletal, neurologic, cardiovascular and pulmonary disorders.

The students receive experiential and didactic instruction from clinical physical therapists, physicians, and other medical professionals. Clinical education is conducted in accredited centers throughout the United States.

Graduates of the program are prepared to assume employment in general hospitals, rehabilitation centers, private clinics, home health care facilities, school systems, sports medicine units, and in the self-employed sector. Most graduates remain in South Florida after completion of the course of study.

Students who apply for admission to the program must meet the general education requirements of the University. Acceptance must be determined both by the University and the Physical Therapy Department. Enrollment is limited and admission is selective. *Students must contact the Physical Therapy Department directly for all applications and information materials.* Deadline for receiving applications is December 31. Classes are selected in April to commence coursework in August.

CAMPUS LOCATION: Tamiami Campus only  
DEGREE AWARDED: Bachelor of Science in Physical Therapy

**LOWER DIVISION PREPARATION:**

*Required Courses:* at least 60 semester hours of an acceptable level of college credit work; at least one academic year of science coursework (including laboratory) in each of the areas of biology/zoology, chemistry, and physics as well

as three courses in psychology (child development is recommended); a minimal grade point average of 2.85 in the above-listed courses; a minimal overall grade point average of 2.75 by December 31.

UPPER DIVISION PROGRAM:

*Semester Hours*  
 All Required Courses: 94

*Junior Year*

<i>Fall Semester</i>		
ZOO 3703	Human Physiology I	3
ZOO 3703L	Human Physiology Lab I	1
ZOO 3733	Gross Anatomy I	3
ZOO 3733L	Gross Anatomy Lab I	1
PHT 3001	Introduction to Physical Therapy	1
PHT 3122	Clinical Kinesiology	5
PHT 3122L	Clinical Kinesiology Lab	1
PHT 3201C	Basic Physical Therapy Techniques I	3
		<hr/> 18

*Spring Semester*

ZOO 3704	Human Physiology II	3
ZOO 3704L	Human Physiology Lab II	1
ZOO 3734	Gross Anatomy II	3
ZOO 3734L	Gross Anatomy Lab II	1
PHT 3133	Musculoskeletal Evaluation	3
PHT 3133L	Musculoskeletal Evaluation Lab	1
PHT 3202C	Basic Physical Therapy Techniques II	4
		<hr/> 16

*Summer Semester*

PHT 3310C	Orthopedics	4
PHT 3400	Emotional Aspects of Physical Disability	2
PHT 3804	Sections L <sub>1</sub> & L <sub>2</sub> Junior Clinical Internship	4
	Electives	Var.
PHT 4905	Independent Study	1-6
		(var.)
		<hr/> Var.

*Senior Year*

<i>Fall Semester</i>		
ZOO 4743	Neuroscience	3
ZOO 4743L	Neuroscience Lab	1
PHT 3300	Physical Therapy & Human Disorders	3
PHT 4141	Evaluation of the Developing Child	3
PHT 4233C	Neurodevelopmental Techniques	3
PHT 4313	Neurology	4
		<hr/> 17

*Spring Semester*

PHT 3232C	Prosthetics and Orthotics	2
PHT 4932	Research Methods and Design	2
PHT 4823	Senior Clinical Clerkship	2
PHT 4234C	Neurophysiologic Techniques	3

PHT 4510	Organization and Administration	4
PHT 3231	Rehabilitation	3
PHT 4235C	Electrodiagnosis	2
		<hr/> 18

<i>Summer Semester</i>		
PHT 4826	Senior Clinical Internship	15

**Course Descriptions**

**Definition of Prefixes:**  
 PCB and ZOO — Biological Sciences; PHT — Physical Therapy

**PHT 3001 Introduction to Physical Therapy (1)**

A survey of the profession vis-a-vis other health professions; ethics and basic medical communication.

**PHT 3122 Clinical Kinesiology (5)**

A study of the anatomical, physiological and biomechanical principles as related to the analysis of motion of the normal human body, with direct correlation to the clinical situation.

**PHT 3122L Clinical Kinesiology Lab (1)**

Laboratory experiences in identifying and palpating the various components of the human musculoskeletal system while the body is at rest and in motion.

**PHT 3133 Musculoskeletal Evaluation (3)**

Study techniques of muscle testing, joint mobilization, X-ray identification, gait evaluation, and posture examination.

**PHT 3133L Musculoskeletal Evaluation Lab (1)**

Laboratory experience and evaluation of skills in palpation, X-ray identification, muscle testing, goniometry, gait and posture evaluations, and joint mobilization.

**PHT 3201C Basic Physical Therapy Techniques I (3)**

A study of the scientific rationale for and performance of the basic techniques of physical therapy including vital signs measurements, massage and hydrotherapy.

**PHT 3202C Basic Physical Therapy Techniques II (4)**

A lecture/laboratory presentation of the underlying physiological rationale, principles of physics and manual performance necessary for the application of the electrophysiologically oriented modalities.

**PHT 3231 Rehabilitation (3)**

Explores functional evaluation, goal setting and treatment planning for severely debilitated patients with medical, cardiac, pulmonary, thermal and spinal-cord-related disabilities. Other health disciplines participate in some presentations.

**PHT 3232C Prosthetics and Orthotics (2)**

A study of the modern appliances and their appropriate utilization including on-site visits to a prosthetic lab, patient clinics, and patient treatment areas.

**PHT 3300 Physical Therapy and Human Disorders (3)**

Study of systemic and organ-specific disease and the related medical terminology as they relate to the practice of physical therapy; explores the current literature in selected disease topics.

**PHT 3310C Orthopedics (4)**

Multimedia lectures and patient case studies presented on the evaluation and management (surgical and non-surgical) of the orthopedic patient, correlated with laboratory practice in evaluative and treatment skills.

**PHT 3400 Emotional Aspects of Physical Disability (2)**

Examines attitudes of physical therapists toward disability, emotional reactions of patients to their own disability, and emotional disorders commonly seen in patients treated by physical therapists.

**PHT 3804 Clinical Internship (4)**

Supervised full-time clinical experience, designed to offer the student experience in patient care, particularly musculoskeletal evaluation, application of basic physical techniques, and orthopedic planning and implementation.

**PHT 4141 Evaluation of the Developing Child (3)**

A study of the neuromuscular development characteristics of the child; includes evaluation methods; a prerequisite to PHT 4235C, Neurophysiologic Techniques.

**PHT 4233C Neurodevelopmental Techniques (3)**

A study of the application of various exercise techniques and systems to the treatment of children with neurophysiologic deficits.

**PHT 4234C Neurophysiologic Techniques (3)**

A study of the application of the exercise techniques of Bobath, Rood, Brunstrom, and Knott and Voss to the treatment of adults with neurophysiologic deficits.

**PHT 4235C Electrodiagnosis (2)**

A study of electromyography and low frequency testing techniques for neuromuscular disorders.

**PHT 4313 Neurology (4)**

Emphasizes evaluation differential diagnosis, goal setting, and treatment planning for patients with neurologic disability. Presented by neurologists, and by physical therapists who provide clinical experience in neurologic evaluation.

**PHT 4510 Organization and Administration (4)**

A study in the management of physical therapy delivery systems and current health trends affecting the profession.

**PHT 4823 Senior Clinical Clerkship (2)**

Extension of PHT 3804, with emphasis on treatment planning and implementation of prosthetics, orthotics, rehabilitation, electrodiagnosis, and neurology.

**PHT 4826 Senior Clinical Internship** (15)

Supervised full-time clinical experience, designed to afford the student the opportunity to practice total patient care, as well as administration and supervision in physical therapy.

**PHT 4905 Independent Study** (1-6)

The student will select a particular aspect of physical therapy or closely related subject for in-depth independent study with a faculty preceptor.

**PHT 4932 Research Methods and Design** (2)

Introduction to research methods, data collection, data analysis, and scholarly writing concerning topics relevant to physical therapy; students complete a research paper and present it to local health professionals.

## Engineering

Dean  
Associate Dean  
Faculty

Lambert Tall  
LeRoy E. Thompson

*Alcorta, Sergio J.*  
*Auriores, Gabriel*  
*Cereijo, Manuel R.*  
*Chaudhari, Bhaskar S.*  
*Hahs, Jimmy D.*  
*Leonard, Rene J.*  
*Radin, Ian*  
*Story, James R.*  
*Subbarao, Wunnava V.*  
*Surti, Vasant H.*  
*Tall, Lambert*  
*Thompson, LeRoy E.*  
*Ural, Oktay*  
*Villate, Jose T.*

**ADJUNCT FACULTY**

*Jones, W.K.*  
*Hernandez, Bernabe A.*  
*Kaderabek, Thomas J.*  
*Mathavan, Sudershan K.*  
*Mibelli, Joseph F.*  
*Puri, Pushpinder S.*  
*Rebull, Patrick J.*  
*Rojas, Rafael M.*  
*Rubio, Oscar L.*  
*Shahane, Ashok N.*  
*Villar, Juan*  
*Wezernak, C.T.*

The School is in the implementation process of providing baccalaureate degree programs in Electrical Engineering and Civil Engineering. Additional fields of Engineering are planned for future implementation in the areas of Mechanical, Industrial and Chemical. The various curricula of the School are designed to give the student an education for entry into the profession of engineering.

These curricula are designed to meet the educational requirements of the engineering professions. Guidelines have been developed according to the respective technical engineering society of the program and to the national professional accrediting agency, Accreditation Board for Engineering and Technology. The initial professional program accreditations are expected for review and evaluation when the

minimum time limit eligibility requirements are fulfilled.

The subjects basic to all fields of engineering are generally studied while the student is in the first two years of undergraduate study, or in a community college pre-engineering curriculum. Specialized or departmental courses are taken in the third and fourth years with additional interspersed mathematics and humanistic-social studies. To earn a bachelor's degree in engineering, a student must complete the approved curriculum requirements, and must have a cumulative grade point average of at least 2.00 on all work attempted at the University.

**Plan of Study**

The engineering programs include a strong engineering core foundation designed to prepare the prospective engineer not only with a broad base of fundamental courses in mathematics, sciences and technical knowledge, but also with a solid cultural background in Humanities, Social Sciences and English. In addition to the core subjects, one must complete an engineering discipline specialization under the direction of the respective administrative department.

Prospective students who are considering engineering should follow an academic program to meet engineering prerequisites. The community college student planning to transfer to the engineering program as a junior should follow a pre-engineering program leading to an Associate of Arts (A.A.) degree. Many courses required by the engineering curriculum are specialized in their content and potential transfer students need to select lower division courses with care. The normal maximum number of credits transferred from a community college is sixty semester credits.

Freshmen admission to the University is determined by the admission standards of the lower division. Students accepted to lower division may declare their engineering major after sixty semester credits. The admitted freshman should discuss their future program intentions with their lower division academic advisor and plan their lower level course selections toward their engineering program goals. The freshman should have had high school preparatory work of high intellectual quality and of considerable breadth. Specifically, students admitted to lower division with a goal toward engineering should have the minimum preparatory studies in mathematics (algebra, geometry, trigonometry, analytical geometry or pre-calculus) and chemistry. Physics and introduction to computers are recommended, but not required.

**CORE ENGINEERING CURRICULUM**

**MATHEMATICS**

Analytic Geometry  
Calculus I  
Calculus II  
Multivariable Calculus  
Differential Equations  
Probability and Statistics  
or  
Linear Algebra  
or  
Complex Variables

**PHYSICAL SCIENCES**

General Chemistry I

General Chemistry Lab I  
General Chemistry II  
General Chemistry Lab II  
Physics w/Calculus I  
Physics w/Calculus I Lab  
Physics w/Calculus I  
Physics w/Calculus II Lab  
**HUMANITIES—SOCIAL SCIENCES**  
Humanities Elective (6 credits)  
Social Science Electives (6 credits)  
Humanities or Social Science Elective (3 credits)  
Professional Ethics  
**ENGLISH**  
Composition/Writing (6 credits)  
**COMPUTER SCIENCE**  
Introduction to Computers  
**ENGINEERING SCIENCES**  
Statics  
Engineering Mechanics of Materials  
Materials in Engineering  
Dynamics  
Thermodynamics I  
Circuits I  
Fluid Mechanics  
**OTHER TECHNICAL COURSES**  
Engineering Economy  
Engineering Drawing/Graphics I  
Engineering Drawing/Graphics II

**CIVIL ENGINEERING**

The Civil Engineering curriculum provides a background of interrelated subdisciplines of civil engineering with the fundamental core subjects of the engineering program. The technical interdisciplinary courses are in the areas of surveying, construction, geotechnical engineering, environmental engineering, transportation, structures and water resources. The civil engineers play an essential role in serving the people and the living environmental needs of society. These needs relate to shelter, mobility, water, air and development of land and physical facilities.

**CIVIL ENGINEERING CURRICULUM**

Elementary Surveying  
Route Surveying and Design  
Geotechnical Engineering I  
Soil Testing Laboratory  
Water Resources Engineering  
Water Supply Engineering  
Sewerage and Wastewater Treatment  
Civil Engineering Materials  
Determinate Structural Analysis  
Indeterminate Structural Analysis  
Reinforced Concrete Design  
Steel Design  
Introduction to Transportation Engineering  
Traffic Engineering\*  
Construction Cost and Scheduling\*  
Technical Elective (3 credits)\*  
\*Denotes courses replaced by Environmental Option

**ENVIRONMENTAL OPTION COURSES**

Elements of Atmospheric Pollution  
Public Health  
Solid Waste Management

**ELECTRICAL ENGINEERING**

The Electrical Engineering curriculum provides an emphasis toward engineering concepts and design in the varied and rapidly expanding

fields of electrical engineering with the fundamental core subjects of the engineering program. The Department of Electrical Engineering seeks to attract students who possess a verbal and written command of the English language, who exhibit logical thinking, creativity, imagination and persistence. They should have proved their academic excellence in mathematics, chemistry and physics.

At the undergraduate level, the basic required program of instruction in fundamental theory and laboratory practice is balanced by a broad range of electives in such fields as computers, communication systems, control systems, power systems, solid state, and integrated electronics. The student, with the counsel and guidance of faculty advisers, designs his or her electives program around their own special interest. The student majoring in the curriculum is prepared to contribute and progress in their chosen field related to the diverse technological areas of electrical engineering.

### **ELECTRICAL ENGINEERING CURRICULUM**

Introduction to Electrical Engineering  
or

Circuits I  
Circuits II  
Electronics I  
Electronics II  
Logic Design  
Logic Design  
Computer Design  
Electromagnetic Fields  
Power Systems I  
Communication Systems  
Control Systems  
Integrated Circuits and Systems  
Technical Electives—3 (9 credits)

## **Drinking Water Research Center**

*Acting Director, William J. Cooper*

The only facility of its kind in the State of Florida, the Drinking Water Research Center (DWRC) was created by the Florida State Legislature in 1977. The Center is primarily devoted to developing scientific information and essential technologies that can be used to provide quality drinking water to Florida residents, residents in the United States, and global neighbors. The Center receives financial support from the State of Florida and from research grants. The Center does not perform routine tests of water for individuals. Administratively, the Center is a part of the University School of Technology.

Through programs of research, education, community service, and public information, the Center provides a comprehensive approach toward solving the dilemmas confronting the world's largest and most essential natural resource — water. Although enormous quantities of water exist, the proper amount of good quality water is not to be found in the right places at all times. Without an adequate supply and qual-

ity of water, a society's physical and economic health will surely suffer.

The Center staff does not conduct academic classes, however, qualified students from the School of Technology or other schools often have an opportunity to work as research assistants in the Center's laboratories or carry out special projects. Cooperation and interchange with other departments in the University are maintained.

### **Staff**

**William J. Cooper, M.S.** (*Pennsylvania State University*), Associate Research Scholar/Scientist.

**Frances Parsons, Ph.D.** (*University of Miami*), Associate Research Scholar/Scientist.

**Ramona G. Rice, Ph.D.** (*University of Arkansas*), Assistant Research Scholar/Scientist.

**Paul R. Wood, B.S.** (*University of Notre Dame*), Associate Research Scholar/Scientist.

### **School of Technology**

Dean

Lambert Tall

Associate Dean

Katharine R. Curry

Associate Dean

LeRoy E. Thompson

Chairpersons:

*Civil and Environmental Engineering*

LeRoy E. Thompson

*Communication Technology*

Lillian Kopenhagen

(Acting Chairperson)

*Construction*

Iraj Majzub

*Dietetics and Nutrition*

Nancy Wellman

*Electrical and Mechanical Engineering*

James R. Story

*Home Economics*

Betty Morrow

*Industrial Systems*

Margaret G. Wilson

(Acting Chairperson)

*Medical Technology*

Janet L. Zins

*Occupational Therapy*

Reba Anderson

*Physical Therapy*

Awilda Haskins

(Acting Chairperson)

*Program Director:*

*Medical Record*

*Administration*

Florence Amato

### **Faculty**

**Alcorta, Sergio J., M.S., P.E.**, (*University of Miami*), Associate Professor, Electrical and Mechanical Engineering

**Amato, Florence C., Ph.D., R.R.A.**, (*St. Louis University*), Program Director and Associate Professor, Medical Records Administration

**Anderson, Barbara V., B.S., M.T. (ASCP), S.B.B.**, (*Ohio State University*), Assistant Professor, Medical Technology

**Anderson, Reba L., M.A., O.T.R.**, (*University of Florida*), Chairperson and Associate Professor, Occupational Therapy

**Aurioles, Gabriel, Ed.D.**, (*Florida Atlantic University*), Associate Professor, Industrial Systems

**Banks, Andrew, M.A.**, (*Goddard College*), Instructor, Industrial Systems and Assistant Director, Center for Labor Research and Studies

**Blackburn, Sara A., D.Sc., R.D.**, (*Boston University*), Assistant Professor, Dietetics and Nutrition

**Canaves, Jaime, M.A., R.A.**, (*University of Florida*), Assistant Professor, Construction

**Cereijo, Manuel R., D.S., P.E.**, (*Universidad Central*), Associate Professor, Electrical and Mechanical Engineering

**Chaudhari, Bhaskar S., Ph.D., P.E.** (*University of Pennsylvania*), Professor, Construction

**Clark, Jack L., Ph.D.**, (*Laurence University*), Professor, Construction

**Cormack, Elizabeth O., M.A., R.P.T.**, (*University of New Mexico*), Assistant Professor, Physical Therapy

**Couch, James E., M.S.**, (*Florida State University*), Associate Professor, Communications Technology

**Curry, Katharine R., Ph.D., R.D.**, (*Southern Illinois University*), Associate Dean and Professor, School of Technology

**deGroot, Sybil, Ph.D.**, (*Ohio State University*), Professor, Industrial Systems

**Dudley, Suze, M.S., O.T.R., L.O.T.** (*Florida International University*), Assistant Professor, Occupational Therapy

**Dunevitz, Burton J., Ph.D., R.P.T.**, (*Nova University*), Associate Professor, Physical Therapy

**Easton, Penelope S., Ph.D., R.D.**, (*Southern Illinois University*), Professor, Dietetics and Nutrition

**Hahs, Jimmy Dean D., D.E., P.E.**, (*University of Oklahoma*), Associate Professor, Civil Engineering

**Hall, Charles, B.A.** (*Florida International University*), Coordinator and Instructor, Center for Labor Research Studies

**Haskins, Awilda R., M.S.** (*State University of New York at Buffalo*), Assistant Professor, Physical Therapy

**Himbrow, Susan P., Ph.D., R.D.**, (*University of Miami*), Assistant Professor, Dietetics and Nutrition

**Hout-Cooper, Neil M., Ph.D.**, (*Florida Atlantic University*), Assistant Professor, Industrial Systems

**Howard, Greta, M.Sc.**, (*Florida International University*), Assistant Professor, Home Economics

**James, Susan S., M.S.**, (*Barry College*), Assistant Professor, Home Economics

**Johnson, Ralph B., M. Arch.** (*Yale University*), Assistant Professor, Construction

**Katz, Eric S., M.S.**, (*Florida State University*), Assistant Professor, Communication Technology

**Khan, Abdur Rasheed, Ph.D., R.D.**, (*Kansas State University*), Associate Professor, Dietetics and Nutrition

**Kopenhagen, Lillian L., Ed.D.**, (*University of Miami*), Assistant Professor, Communication Technology

- Leonard, Rene J., D.A., P.E., (*University of Miami*), Associate Professor, Electrical and Mechanical Engineering
- Llevada, Evodio, Ph.D., (*University of Miami*), Assistant Professor, Industrial Systems
- LeRoy, David J., Ph.D., (*University of Wisconsin*), Professor, Communication Technology
- Martinson, David L., Ph.D., (*University of Minnesota*), Associate Professor, Communication Technology
- Majzub, Iraj E., D. Arch., R.A., (*University of Torino*), Chairperson and Professor, Construction
- Merkel, Robert S., Ph.D., (*Institute of Textile Technology*), Assistant Professor, Home Economics
- Meszaros, Hedvika, M. Arch. Engr., (*Czech University of Technology in Prague*), R.A., Assistant Professor, Construction
- Morrow, Betty, Ph.D., (*University of Miami*), Chairperson and Associate Professor, Home Economics
- Otazo, Julio O., M.A. Arch., (*University of Florida*), R.A., Assistant Professor, Construction
- Pursell, Juanita S., B.S., (*Florida International University*), Assistant Professor, Medical Record Administration
- Radin, Ian, Ph.D., (*University of Missouri*), Associate Professor, Electrical and Mechanical Engineering
- Remington, John, Ph.D., (*University of Michigan*), Associate Professor, Industrial Systems and Director, Center for Labor Research Studies.
- Shellings, Edmund G., Ph.D., (*University of Iowa*), Director and Professor, International Institute for Creative Communications
- Smith, Adele, M.S., (*Auburn University*), Assistant Professor, Home Economics
- Smith, Sylvia L., M.S., S.M., (AAM), (ASCP), (*University of Miami*), Associate Professor, Medical Technology
- Starling, Shirley, M.H.S., O.T.R., (*University of Florida*), Assistant Professor, Occupational Therapy
- Staton, Pamela F., M.S., (*West Virginia*), Assistant Professor, Medical Technology
- Storm, Penelope, Ph.D., (*University of Maryland*), Associate Professor, Home Economics
- Story, James R., Ph.D., P.E., (*University of Alabama*), Chairperson and Associate Professor, Electrical and Mechanical Engineering
- Subbarao, Wunnava V., Ph.D., P.E., (*Andhra University*), Associate Professor, Electrical and Mechanical Engineering
- Surti, Vasant H., Ph.D., (*Catholic University of America*), Professor, Civil Engineering
- Tall, Lambert, Ph.D., (*Lehigh University*), Dean and Professor, School of Technology
- Thompson, LeRoy E., Ph.D., P.E., (*Rice University*), Associate Dean of Engineering, Chairperson and Professor, Civil and Environmental Engineering
- Ural, Oktay, Ph.D., P.E., (*North Carolina State University*), Director, International Association for Housing Science and Professor, Construction
- Villate, Jose T., Ph.D., P.E., (*University of Wisconsin*), Professor, Civil and Environmental Engineering
- Wellman, Nancy S., M.S., R.D., (*Columbia University*), Chairperson and Associate Professor, Dietetics and Nutrition
- Wilson, Margaret G., Ph.D., (*University of Southern California*), Assistant Professor, Industrial Systems and Research Director, Center for Labor Research and Studies
- Zins, Janet L., Ph.D., M.T., (ASCP), (*University of Miami*), Chairperson and Associate Professor, Medical Technology

# Military Programs

## Aerospace Studies

Florida International University, in cooperation with the Department of Aerospace Studies, Air Force Reserve Officer's Training Corps (AF-ROTC), at the University of Miami, provides an opportunity for selected students to prepare for Air Force commissions while completing degree requirements. Two programs are offered:

1. The Four-Year AFROTC program is comprised of a two year basic course in Air Force organization and the development of air power, and a two year advanced course directed toward developing managerial skills and attitudes necessary for appointment as an Air Force officer.

2. The Two-Year AFROTC program (the last two years of the Four-Year program) is available for students in their last four semesters of college following successful completion of a six-week summer Field Training course at selected Air Force bases.

In order to complete either program, all Air Force ROTC cadets must complete specified minimum requirements in English composition and mathematical reasoning.

Air Force ROTC scholarships are available to qualified cadets on a competitive basis. AF-ROTC scholarship students must obtain at least 3 hours of college level credit in an Indo-European language in addition to the English and math requirements listed above.

Cadets earn two credits for each basic year and six credits for each advanced year. Entry into the basic course entails no military obligation; entry into the advanced course usually leads to extended active duty as an Air Force officer. Call to active duty after graduation may be delayed for selected cadets who plan to attend graduate school.

Cadets are provided with uniforms and textbooks; the cadet corps collects a small activity fee each semester from each cadet to cover corps activities.

Selection for the advanced course is highly competitive. Cadets must be citizens of the highest personal and physical qualifications, chosen for their proven ability to lead.

Applicants who are veterans or who have completed Junior ROTC, may be considered for waiver of the basic course.

Advanced course cadets are paid \$100 per month for 20 months. Basic cadets attend one hour of class each week. Advanced cadets attend three hours of class each week, and all cadets are involved in one hour of leadership laboratory each week. All classes are conducted on the University of Miami campus.

AFROTC cadets may participate in orientation flights in military aircraft. Seniors selected for pilot training receive 25 hours of flight instruction at a local FAA approved flight school. For more information, call 284-2870.

## Course Descriptions

Air Force ROTC

AFR 1101C First Semester Basic

Study of the doctrine, mission and organization of the United States Air Force; U.S. strategic offensive and defensive forces; their mission, function and employment of nuclear weapons.

AFR 1111C Second Semester Basic (1)  
U.S. general purpose and aerospace support forces; the mission, resources, and operation of tactical air forces, with special attention to limited warfare; review of Army, Navy, and Marine general purpose forces.

AFR 2130C Third Semester Basic (1)  
Changing nature of military conflict; factors leading to the development of air power; concepts and doctrine governing the employment of air power.

AFR 2131C Fourth Semester Basic (1)  
How technology has affected the growth and development of air power; the changing mission of the defense establishment, emphasizing the Air Force; how air power has been employed in military operations.

AFR 3220C Air Force Leadership (3)  
Air Force leadership in theory and practice; written and oral communications in the Air Force.

AFR 3230C Air Force Management (3)  
Air Force management in theory and practice; management tools, principles, problem-solving; written and oral communications in the Air Force.

AFR 4201C The Military Profession and Society (3)  
National security forces in contemporary American society.

AFR 4210C Formulation and Implementation of U.S. Defense Policy (3)  
Political, economic and social constraints on the formulation of U.S. defense policy. Technological and international impact upon the overall defense policymaking process. The military justice system.

AFR 4240 Flight Instruction Ground School (2)  
Fundamentals of flight; rules and regulations governing safe operation of civil aircraft.

## Army ROTC Program

The Army Reserve Officers' Training Corps at Florida International University offers a four-year and a two-year Office Training Program leading to a commission as a Second Lieutenant in either the United States Army Reserve or the Regular Army. Depending on the student's academic major his/her desires and the needs of the Army, this commission may be in any one of the Army's branches.

All textbooks, uniforms and equipment are furnished. The only cost is a student activity fee of \$5.00 per semester. During the two years of the Advanced Course, the student is paid \$100.00 per month for up to ten months during each academic year by the U.S. Government. In addition, one-, two-, and three-year scholarships may be awarded to exceptional students. (For further information contact the Military Science Department.)

The course of instruction emphasizes the-

oretical and practical leadership. It is divided into Basic (MS I and MS II) and Advanced (MS III and MS IV) Courses. Admission to the Basic Course is open to full-time students who will complete the four-year program prior to their 30th birthday and who are physically qualified. Admission to the Advanced Course is competitive. The Professor of Military Science must approve all applicants. In addition, all advanced students must pass mental and physical examinations and have received credit for the Basic Course. A student who wishes to continue with post-graduate work may be deferred from call to active duty for up to four years after commissioning.

Credit for the Basic Course may be given for prior military service of for participation in three years of Junior ROTC during high school. Credit for the entire Basic Course may be received by attending a six-week Summer Camp at Fort Knox, Kentucky under the Two-Year ROTC Program. Students participating in this camp are paid approximately \$540.00 plus travel costs, lodging and food.

Additionally, the Army ROTC offers voluntary "activity modules" to all students. These modules allow the student to receive Military Core Credit Hours (MCCH) for his/her participation. The modules offered are:

### BUSHMASTER/RAIDER

Teaches small unit Ranger/Special Forces tactics, techniques, rappelling, survival, field crafts and leadership.

### EXPERT FIELD CADET

Teaches basic military skills and leadership. In addition to the above, students can receive Military Supplemental Credit Hours (MSCH) for participation in:

### RIFLE MARKSMANSHIP

Training and firing of the .22 caliber rifle. All students fire and are eligible to compete in intercollegiate rifle matches.

### WARGAMING

Teaches the evolution of warfare, strategy, tactics and logistics through the use of wargames such as Blitzkrieg and Squad Leader, as well as through the use of military miniatures and other RPG's.

### CLASS HOURS REQUIRED:

First- and second-year students attend one hour of class per week.

Third- and fourth-year students attend three hours per week. In addition, the advanced student attends one six-week Advanced Summer Camp between his/her junior and senior years. He/she will receive approximately \$800.00 plus food, lodging and travel costs reimbursement for participation in this summer training.

For any additional information concerning the Army ROTC Program, contact the Professor of Military Science at (305) 284-4673.

## Course Descriptions

### ARMY ROTC

MIS 1002 First Year Basic (1)  
An orientation of the ROTC program and its objectives; the role and organization of the Army; the fundamentals of leadership and management; leadership development.



MIS 1300 First Year Basic (1)  
Basic operations and tactics of Infantry and Mechanized Infantry as small unit level, military principles of war.

MIS 2106 Second Year Basic (1)

MIS 2106L Second Year Basic Laboratory (0)  
Basic military skills in radio communication procedures; US and opposing forces Armor and Anti-Armor capabilities; security and intelligence reporting; nuclear, biological, and chemical battlefield; US Artillery weapons; and basic first aid. Required Laboratory, Field Training, and/or Activity Module participation.

MIS 2333 Second Year Basic (1)

MIS 2333L Second Year Basic Laboratory (0)  
Map reading skills, determining distance, direction, and location; analysis of terrain; and indirect fires. Required Laboratory, Field Training, and/or Activity Module.

MIS 3423 Advanced Military Science III (3)

MIS 3423L Advanced Military Science III Laboratory (0)

Management and leadership. Case studies in fact finding, decision making, planning, delegation, and interpersonal skills. Motivation training with emphasis on crisis-oriented organizations. Required Laboratory. Prerequisite: Permission of the PMS.

MIS 3310 Advanced Military Science III (3)

MIS 3310L Advanced Military Science III Laboratory (0)

Advanced leadership and troop command procedures. Small unit tactics and communications. Map and compass skill. Patrolling, tactical operations. Required Leadership Laboratory. Prerequisite: Permission of the PMS.

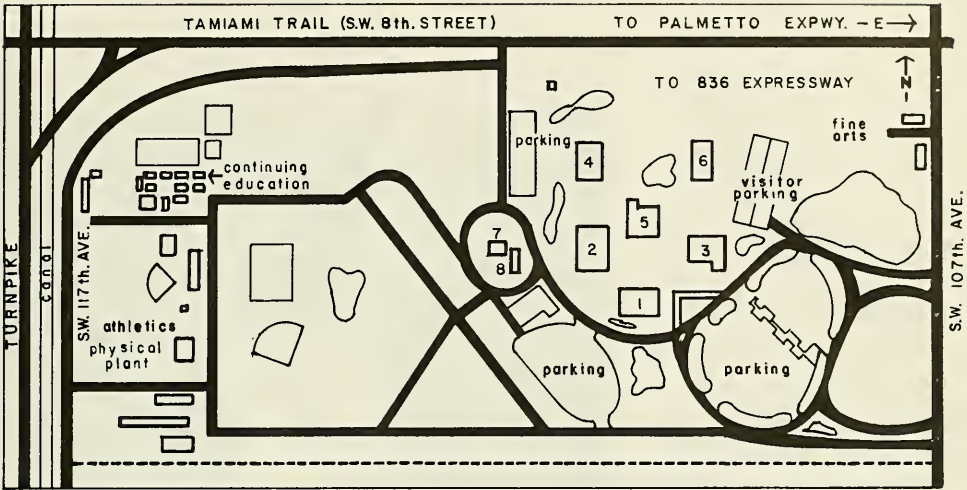
MIS 4120 Advanced Military Science IV (3)

Ethics and professionalism responsibilities of the military officer. The military law and justice system. The laws of war. Prerequisite: Permission of the PMS.

MIS 4410 Advanced Military Science IV (3)  
The applied leadership techniques in counsel ing subordinates; written and oral communica tions; the command, staff, personnel, logistics and training management systems; the role of NCO's.

## Marine Officer Programs

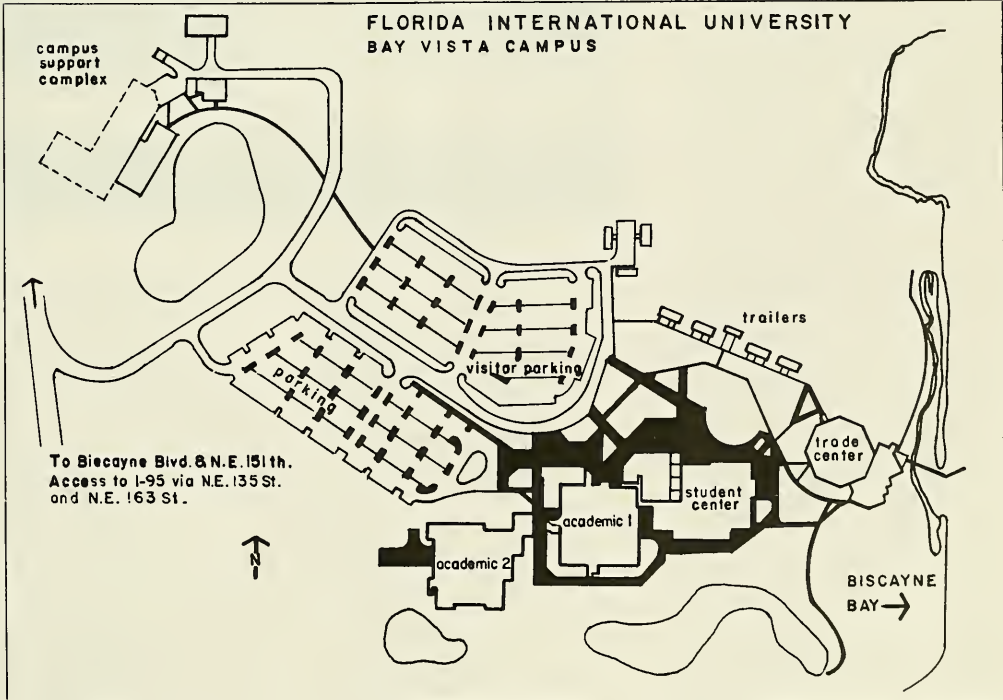
Qualified students may apply for an officer program leading to a commission as a Second Lieutenant in the United States Marine Corps. Commissions are offered in both ground and aviation components. The Platoon Leaders Course (PLC) is offered to freshman, sophomores and Juniors who attend pre-commissioning training during the summer. Financial assistance and Flight Indoctrination Programs are available. Qualified seniors and twelve weeks of training in the Officer Candidate Course (OCC) after graduation. For details, contact the Career Development and Placement Office, or the Marine Officer Selection Officer when he is on campus.



- 1. PRIMERA CASA
- 2. DEUXIEME MAISON
- 3. UNIVERSITY HOUSE
- 4. VIERTES HAUS

- 5. ATHENAEUM (library)
- 6. OWA EHAN
- 7. TOWER
- 8. DUPLICATING CENTER

FLORIDA INTERNATIONAL UNIVERSITY  
BAY VISTA CAMPUS







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## SUMMER SEMESTER 1983

February 8	Last day for receipt of Admissions application for International Students for the Summer terms.
April 4-8	Official Registration Week (Degree-Seeking Students) by appointment only, for Complete Summer Term, Term A, and Term B.
April 5	Last day for receipt of applications (including appropriate credentials) to insure consideration for admission for the Summer terms.
April 11-15	Open Registration for Complete Summer Term, Term A, and Term B.
June 3	**Last day to apply for graduation for Complete Summer Term, Term A, and Term B

### Complete Summer Term

May 9	Registration Day
May 11	Classes Begin
May 20	Last day to complete late registration by 3:00 p.m. <ul style="list-style-type: none"><li>• Drop/Add Period ends</li><li>• Last day to drop courses or withdraw from the University without incurring a financial liability</li><li>• Last day to pay fees without incurring a late fee.</li><li>• Last day to pay fees to avoid cancellation of enrollment.</li></ul>
May 30	Memorial Day Holiday (University closed).
June 3	Last day to apply for graduation <ul style="list-style-type: none"><li>• Last day to complete withdrawal with a 25% refund of tuition less bonding fees</li></ul>
July 8	<ul style="list-style-type: none"><li>• Last day to drop a course with a DR grade by 3:00 p.m.</li><li>• Last day to withdraw from the University with a WI grade</li><li>• Last day for reinstatement of cancelled courses due to non-payment</li></ul>
July 4	Independence Day Holiday (University closed)
August 12	Classes end

### Summer Term A

May 9	Registration Day
May 11	Classes Begin
May 20	Last day to complete late registration by 3:00 p.m. <ul style="list-style-type: none"><li>• Drop/Add Period ends</li><li>• Last day to drop courses or withdraw from the University without incurring a financial liability</li><li>• Last day to pay fees without incurring a late fee</li><li>• Last day to pay fees to avoid cancellation of enrollment</li></ul>
June 3	Last day to apply for graduation <ul style="list-style-type: none"><li>• Last day to drop a course with a DR grade by 3:00 p.m.</li><li>• Last day to withdraw from the University with a WI grade</li><li>• Last day for reinstatement of cancelled courses due to non-payment</li><li>• Last day to complete withdrawal with a 25% refund of tuition less bonding fee</li></ul>
June 24	**Classes end

### Summer Term B

June 3	Last day to apply for graduation
June 27	Registration Day
June 29	Classes Begin
July 4	Independence Day Holiday (University closed)
July 8	Last day to complete Late Registration by 3:00 p.m. <ul style="list-style-type: none"><li>• Drop/Add Period ends</li><li>• Last day to drop courses or withdraw from the University without incurring a financial liability.</li><li>• Last day to pay fees without incurring a late fee.</li><li>• Last day to pay fees to avoid cancellation of enrollment.</li></ul>
July 22	Last day to drop a course with a DR grade by 3:00 p.m. <ul style="list-style-type: none"><li>• Last day to withdraw from the University With a WI Grade</li><li>• Last Day for reinstatement of cancelled courses due to non-payment</li><li>• Last day to complete withdrawal with a 25% refund of tuition fees less bonding fees</li></ul>
August 12	Classes end

\*Calendar dates are subject to changes. Appropriate Offices should be contacted for verification and updated information.

\*\*Grades will not be posted on transcripts and graduation will not be processed until the end of the Complete Summer Term, August 12.

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