

UNDERGRADUATE CATALOG

UNIVERSITY OF CENTRAL FLORIDA Orlando — Brevard — Daytona Beach — South Orlando

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Directions to UCF Campus	

From Orlando International Airport: (20 Miles)

Go east on BeeLine Expressway (528) to 417 North. Take 417 North (Toll Road) to University Blvd. Exit east onto University Blvd. to UCF.

From Daytona on I-4:

Exit 49 onto Route 434. Go through Longwood and Oviedo on 434 to UCF.

From Tampa on I-4:

Exit 28 onto BeeLine Expressway East (528) Toll Road. Go past Orlando International Airport to 417 North. Take 417 North (Toll Road) to University Blvd. Exit east onto University Blvd. to UCF.

From South on Florida Turnpike:

Exit 254 (Orlando South — 441). Take first right onto BeeLine Expressway East (528) Toll Road. Go east past Orlando International Airport to 417 North. Take 417 North (Toll Road) to University Blvd. Exit east onto University Blvd. to UCF.

From North on Florida Turnpike:

Exit 265 (Holland East-West) onto East-West Expressway East (408) (Toll Road). Go east through Orlando to merge with 417 North Toll Road to University Blvd. Exit east onto University Blvd. to UCF.

From Titusville (East Coast):

Hwy. 50 west past East-West overpass to 434. Turn right to UCF (2 miles).

From Melbourne:

I-95 to 520 to Hwy. 50 west to right on 434 or I-95 to 528 Beeline west (toll) to 417 north to University Blvd. Exit east to UCF.

Reader comments and suggestions for improving the usefulness of this catalog may be sent to: Catalog, Enrollment and Academic Services, AD 210/213, PO Box 160125, Orlando, FL 32816-0125.

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Associate Dean	
Assistant Dean	.
Assistant Dean	
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Chair, English	
Chair, Foreign Languages and Literatures	
Chair, History	
Chair, Mathematics	
Chair, Music	Lyman A. Brodie
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Chair, Sociology and Anthropology	
Chair, Statistics	
Chair, Theatre	
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Chair, Engineering Technology	
Chair, Aerospace Studies (AFROTC)	
Chair, Army ROTC	
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Advisement Coordinator	Debbie K. Phillis

March 4 June 4 June 18 July 15 August 6 August 16 (1 p.m.) August 17 and 22 August 18-19 August 20 August 23 August 24-25 August 26 August 26 August 26 August 26 August 26 (until noon) August 26 September 5 October 1 October 8 October 14 October 15 October 22 October 22 November 11 November 18 November 19 November 24-25 December 3 **December 7 December 8** December 9-16 December 10 December 17 December 18 (12 noon) December 20 (12 noon)

FALL SEMESTER 1994 International Student Application Deadline CLAST. GRE GMAT Application deadline for all applicants, transfers, and readmissions (except International Applicants) FTCE, TOEFL Residence Halls open for Fall Semester Orientation and advisement Registration by appointment MCAT Classes begin Add/Drop Last day to submit Grade Forgiveness Request Last day of late registration - \$50 late fee Last day for refund/fees due Graduation application deadline Drop only Senior Citizen Audit Registration Labor Day Holiday (University-wide) CLAST, LSAT GRE Withdrawal deadline GMAT Homecoming FTCE, TOEFL Veterans' Day Holiday (University-wide) Last day to remove an "I" earned last semester TOEFL Thanksgiving Holidays (University-wide) LSAT Classes end for Fall Semester Prep day for final exams **Final Examination period** GRE Commencement **Residence Halls close** Grades due in Registrar's Office

May							Jun	e						July							Aug	ust					
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SPRING SEMESTER 1995

	SPRING SEMESTER 1995
August 31	International Student Application Deadline
December 15	Application deadline for all applicants, transfers, and
	readmissions (except International Applicants)
January 1 (1 p.m.)	Residence Halls open
January 2	Orientation and advisement
January 3-4	Registration by appointment
January 5	Classes begin
January 10-11	Add/Drop
January 11	Last day to adjust class schedule
January 11	Last day of late registration - \$50 late fee
January 11	Last day for refund/fees due
January 11	Last day to submit Grade Forgiveness Report
January 11	Graduation application deadline
January 12	Senior Citizen Audit Registration
January 14	TOEFL
January 16	Martin Luther King Day. (University Holiday)
January 21	FTCE, GMAT
February 5	GRE GRE STORE AND
February 11	LSAT, TOEFL
February 18	CLAST
March 3	Withdrawal deadline
March 13-18	Spring Holidays!
March 18	GMAT
April 5	Founders' Day Honors Convocation (Classes cancelled
a second s	10 am-noon)
April 7	Last day to remove an "I" earned last semester
April 8	GRE Meteoremeteo
April 22	FTCE, MCAT, TOEFL
April 25	Classes end for Spring Semester
April 26	Prep day for final exams
April 27-May 4	Final Examination period
May 6	Commencement
May 7 (12 noon)	Residence Halls close
May 8 (12 noon)	Grades due in Registrar's Office
May 13	TOEFL

Jan	uary	1					Feb	ruar	v					Mar	ch						Ap	ril					
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SUMMER "C" TERM 1995 (See also Summer "A" and "B")

January 27	International Student Application Deadline
April 15	Application deadline for all applicants, transfers, and
	readmissions (except International Applicants)
May 7 (3 p.m.)	Residence Halls open for Summer Semester
May 8	Orientation and advisement
May 9	Registration by appointment
May 11	Classes begin
May 12	Add/Drop
May 12	Last day to adjust class schedule
May 12	Last day to submit Grade Forgiveness Request
May 12	Last day of late registration — \$50 late fee
May 12	Last day for refund/fees due
May 12	Graduation application deadline
May 13	TOEFL
May 15	Senior Citizen Audit Registration
May 29	Memorial Day Holiday (University-wide)
June 3	CLAST, GRE
June 16	Withdrawal deadline
June 17	GMAT AND
July 4	Independence Day Holiday (University-wide)
July 7	Last day to remove an "I" earned last semester
August TBA	MCAT monoil and freedomental
August 4	Classes end
August 5	FTCE: no overan where here
August 5	Commencement
August 6 (12 noon)	Residence halls close
August 8 (12 noon)	Grades due in Registrar's Office

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SUMMER "A" TERM 1995 **January 27** International Student Application Deadline April 15 Application deadline for all applicants, transfers, and readmissions (except International Applicants) May 7 (3 p.m.) Residence Halls open for Summer "A" term Orientation and advisement May 8 May 8 Registration by appointment May 11 **Classes begin for Summer "A" Term** May 12 Add/Drop May 12 Last day to adjust class schedule May 12 Last day to submit Grade Forgiveness Request May 12 Last day for refund May 12 Last day for late registration - \$50 late fee May 12 Graduation application deadline May 13 TOEFL May 15 Senior Citizen Audit Registration May 29 Memorial Day Holiday (University-wide) June 2 Withdrawal deadline June 3 CLAST, GRE GMAT June 17 June 22 **Classes end for Summer "A" Term** June 23 (9 a.m.) **Residence Halls close** June 26 (12 noon) Grades due in Registrar's Office August TBA MCAT August 5 FTCE Commencement August 5

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	SUMMER "B" TERM 1995
January 27	International Student Application Deadline
April 15	Application deadline for all applicants, transfers, and
Telephone A manufacture A manufacture A	readmissions (except International Applicants)
May 8	Registration (see also June 23)
May 12	Add/Drop (see also June 27)
May 13	TOEFL
June 21 (1 p.m.)	Residence Halls open
June 22	Orientation and advisement
June 23	Registration by appointment
June 26	Classes begin for Summer "B" Term
June 27	Add/Drop
June 27	Last day to adjust class schedule
June 27	Fees Due
June 27	Last day for refund/fees due
June 27	Last day to submit Grade Forgiveness Request
States and States	("B" term only)
June 27	Last day of late registration — \$50 late fee
June 28	Senior Citizen Audit Registration
July 4	Independence Day Holiday (University-wide)
July 14	Withdrawal deadline
July 14	Last day to remove an "I" earned last semester
August TBA	MCAT
August 4	Classes end for Summer "B" Term
August 5	Commencement
August 5	FTCE
August 6 (12 noon)	Residence Halls close
August 8 (12 noon)	Grades due in Registrar's Office

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CAMPUS SERVICES DIRECTORY

OFFICE/SERVICE		CAMPUS XTENSION r (407) 823
A.A. DEGREE APPLICATION	Enrollment & Academic Services,	
ACADEMIC CLASSIFICATION	AD 210 Registrer AD 1et Elect	3-2691
ACADEMIC CLASSIFICATION	Registrar AD 1st Floor PC-1 102	3-3100 3-5130
ACADEMIC STATUS	Registrar AD 1st Floor	3-3100
ACADEMIC STATUS	(or Academic Advisor in College	
ADD/DROP	Registrar/Records (Class Schedul	
TOTO IN CONTRACT IN THE PARTY OF THE PARTY O	lists dates for current term)	DIS OFFICE
ADDRESS CHANGE	Registrar/Records AD 1st Floor	3-3100
ADMISSIONS/STANDARDS COMMITTEE	Admissions AD 1st Floor	3-3000
ALUMNI RELATIONS	AD 340	3-2586
ARENA BOX OFFICE	Arena, Second Level	3-6006
ARENA INFORMATION	Arena, Second Level	3-3070
AUDIT A CLASS	Registrar/Records AD 1st Floor	3-3100
BANKING — see Credit Union	(Details in UCF Catalog & Class S	Schedule)
BOOKS, SUPPLIES, & SUNDRY ITEMS	Bookstore, Student Services	3-2665
CAREER RESOURCE CENTER	AD 124	3-2361
CATALOGS	Bookstore, Student Services	3-2665
CERTIFICATION OF ENROLLMENT	Registrar/Records AD 1st Floor	3-3100
CHANGE OF MAJOR	Present Department	
CHECK CASHING	Bookstore, Student Services	3-2665
CLAST INFORMATION	Student Academic Resource	
and an and a second distance of the second of the second s	Center, PC1-102	3-5130
CLEP	Counseling & Testing RS 203	3-2811
COMMUNITY COLLEGE RELATIONS	AD 210	3-2231
CONTINUING EDUCATION	PC 547	3-6100
MULTILINGUAL MULTICULTURAL STUDIES	PC 547	0 5545
NON-CREDIT/CONFERENCES	PC 547 PC 547	3-5515 3-6103
OUTREACH CREDIT	PC 547	3-6108
COOPERATIVE EDUCATION	PH 208	3-2667
COUNSELING:	PRIME PRIME	0 2007
ACADEMIC	Academic Advisor (Degree Progra	m Advisor)
ADMISSIONS	Admissions AD 1st Floor	3-3000
CAREER	Counseling & Testing RS 203	3-2811
	and Career Resources Center	
-	AD 124	3-2361
PERSONAL	Counseling & Testing RS 203	3-2811
RELIGIOUS CREDIT BY EXAMINATION	Campus Ministry SC 208	3-2468
CREDIT UNION	Department Chair	3-3176
DECALS (PARKING)	Credit Union, Students Services Police Department	3-5812
DISABLED STUDENTS	Student Disability Services	0-0012
	AD 282	3-3271
DRIVER IMPROVEMENT PROGRAM	TR 547	3-6116
MERGENCY	Fire, Police, Ambulance	9-1-1
INANCIAL AID	AD 120	3-3200
LORIDA RESIDENT AFFIDAVIT	Admissions AD 1st Floor	3-3000
RATERNITIES	Student Affairs AD 282	3-2177
ORDON RULE	Enrollment & Academic Services,	
	AD 210	3-2691
RADE FORGIVENESS	Registrar/Records AD 1st Floor	3-3100
GRADUATE ADMISSIONS	Admissions AD 1st Floor	3-2766

OFFICE/SERVICE	LOCATION EX	CAMPUS TENSION 407) 823-
GRADUATION	Graduation Area/Registrar	3-2842
HEALTH INSURANCE	Wellness Center	3-5841
"HOLD" CLEARANCES	Registrar/Records AD 1st Floor	3-3100
HOUSING (Campus/Off-Campus)	Housing Office SC 137	3-4663
"I.D." CARD INFORMATION	Business Services AD 374	3-2624
INTERNATIONAL STUDENTS	International Student Services AD 123	3-2337
INTERNATIONAL STUDIES	PC 542, #114	3-5375
INTRAMURALS	Recreational Services RS 101	3-2408
LEISURE PROGRAMS	Student Center	3-2117
LOST AND FOUND	Student Government Kiosk	3-2060
MEDICAL WITHDRAWAL	AD 210	3-2691
MINORITY STUDENT SERVICES	AD 145	3-2716
MULTILINGUAL MULTICULTURAL	AD 145	5-2710
STUDIES	PC 547	3-5515
NAME CHANGE ON RECORDS		3-3100
	Registrar/Records AD 1st Floor	
ORIENTATION OFFICE	Student Center 198	3-5105
OUTREACH CREDIT	PC 547	3-6108
PARKING SERVICES/DECALS POLICE DEPARTMENT	Police Department, Libra Drive	3-5812
NON-EMERGENCY	Libra Drive	3-5555
READMISSION APPLICATION	Registrar/Records AD 1st Floor	3-3100
SAFETY HAZARDS/CONCERNS	Environmental HIth & Safety PP102	3-5323
SCHOLARSHIPS	Financial Aid AD 120	3-3200
	AD 210	3-2691
	or College of major	
SENIOR CITIZEN AUDIT FORMS	Registrar/Records AD 1st Floor or Enrollment Academic Services	3-3100
	AD 210	3-2691
SORORITIES	Student Affairs AD 282	3-2177
STUDENT ACADEMIC RESOURCE		
CENTER (SARC)	PC1-102	3-5130
STUDENT CENTER ROOM		
RESERVATIONS	Student Center	3-2633
STUDENT EMPLOYMENT	Center Resource Center AD 124	3-2361
	Financial Aid AD 120	3-2827
STUDENT GOVERNMENT	Student Center	3-2191
STUDENT GOVERNMENT	Student Center 227	3-2831
MAC LAB		
SUMMER CREDIT WAIVER	AD 210	3-2691
TESTING: STANDARDIZED TESTS	Counseling & Testing RS 203	3-2811
TICKETS: ATHLETIC	Athletic Ticket Office/Arena 120	3-1000
TICKETS: MOVIES AND ATTRACTIONS	Student Government Kiosk	3-2060
TRANSCRIPTS:	and the state of the	
ACADEMIC (official & unofficial)	Registrar/Records AD 1st Floor	3-3100
FINANCIAL AID	Financial Aid AD 120	3-3200
TRANSFER HOURS SENT TO UCF	Admissions AD 1st Floor	3-3000
REQUESTS SENT FROM UCF	Registrar/Records AD 1st Floor	3-3100
TRANSIENT STUDENT		
FORMS APPLICATIONS:	A TOTAT A A DIA TOTAT A A A A A A A A A A A A A A A A	1.010
OUTGOING	Registrar/Records AD 1st Floor	3-3100
INCOMING	Admissions AD 1st Floor	3-3000
TUTORING/ACADEMIC SUPPORT	PC1-102	3-5130
VETERAN' BENEFITS	Veterans' Affairs SC 132	3-2707
WITHDRAWAL FROM COURSES OR		
UNIVERSITY	Registrar/Records AD 1st Floor	3-3100
CAN'T FIND AN ANSWER?	Dean of Students AD 282	3-2851

UNIVERSITY OF CENTRAL FLORIDA

The University of Central Florida, a member institution of the State University System, was formerly Florida Technological University. The name was changed by action of the Florida Legislature on December 6, 1978.

MISSION STATEMENT

UCF is a growing metropolitan university with the responsibility to deliver a comprehensive program of teaching, research, and service. Its primary mission is to provide intellectual leadership through quality undergraduate and graduate programs.

UCF offers undergraduate education rooted in the arts and sciences, providing a broad liberal education while developing competence in fields of special interest. Unique aspects of UCF's approach are its commitment to educate students for a world in which cooperation is as important as competition; in which societal and environmental impacts of new developments are as important as their technical merits; and in which technology, the arts, sciences, humanities, and commerce work together to shape the future.

The complexity of modern society requires comprehensive graduate and professional programs. UCF provides advanced education that matches institutional strengths with evolving regional, state, national, and international needs. It supports these advanced programs by recruiting excellent students, faculty, and staff and by supplying the infrastructure that enables these programs to achieve national prominence.

Basic and applied research, as well as creative activity, are integral parts of a quality education. UCF faculty are scholar-teachers. As such, they create new knowledge, new points of view, and new means of expression in a broad range of academic, professional, and socially significant areas. Their creativity fosters innovation as they convey their results, methods, values, and expressions to students, colleagues, and the public.

Service to its community is an important extension of the teaching and research mission of the University. Public service is prominent at UCF, with the University developing partnerships with the community to enrich the educational, artistic, cultural, economic, and professional lives of those it serves in Central Florida and beyond.

Education is more than classroom experience. UCF students are involved in cooperative research and participate in artistic, social, cultural, political, and athletic activities. UCF provides academic diversity by bringing to its campus national and international leaders who expose students and the community to wide range of views and issues. UCF achieves cultural diversity by using its multi-campus facilities to serve a diverse population of traditional and non-traditional students from various races, cultures, and nationalities.

UCF is committed to the free expression of ideas, the equality of all people, and the dignity of the individual.

ACCREDITATION

The University of Central Florida is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools as a Level IV, general post-secondary institution. The following scientific, professional, and academic bodies also confer accreditation in the listed disciplines and groups of disciplines.

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COLLEGE/DISCIPLINE

Arts and Sciences Computer Science

Chemistry Music

Business Administration (all disciplines)

Education (all disciplines)

School Psychology

Engineering

Aerospace Engineering Civil Engineering Computer Engineering Environmental Engineering Electrical Engineering Industrial Engineering Mechanical Engineering

Health and Public Affairs Cardiopulmonary Science

Communicative Disorders (Speech Pathology/Audiology)

Health Information Management

Medical Sciences Laboratory

Nursing

Radiologic Technology

Social Work

ACCREDITING BODY

Computer Science Accreditation Commission (CSAC) American Chemical Society (ACS) National Association of Schools of Music (NASM)

American Assembly of Collegiate Schools of Business (AACSB)

State Accreditation-Florida Department of Education National Council for Accreditation of Teacher Education (NCATE)

National Association of School Psychologists

Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology

Joint Review Commission on Respiratory Therapy Education in Conjunction with CAAHEP of AMA

American Speech-Language-Hearing Association — Educational Standards Board (ASHA)

American Medical Record Association (AMRA) in conjunction with CAAHEP of AMA

Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

National Accrediting Agency for Clinical Laboratory Services

National League for Nursing (NLN), Florida Board of Nursing Commission on Accreditation of Allied Health Education Programs (CAAHEP of AMA) of the Department of Allied Health Education and Accreditation Council of Social Work Education (CSWE)

UCF is listed in *Transfer Credit Practices on Designated Educational Institutions* with the highest level of credit acceptability. This handbook is published by the American Association of Collegiate Registrars and Admission Officers, and lists the acceptability of transfer credits based upon the reporting institutions in the states, commonwealths, territories, and selected international institutions.

EAST CENTRAL FLORIDA AREA

UCF is located in East Central Florida, a region with a population of about two million. Known principally for its tourist attractions, the area is one of the fastest growing regions in the nation. East Central Florida is noted for its many lakes. Atlantic beaches are an easy hour drive from the main campus. The area offers Walt Disney World and other attractions that draw more vacationers here than anywhere else. The area also offers Broadway productions, pop and classical music headliners, art festivals, a Shakespeare festival of UCF origin, the National Basketball Association's Orlando Magic and restaurants of every type and price.

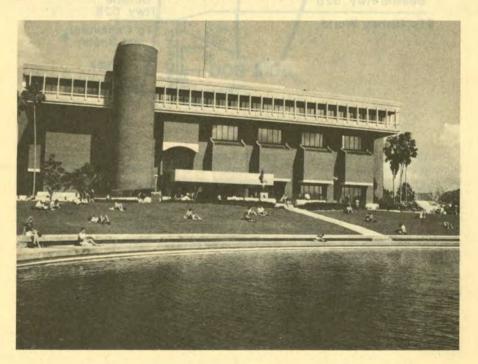
THE ORLANDO CAMPUS

The 1,445-acre campus is located in the Orlando suburbs, 13 miles northeast of downtown. Fifty-one permanent buildings — valued at more than \$130 million — radiate outward from an academic core, where UCF's colleges, classrooms and library are located. More than \$22 million in construction, including a \$14 million communications building, is planned over the next three years. New facilities recently completed or now under construction include a 700-bed residence hall, an \$11 million student union and an \$11 million building to house the Center for Research and Education in Optics and Lasers. UCF recreational facilities include lighted tennis and racquetball courts, an outdoor swimming pool, golf driving range, volleyball and basketball courts and ball fields.

UCF AREA CAMPUSES

In addition to the academic programs offered on the Orlando campus, the University of Central Florida offers a number of upper-division programs and graduate programs at Area Campuses in Cocoa and Daytona Beach. Times and dates for all courses are listed in the regularly published schedule of classes.

The College of Business Administration has a satellite office in Downtown Orlando to target working executives who are looking for new management or marketing skills.



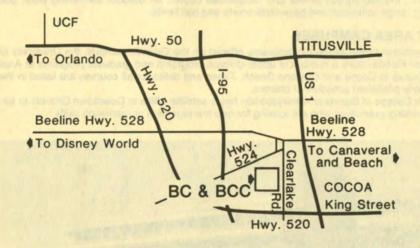
UCF Brevard Area Campus

Clark Maxwell, Jr. Lifeline Learning Center 1519 Clearlake Road Cocoa. FL 32922

Campus Director: James A. Drake (407) 632-0067 UCF Ext. 50-5567

Associate Director, Academic Affairs James O. Hill (407) 632-4129 UCF Ext. 50-5564

Director, Academic Services/Advising Coordinator (Admissions, Registration, Records, Financial Aid, Student Services) Doyce E. Walter (407) 632-4127 UCF Ext. 50-5561



The University of Central Florida, Brevard Campus, is housed in the Clark Maxwell, Jr. Lifelong Learning Center on the Cocoa campus of Brevard Community College. The University offers junior, senior, and graduate-level courses and programs. Freshman and sophomore-level courses are provided by Brevard Community College. Students who have completed the Associate of Arts Degree are able to select from 17 baccalaureate programs offered by the University in Brevard. Newly admitted or currently enrolled UCF students may also register in selected upper division elective courses presented at UCF-Brevard. Graduate programs are offered in Business Administration, Communicative Disorders, Education, Engineering, and Public Administration.

The coordination between the University of Central Florida and Brevard Community College for the 2+2 baccalaureate degree has become a model for other institutions of higher education in the State of Florida. College of Arts and Sciences (407) 631-5366 Psychology Liberal Studies Program Social Sciences

College of Business (407) 632-0098 Accounting (coursework only) General Business Administration

College of Education (407) 631-5339 Elementary Education Exceptional Education Science Education — Biology (Secondary) Vocational Technical Education

College of Engineering (407) 631-5366 Electrical Engineering Technology with concentrations in Electrical Systems and Information Systems Engineering Technology with concentration in Operations

College of Health and Public Affairs (407) 631-5440

Communicative Disorders Criminal Justice Legal Studies Nursing Public Administration

GRADUATE PROGRAMS

Masters of Business Administration (MBA) Masters of Communicative Disorders (MA) Masters of Education Leadership (MEd) Masters of Education Elementary Education (MEd) Masters in Public Administration (MPA) Engineering FEEDS/ITV Graduate Engineering (Courses on videotape)

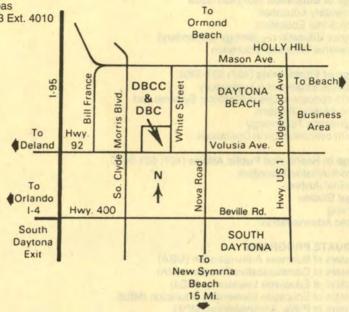
For information concerning the campus contact the Admissions Office at the University of Central Florida-Brevard.

UCF at Daytona Beach

UCF/DBCC Higher Education Center 1200 International Speedway Blvd. P.O. Box 2811 Daytona Beach, Florida 32120-2811 (904) 255-7423

Associate Vice President and Campus Director Sarah H. Pappas (904) 255-7423 Ext. 4010 Associate Campus Director William J. Wetherell (904) 255-7423 Ext. 4025

Director of Undergraduate Advising Sylvester Covington (904) 255-7423, Ext. 4017



The Daytona Beach Campus of the University of Central Florida is located in a new two building Higher Education Center it shares with Daytona Beach Community College. The faculty and staff at the new facility have a strong commitment to serve the residents of Volusia and Flagler counties. In Daytona Beach, UCF offers junior, senior, and graduate level courses and programs. Freshman and sophomore level courses are provided by Daytona Beach Community College. Together, the two institutions provide the "2+2" Baccalaureate Degree. Additional courses and programs will be added as needs are identified.

Education programs at the branch campus are limited access programs. Acceptance to the University and/or the college of education does not constitute admission to UCF/Daytona's education program. A separate application must be made directly to the Daytona Campus program.

The branch campus offers a wide range of services, including admissions, registration, financial aid, student clubs and organizations, career resources, veterans affairs, disability services, and others.

At present, undergraduate and graduate-level degree programs are offered in the following academic disciplines:

College of Arts and Sciences (904) 254-4412

Liberal Studies Program Psychology Social Sciences

College of Business Administration (904) 254-4412

General Business Administration Economics (partial) Finance (partial) Management (partial) Marketing (partial)

College of Education (904) 254-4428

Elementary Education Exceptional Education Vocational Education

College of Health & Public Affairs (904) 254-4412, 254-4428

Criminal Justice Nursing

Graduate (Master's Level) Programs (904) 255-7423

Business Administration (M.B.A.) Counselor Education: School Counseling Mental Health Counseling Educational Leadership Engineering (Video) Public Administration Vocational Education

ENDOWED CHAIRS

Endowed chairs are established under terms of the 1980 Florida Eminent Scholars Act, which provides \$420,000 in state funds to mach \$600,000 in contributions from private sources within a 6-year period. UCF presently has six fully funded endowed chairs and three others fully pledged:

Phillips-Schenck Chair in American Private Enterprise Created in 1980 as the focal point for a continual dialog on major economic issues, comparative economic systems, and economic decision-making in business. The Chair: Dr. David F. Scott, Jr.

Charles N. Millican Chair in Computer Science Created in 1983 and dedicated to probing the frontiers of computer science, with emphasis on the direction that the discipline will take over the next decade. The Chair: Dr. Narsingh Deo.

William and Alice Jenkins Chair in Community Arts — Created in 1986 to enable UCF to design and oversee programs covering art administration, art therapy and art education within the Central Florida community. The Chair: Dr. Kristin G. Congdon.

Carl H. Galloway Chair for Excellence in Business — Created in 1986 to honor Carl Galloway, a pioneer in telecommunications. This chair will establish a Ph.D. program in Business Administration.

Cobb-L.J. Hooker Chair in Optical Sciences and Engineering — Created in 1988 as the largest academic gift ever received by UCF. The gift supports the work of an internationally recognized scholar in laser and optical sciences. The Chair: Dr. George I.A. Stegeman.

General Mills Chair in Restaurant Management — Created in 1990 to develop a program of excellence in restaurant management, this chair, the first of its kind in the country, will also serve as a critical resource for the hospitality industry.

SunBank Chair of Banking for Teaching Excellence — Created in 1989 to attract a nationally or internationally prominent expert in banking and a strong commitment to undergraduate, graduate and Executive Development.

Al Burnett-Contemporary Cars Eminent Scholar Chair in Accounting — Created in 1989 to support an exceptional faculty member in the School of Accounting.

Bert Fish Memorial Eminent Scholar Chair — Created in 1990 to establish an endowed chair in nursing education. This is the first chair to be established at the Daytona Campus. It is designed to improve nursing education and ease the shortage of nurses.

INTERNATIONAL STUDIES AND PROGRAMS

Director: Denise L. Young, Study Abroad: Heinrich Barsch, PC 542, Room 114 (Social Work Trailer), Phone (407) 823-5375, FAX (407) 823-5211.

Director, Florida/Canada Linkage Institute: M. Elliot Vittes, Phone (407) 823-2608

Director, Florida/Eastern Europe Linkage Institute: Richard Astro, Research Pavilion, Suite 130, Phone (407) 658-5573, FAX (407) 658-5570

One of the University of Central Florida's five general goals is to achieve prominence by providing an international focus to its curricula and research programs and increasing the number and diversity of international students and cross cultural activities. UCF offers a variety of programs that support the goal to internationalize the university by offering students an opportunity to gain first-hand information on the arts, customs, economy, geography, human services, languages, and political systems of other countries. UCF also offers many types of study abroad programs that meet general education requirements as well as the needs of majors in all colleges.

The Office of International Studies (OIS) is a university level office which coordinates and serves as a clearinghouse for all international programs within the university. The mission of the OIS is to create an environment that facilitates the identification, development, promotion, coordination, and support of high quality international activities related to the academic mission of UCF. The ongoing development of the international dimension at UCF will be realized through the implementation of goals and objectives related to the curriculum, faculty development, policies and planning, academic support, students, the community, funding, and external agencies. The general goals stated in the UCF Five Year Plan for International Studies are:

- To infuse the curriculum with international content that will teach students to think about themselves and their profession within an interdependent world context and prepare them to compete in a global market.
- To increase the pool of faculty with international expertise in order to have an impact upon all facets of the academic experience at UCF.
- To create an environment that encourages the development and continuation of international programs through the appropriate policies.
- To identify and improve all components of academic support that are integral to internationalizing UCF.
- To offer students an educational experience that will prepare them to compete as global citizens in an interdependent and diverse world.
- To create strong linkages between the international dimensions of UCF and the Orlando community.
- · To develop additional methods of funding international programs and activities at UCF.
- To monitor the activities of and develop contacts with external agencies relevant to the international mission of the university.

STUDY ABROAD PROGRAMS

The primary purpose of study abroad programs is to improve the linguistic and cultural proficiency of the UCF students. Study abroad is not just for foreign language majors. UCF has programs designed to meet the general education and language requirements of all students, as well as programs designed for majors within every college. The benefits of participation in a study abroad program transcend the courses content.

The UCF study abroad programs are designed and administered by UCF faculty. All programs require a person with good health, emotional stability, maturity, adaptability, curiosity, and a sense of adventure. Students have the choice of programs that last one year, one semester, or six weeks. Some programs require proficiency in a foreign language, others do not. Prerequisites, length of stay, and academic requirements vary by program. UCF has summer programs in Canada, Germany, Italy and Spain. UCF faculty and students also participate in State University System programs in Cambridge and London, England, and Florence, Italy. If UCF does not offer a program in the language or country of your choice, the Office of International Studies will provide information from the inventory of study abroad programs call (407) 823-5375

LINKAGE INSTITUTES

The eleven Binational Linkage institutes were established by the Florida Legislature to mobilize the resources of Florida universities and community colleges and integrate them with the efforts of government and business. They were created to enhance the State's competitive position in strategic foreign countries. Institutes have been created for Brazil, Canada, the Caribbean, China, Costa Rice, Eastern Europe, France, Israel, Japan, Mexico, and West Africa. These institutes are authorized to waive up to 25 FTE of the out-of-state portion of tuition for SUS and community college international students from the representative countries each academic year.

The University of Central Florida is home to two of these linkage institutes. For more information about the Florida-Canada Linkage Institute, contact Dr. M. Elliot Vittes (407) 823-2608. For more information about the Florida-Eastern Europe Linkage Institute contact Dr. Richard Astro, (407) 658-5572. Contact the OIS for the names and numbers of the directors of programs located at the other SUS universities.

AREA STUDIES PROGRAMS

Area Studies programs are multi-disciplinary programs that focus on specific regions or cultural groups. UCF has five area studies programs with an international focus: Asian, Canadian, Judaic, Latin American and Iberian Studies, and Russian Studies. Although the academic home of these programs is the College of Arts and Sciences, faculty from across the entire university may participate in these programs. These programs may be elected as

minors by students majoring in any discipline within the university. For more information about the programs and contact numbers of the program directors see the list below. Contact the Office of International Studies for assistance or referral for all international inquiries regarding academic programs.

CANADIAN STUDIES PROGRAM

Canadian Studies offers both a certificate and a minor but not a major. This program is interdisciplinary and includes courses from the departments of Criminal Justice and Legal Studies, English, Foreign Languages, History, Political Science, Sociology and Anthropology, and the College of Engineering. In addition, UCF is the site of the Florida-Canada Institute, a state program which offers other activities relating to Canada. For information consult Dr. M. Elliot Vittes, Director of Canadian Studies, at the Florida Canada Institute Center, FA 408D, (407) 823-2608.

Asian Studies — Contact: Dr. Husain Kassim (407) 823-2803 Canadian Studies — Contact: Dr. Elliot Vittes (407) 823-2608 Latin American and Iberian Studies — Contact: Dr. Jose Fernandez (407) 823-2389 Judaic Studies — Contact: Dr. Moshe Pelli (407) 823-5039 Russian Studies — Contact: Dr. Richard Crepeau (407) 823-2224



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UNIVERSITY LIBRARIES

Director: Anne Marie Allison, LR 512, Phone (407) 823-2564

Associate Director: Orlyn B. LaBrake, LR 512, Phone (407) 823-2564

Professional Staff: Joseph C. Andrews, R. Rochelle Ballard, Norris S. Bazemore, Mem T. Catania, Jeffrey A. Franks, Elba C. Grovdahl, Carole S. Hinshaw, Suzanne E. Holler, Phyllis J. Hudson, Gary L. Hyslop, Patricia E. Kenly, Chang C. Lee, Cheryl G. Mahan, Kimberly K. Montgomery, Ted R. Pfarrer, Peter C. Rossi, Phyllis L. Ruscella, Margaret K. Schaf, Roger D. Simmons, Marilyn R. Snow, Jeffrey D. Sowder, June S. Stillman, Linda J. Sutton, Cheryl D. Walters, John S. Walters, Jeannette A. Ward, Jack L. Webb.

The University Library, housed in a facility of 200,000 square feet, has a collection of over 939,000 volumes (books, journals, government documents) with approximately 5,000 subscriptions (journals, newspapers, and other serials) and over 7,500 media titles. The Library is a partial depository for US and Florida documents, and US Patents. The Library online catalog, called LUIS, may be accessed through terminals in the Library, at other Campus locations, or from personal computers at home. Through LUIS, Library users can determine whether the UCF Library owns a particular item, and the location and availability of the item. In addition, LUIS also provides online access to catalogs of all state university libraries in Florida, and to ERIC, IAC, and other indexes.

The University Library is open approximately 95 hours each week, including evenings and weekends. A shortened schedule is maintained during vacation periods, and hours are extended during the last few weeks of each semester. A staff of professional librarians and paraprofessionals is available to assist and advise those using the Library. Arrangements may also be made for class or small group instruction. Faculty, staff, and students can obtain materials not available in the Library's collections through the Interlibrary Loan service. The Library can provide customized computer-produced bibliographies from any of approximately 500 different commercially available databases.

Special services are provided for the disabled. By using a computer terminal, disabled students can determine the availability of the books they need, and telephone the Library to request that books be brought to them at a convenient location on campus. A Kurzweil reading machine is available in the Library for the visually impaired; students or faculty may arrange for instruction in its use. Through the cooperation of the University's Office of Student Disability Services and the Florida Bureau of Blind Services, the Library staff can aid disabled students in obtaining special equipment they may need to use Library resources.

Students enrolled in the University's area campuses in Daytona Beach and Brevard County receive a full range of services from the Daytona Beach Community College Library and the Brevard Community College Library. Students at the South Orlando Campus have access to an "electronic" library. Online access to the catalog of the main Library collection is available from all branch campus locations and materials are delivered through a regular courier service.

THE UCF ALUMNI ASSOCIATION

The University of Central Florida Alumni Association was developed to maintain awareness and support of the University by our alumni. Membership is open to all alumni and friends of the University. Membership in the Alumni Association provides many benefits, including:

- One-year subscription to The UCF AlumNews (6 issues)
- Free borrowing privileges at UCF library (main branch)
- 15% discount off logo items at UCF Bookstore
- Career assistance with SkillSearch & UCF Career Resource Center
- Free access to campus Macintosh Computer Lab
- Discounts on Budget and Dollar car rentals
- Free usage of several on-campus recreational facilities
- Members-only discounts at Association-sponsored events

Each member participates in the election of a Board of Directors for the Association and every active member is eligible to hold office on the Board. The Board guides the direction of the Association and the development of programs and annual scholarships to undergraduate and graduate students. For information, contact the UCF Alumni Relations Office, Administration 340, Phone (407) UCF-ALUM (823-2586).

UNIVERSITY OF CENTRAL FLORIDA FOUNDATION, INC.

THE UCF Foundation, Inc. is a non-profit, tax-exempt corporation directed by a 60 member community based Board of Directors that encourages, solicits, receives, and administers private gifts and bequests of property and funds for scientific, educational, and charitable purposes. All gifts to UCF are received and processed through the Foundation for support of the University.

OFFICE OF INSTRUCTIONAL RESOURCES (OIR)

Instructional Resources provides UCF faculty with graphic, photographic, and television production; a full range of audiovisual and classroom support services; and a wide range of instructional development assistance and consultation. Instructional Resources also administers the Center for Faculty Support, the Multimedia Center, Brevard Educational Cable Network, ITFS television, and WBCC-TV.

Instructional Resources, through the OIR Auxiliary, provides design, production, and presentation support to University-affiliated organizations, other educational institutions, educational non-profit organizations which have UCF faculty or staff as members and local non-profit public service organizations.

UNIVERSITY BOOKSTORE

The University Bookstore is owned and operated by the University of Central Florida. The University Bookstore is conveniently located in the Student Services Building and is open to the public. In addition to textbooks and school supplies, this facility offers a complete line of UCF insignia clothing and gift items. A brochure of UCF items is available for mail order purchases. Please call (407) 823-2665 to request a brochure or inquire about store hours.

INTERCOLLEGIATE ATHLETICS

Programs in Intercollegiate Athletics are coordinated by athletic department coaches and staff under the general supervision of the Director of Athletics.

The University of Central Florida is a member of the National Collegiate Athletic Association (NCAA), Division 1. Intercollegiate athletic contests are governed by the rules of play published by NCAA and all established eligibility standards are observed.

UCF's current intercollegiate sports for men include baseball, basketball, cross county, golf, football, soccer, track, and tennis. Women's sports include basketball, cross-country, golf, soccer, track, tennis and volleyball. Crew and waterskiing are intercollegiate club sports for both men and women.

THE ORLANDO-UCF SHAKESPEARE FESTIVAL

The Orlando-UCF Shakespeare Festival is a year-round arts and humanities project whose center is its professional Equity repertory theater, producing the works of Shakespeare and other classical playwrights. Performances are every April at the Walt Disney Amphitheater in downtown Orlando, at Lake Eola Park.

In its fifth anniversary season, the Festival has achieved a position of national recognition, attracting its acting company as well as supporting artists and scholars, from around the world. The Festival has been featured in such national publications as *Theater Week*, *Backstage*, and *Southern Theater*. The Orlando-UCF Shakespeare Festival also has several affiliated activities which take place throughout the year.

Among the Festival's affiliated activities are its Young Company: a classical multiethnic, multiracial acting company composed of talented Central Florida youngsters, mentored by UCF students; Shakespeare at Elderhostel: an international education program for senior citizens; Shakespeare: In The Mind's Eye: a performance-based study guide available to 25,000 teachers and students in Central Florida; Classics In Context: a year-round community-anchored series of special events, which in 1994, features a radio talk show produced by WUCF, and featuring faculty, students and Orlando citizens discussing modern themes

and issues from the Season's plays; The Center For Dramatic Literature, Humanities and Civic Values: an exciting program for professionals in our community which explores issues of ethics, leadership, and decision-making; the Orlando-UCF Shakespeare Festival Class: an interdisciplinary class, co-presented at Rollins College, offering a study of the plays within the Festival's environment; the UCF Early Music Ensemble: an on-going ensemble of community ad UCF students who play music from the Medieval Renaissance and Baroque periods on period instruments. Musicians drawn from the Ensemble serve as the Festival's resident musical company.

Internships, special topics classes, and independent studies with the Festival involve students from film, art, English, humanities, journalism, music, education, theater and engineering. Other disciplines interested in exploring formal relationships with the Festival should contact the Orlando Shakespeare Festival's Artistic Director, Dr. Stuart E. Omans, Professor of English, 30 S. Magnolia Avenue, Suite 250, Orlando, Florida 32801, (407) 423-6905.

CENTRAL FLORIDA RESEARCH PARK

The Central Florida Research Park, abutting the main UCF campus, is a university related research park established as a result of legislation passed by the Florida Legislature in 1978. The Park is a cooperative effort between the University of Central Florida, the Orange County Research and Development Authority, and the Orange County Board of County Commissioners (who appoint the members of the Authority). The governing body of the Park is the Orange County Research and Development Authority.

The objectives of the Central Florida Research Park are in keeping with the legislative action which enabled its creation "to encourage and promote the establishment of research and development activity combining the resources of institutions of higher learning, private sector enterprise involved in pure or applied research, and state or federal governmental agency research."

The ultimate goal of university-related research parks is to establish an academic/industry community resulting in a unique approach to the creation of a more effective cooperative academic/industrial endeavor. The University and officials of the Central Florida Research Park believe that the potential for the establishment of close ties between the University and industry will create an attractive environment conducive to the location of research-oriented industry in the Park. This activity will enrich and support the academic, teaching, and research programs of the University. The University, in turn, as a community of scholars, reservoir of knowledge past and present, and creator of new knowledge and discovery, can provide the necessary expertise and human resources to enhance the research and development activities required and planned by Park residents.

Totally planned to provide a campus-like environment for business adjacent to UCF, the Central Florida Research Park consists of over 1,000 acres of land. Businesses which desire a "university relationship" can purchase or lease land in the Research Park on which to construct a facility or can lease space for office, office/lab, or light manufacturing activities.

Several University organizations including the Institute for Simulation and Training, and the Center for Research and Education in Optics and Lasers (CREOL), are located in the Research Park. The Naval Air Warfare Center Training Systems Division, and the Army Simulation, Training. and Instrumentation Command (STRICOM), the focal point of the nation's simulation and training industry, have their headquarters in the Research Park. Over 700 million dollars a year in federal contracts is granted by the Army and Navy each year.

Currently over 70 companies are located in the Research Park pursuing activities in simulation and training, lasers, optical filters, behavioral sciences, diagnostic test equipment, and oceanographic equipment. Almost 4,000 employees currently work in the Research Park including many students and faculty.

Research Park tenants are involved with the University of Central Florida through sponsored research, using faculty as consultants, and using graduate and undergraduate students for intern programs and part-time employment. Research Park tenants can also contract with the University for the use of the library, computer resources and laboratory facilities. Cooperative projects range from technical research to developing business plans and employee training programs.

TRANSIT SERVICES

Through joint efforts of UCF Student Government, LYNX and the University/Alafaya Corridor Transportation Association (UACTA), UCF staff, faculty and students have the availability of a number of transit options.

Three transit routes serve UCF from Oviedo, Downtown Orlando and both Valencia Community College campuses. Through the use of these routes, commuters can connect to most anywhere in Greater Orlando. Individual route times vary between thirty and sixty minutes. Cost for LYNX routes is seventy-five cents per ride.

The LASER Shuttle is a local shuttle system with three separate routes. These routes serve all local residential and commercial areas as well as the Central Florida Research Park and the Quadrangle. The LASER shuttle is identified by the UCF sports depicted on each shuttle. LASER runs every thirty minutes and costs twenty-five cents per ride. Semester passes are available at the UCF Bookstore or Kiosk.

Route maps may be obtained at the Administration Building Information Booth or by calling LYNX at (407) 841-8240.

STUDENT AFFAIRS

INTRODUCTION

The mission of the Division of Student Affairs is to provide services and programs to enhance the teaching/learning process while simultaneously improving the student's total collegiate experience. In partnership with other university divisions and the community, the division fosters an environment that promotes the holistic development of students and encourages lifelong learning. Student Affairs at the University of Central Florida encompasses three separate but interdependent components: student services, student life and student development.

OFFICE OF THE DEAN OF STUDENTS

The Dean of Students Office (Admin Bldg., Room 282, (407) 823-2851) is the primary source for students seeking information on non-academic areas of the University. The office staff strives to introduce students to educational opportunities designed to provide personal, social, and academic growth outside the classroom. Additionally, the Deans supervise the judicial affairs process as well as counsel students confronted with a variety of difficulties, referring students for specialized professional services as necessary.

The Division of Student Affairs annually publishes the student handbook, *The Golden Rule*, which contains more detailed information on student life. Copies may be obtained in the Student Affairs Suite, Room 282, Administration Building. Students are urged to take advantage of the many services and educational programs available through the Dean of Students Office and the Division of Student Affairs.

CONFIDENTIALITY OF STUDENT RECORDS

The procedures for the confidentiality of student records are based on state regulations and the federal **Family Educational Rights and Privacy Act of** 1974. Students who have questions concerning the confidentiality of records should contact the Dean of Students Office. Details of the University practices for confidentiality are presented in *The Golden Rule*.

CLASSROOM RESPONSIBILITY

Students are responsible for maintaining a classroom decorum appropriate to the educational environment. When the conduct of a student or group of students varies from acceptable standards and becomes disruptive to normal classroom procedures, the instructor has the authority to remove the offending party from the room.

STUDENT CONDUCT

Students are subject to federal and state laws and local ordinances as well as regulations prescribed by the University of Central Florida and the Florida Board of Regents. The breach or violation of any of these laws or regulations may result in judicial action. Detailed conduct regulations and procedures are presented in *The Golden Rule*.

A person applying for admission to UCF who has declared a violation of the law which resulted in probation, community service, a jail sentence, or the revocation or suspension of their driver's license (including traffic violations which resulted in a fine of \$200 or more) may have circumstances of the case reviewed by the Dean of Students to consider eligibility for admission.

STUDENT GOVERNMENT

The purpose of the Student Government is to provide a system whereby students can effect progressive changes that bring about improvements in campus life. Student Government also endeavors to promote better communication and understanding among the UCF family and to provide certain services which impact student life. All enrolled students at UCF campuses, both graduate and undergraduate, are considered active members of Student Government who are allowed to voice their opinions through senate representatives. Funds available from the Activity and Service Fee paid by students are used to provide numerous activities and services to students to support their academic

endeavors at UCF. SG is effective at lobbying for the rights of students at local, state, and national levels.

The democratic process of SG is grounded in the fundamental structure of the U.S. Government. The executive, legislative, and judicial branches have representatives from each college at UCF. The structure of SG provides an atmosphere that reflects the democratic processes of the real world thus providing students an opportunity to become educated and experienced in practical situations.

Some of the services made available to students and funded by student activity and service fees are: legal services, computer lab, discount entertainment tickets, free local telephones, vehicles for clubs and organizations use, and funding for recreational services as well as campus programming.

Students interested in working with SG may obtain information from the SG offices located in the Student Center (407) 823-2191.

STUDENT LEGAL SERVICES

Student Legal Services provides students with advice and consultation including court representation in selected areas of law such as landlord/tenant, consumer, simple wills, and non-criminal traffic. Each eligible student (an undergraduate enrolled in six UCF hours or graduate enrolled in four UCF hours) is entitled to consult with the Program Attorney about any legal matter not excluded by program guidelines free of charge. Students in need of legal services should contact Student Legal Services at (407) 823-2538, or Student Center Room 210. This service is by appointment only, and no legal advice is given over the phone.

ORIENTATION

Orientation sessions are available to all new students at the University of Central Florida. Important information is provided regarding advisement, registration, housing, the transition to college life, and the administration of placement tests. Faculty, administrators and a specially trained group of students assist the sessions and are available to answer any questions. Information is mailed to each student accepted by the University regarding date, time and location of the orientation sessions.

UNIVERSITY COUNSELING AND TESTING CENTER

The University Counseling and Testing Center (Recreational Services Building, Room 203 (407) 823-2811) offers a professional staff of psychologists and counselors to assist students through educational, vocational, and career counseling; and personal, social, relationship, marriage, and family counseling.

The Center administers the following national testing programs: GRE, LSAT, GMAT, and MCAT. In addition, the Center administers the College Level Academic Skills Test (CLAST), and a variety of interest, aptitude, career, occupational, and personality assessments.

The Center presents special programs throughout the year, including training in relaxation and coping skills, self-hypnosis training, stress reduction training, and group psychotherapy. All Center services are free to UCF students.

CAREER RESOURCE CENTER - CAREER PLANNING AND PLACEMENT

The Career Planning and Placement Office, located in Suite 124 of the Administration Building (407) 823-2361, is a career resource center for all University of Central Florida students and alumni. The Center provides individualized counseling about current and projected trends in the job market. Services also include: resume advice and critiquing, CHOICES — (computerized career guidance), career planning mini-classes, resume referrals at employers' request, on-campus interviews by employers, lists of full-time and parttime job vacancies, interviewing tips, and help in organizing a job search.



The Career Resource Center provides information about a broad cross section of employers.

Students just beginning studies at UCF are advised to begin preparing for a career. To make the most effective use of the Placement Service, seniors are urged to register with the office two semesters prior to graduation.

Further information may be obtained by visiting the Center or telephoning (407) 823-2361.

HOUSING

1. Regularly enrolled single students paying registration fees for a minimum of nine semester hours may apply for assignment to University residential units. Currently, there are seven residence halls on the campus of the University of Central Florida. The total combined designed capacity of the seven halls is 867 spaces. Additionally, there are 15 buildings in the Lake Claire Courtyard Apartment Complex which house 702 students in single occupancy four bedroom apartments. These apartment facilities are restricted for assignment to students who have completed at least 30 semester hours of college credit. Because of the limited amount of space in University housing facilities, the University does not require any student to live on campus. There are no on-campus accommodations for married students.

Priority for assignment is given to incoming Freshmen who will occupy approximately 50 percent of the University's housing capacity in the seven residence facilities. Current residents will occupy most of the remaining space. The spaces set aside for incoming Freshmen are limited by the University's overall residence hall capacity. Therefore, those desiring to reside on campus should apply for admittance to the University as soon as possible.

Applications for housing can be accepted only from those applicants who have been admitted to the University. Priority for room assignments for new applicants is based on the date of receipt of the completed housing application in the Housing Office. Applicants should CAREFULLY READ the application before submitting it to the Housing Office along with the Letter of Acceptance to the University and the \$150.00 prepayment.

 Housing contracts (whether in the on-campus apartments or the residence halls) when issued for Fall Semester occupancy, serve as a two-semester (Fall AND Spring) obligation between the applicant and the Housing Office. Housing contracts issued for the Summer Semester are a one-semester (Summer Only) obligation and do not extend to include an assignment to Fall housing accommodations.

 Applicants have the option of choosing one of several Meal Plans available at the University. Specific information concerning University Meal Plans is available from Marriott Corporation, P.O. Box 168017, UCF, Orlando, FL 328166-0222.

Applications and other information concerning University housing may be obtained by consulting the Department of Housing and Residence Life, P.O. Box 163222, UCF, Orlando, FL 32816-0222 (407) 823-4663.

Off-Campus Housing

With two miles of the campus are numerous apartment and duplex communities, in addition to a privately-owned residence hall complex. Sidewalks, bike paths, and Tri-County bus service connect many of these facilities with the University. Students living off-campus are invited to participate in one of the University meal plans.

STUDENT HEALTH SERVICES (SHC)

Recognizing the importance of lifestyle in health and the prevention of disease, the Student Health Service combines quality care for illness and accidents with an aggressive health education and lifestyle enhancement program. A student Wellness Advocate Team enhances the health promotion efforts of the Student Health Center.

The Student Health Center (SHC) is staffed by medical doctors, certified nurse practitioners, physician's assistants, Registered Nurses, and a full complement of other medical support personnel. Full referral service to Orlando area specialists is established. Charges incurred outside the Student Health Center are the responsibility of the student. A variety of laboratory and x-ray tests are available at the Student Health Center. Testing for HIV (AIDS virus) is not done in our laboratory. Referral arrangements may be made for anonymous AIDS testing by contacting the Chief Nurse at the Student Health Center at (407) 823-2701, ext. 5275.

When the Student Health Center is not open, students can use the "Hot Line" phones at the front and back doors of the building to obtain help for urgent needs.

By Board of Regents regulation, each student must demonstrate Rubella and Rubeola immunity prior to registration. The Student Health Center cannot provide immunization services to meet this requirement. It is a pre-registration requirement and prospective students are not eligible for services at the SHC. Medical records are held in the strictest confidence.

Each health fee paying student is entitled to the benefits outlined in the SHC brochure; faculty and staff can only be seen on an emergency basis, and then for a fee (except Worker Compensation cases). Optional health and accident insurance may also be purchased by contacting the office of Student Affairs or Student Government (please note optional health and accident insurance is not part of the Student Health Center program and will provide a variety of coverages for health needs beyond the scope of Student Health Services).

Blood drives are held several times annually by the Central Florida Blood Bank. Students, faculty, and staff are eligible for credits from the blood bank upon demonstrating need.

STUDENT CENTER

Student life at the University of Central Florida emanates from the Student Center. As the focal point for campus activities, the Student Center serves students, faculty, staff, patrons, alumni, and guests with its many programs, services, and facilities. The Student Center is funded through Activity and Service fees as allocated by Student Government.

Several student organizations flourish in the Student Center. The Campus Activities Board sponsors a wide variety of educational and entertaining programs for the UCF campus community. The Student Government Association provides for active leadership experiences through the Senate and committees working for student rights. The Orientation Team coordinates the orientation programs. Greek Council promotes memberships in, and operation of, Fraternities and Sororities.

The Student Center provides other services for students as well. The Game Room offers billiards, ping pong and video games. Student Government Association operates a Macintosh computer lab. There are four food services facilities, an information desk, conference and meeting rooms, and the Student Center Auditorium. Reservations for university facilities can be made at the Student Center Information Desk. The Student Center Director is located in SC 198. For more information regarding the Student Center, call 823-2611.

STUDENT ORGANIZATIONS

Student Organizations play a vital role in enhancing student life at the University of Central Florida. Academic, pre-professional, honorary, military, minority/international, religious, service, social, special interest, and sports are the ten categories of the over 150 organizations available. The Student Organizations Office publishes a *Student Organization Handbook* listing all of the organizations at UCF and their purposes.

For further information regarding clubs and organizations, call (407) 823-5107 or visit the Student Organizations Office, Student Center, Room 215.

RECREATIONAL SERVICES

The Office of Recreational Services offers a wide variety of sports and recreational opportunities to the students of UCF and their immediate families and some opportunities to UCF faculty, staff, and the surrounding community.

These opportunities include intramural sports leagues and tournaments, organized recreation and fitness programs, unstructured open recreation, sports-related special events, screen printing and racquet stringing. Equipment may be checked out for use on and off campus.

The Office of Recreational Services is located next to the pool. The phone number is (407) 823-2408.

OFFICE OF STUDENT INFORMATION AND EVENING/WEEKEND STUDENT SERVICES

The Office of Student Information and Evening/Weekend Student Services is a one-stop communications network and information center committed to gathering and disseminating information to students. The office is also responsible for the administrative supervision of student affairs functions for all University students taking evening and weekend classes and for the administration and programming of the 24-hour Student Information Buzzline, (407) 823-5479. The office phone number is: (407) 823-3111.

Information Booth & Evening Student Services:

9:00 a.m. to 9:00 p.m.

Monday through Thursday second floor Administration Building, Education Building Lobby, and College of Business Information Booth Friday (same locations as above)

9:00 a.m. to 5:00 p.m.

Weekend Student Services 10:00 a.m. to 2:00 p.m. 2:00 p.m. to 5:00 p.m.

Saturday at SG Kiosk (407) 823-2060 Sunday at SG Kiosk (407) 823-2060

INTERNATIONAL STUDENT SERVICES

The International Student Office provides services for all international students and resident aliens. Its central role is to assist International students and scholars attending UCF to adjust to the changing lifestyle in order to achieve their educational goals and gain a meaningful living experience in the United States. A wide range of special services is provided to the UCF international community, such as issuance of immigration forms 1-20 A/B and IAP-66, assistance in locating off-campus apartments, counseling on personal, financial, academic, and cross-cultural communication matters, advisement in immigration and tax matters, promotion of social activities, and home visits in Central Florida. Further information may be obtained from the International Office, Administration 123, or by calling (407) 823-2337.

STUDENT DISABILITY SERVICES

Student Disability Services provides information and orientation to campus facilities and services, assistance with classroom accommodations, assistance with course registration, disabled parking decals, counseling, and referral to campus and community services for students with disabilities.

Services are available to students whose disabilities include, but are not limited to, hearing impairment, manual dexterity impairment, mobility impairment, specific learning disability (such as dyslexia), speech impairment, visual impairment, or other disabilities which require administrative or academic adjustments.

If a student needs special admission consideration based on a disability, the student should answer this question on the Application for Admission form and send the requested official documentation to the Admissions Office. Students who have a disability which may require special assistance also are requested to voluntarily contact the Office of Student Disability Services. All information is confidential and will be used only to assist the student.

Information and assistance are available for faculty members working with students who have disabilities.

A Telecommunication Device for the Deaf (TDD) is available for hearing-impaired or speech-impaired persons with TDD's to contact the University. Phone (407) 823-2116 TDD calls ONLY.

Further information may be obtained from the Student Disability Services Office, Administration Building, Suite 282, Phone (407) 823-2371.

CREATIVE SCHOOL FOR CHILDREN

The Creative School for Children provides an educational program, including kindergarten-first grade, for children two through five years old. The daily program is planned and conducted by Florida-certified teachers. The program provides a wide variety of experiences in art, music, language, motor skills, science, math, social studies, perceptual development, socialization, and self-discovery. Planned and spontaneous field trips and special family programs are a part of the yearly schedule. Experiences in observation and training in academic areas are also made available to University students. Opportunities for educational research are available to University faculty and graduate students.

A Flex Time program is provided for children three through twelve years old. This program provides educational activities for children who need part time schedules. This program is open daily and evenings Monday-Thursday.

The school conducts a Summer Day Camp for elementary school children during Summer "B" semester.

For further information, call the Creative School for Children, (407) 823-2726.

OFFICE OF VETERANS' AFFAIRS (OVA)

The Office of Veterans' Affairs (OVA) is a center for all veterans, including students who are using VA educational benefits to further their education. The office, located in room 132 of the Student Center (407) 823-2707 has a professional staff augmented by student veterans to assist in providing information concerning entitlements, filing claims to the Department of Veterans Affairs (DVA), and certifying enrollment at the University. The office also provides counseling for personal and academic concerns, tutorial assistance, and referral to various community agencies. Veterans and eligible dependents must be certified through the Office of Veterans' Affairs to receive DVA educational benefits. The office monitors the academic progress of all those receiving DVA,educational benefits.

All veterans and eligible dependents are urged to consult the Office of Veterans' Affairs early in the process of applying for admission to UCF.

Veterans' Benefits

Students who are entitled to DVA educational benefits must make initial contact with the Office of Veterans' Affairs. To maintain eligibility for DVA education benefits, students must adhere to the policies and procedures contained in the UCF "Student Veteran Handbook" and DVA rules and regulations. A copy of the "Student Veteran Handbook" can be obtained at the Office of Veterans' Affairs.

Students eligible for DVA education benefits, may also be eligible for a VA Deferral of Tuition and Fees. This deferment is authorized once each academic year, beginning with the Fall semester. The VA Deferment due date is published in the Class Schedule each semester. STUDENTS ELIGIBLE FOR FINANCIAL AID ADEQUATE TO COVER TUITION AND FEES ARE NOT ELIGIBLE FOR THIS DEFERMENT.

Undergraduates must carry at least 12 semester hours for full-time DVA benefits, 9-11 semester hours for three-quarter time benefits, and 6-8 semester hours for half-time benefits. Five semester hours or less will be reimbursed at cost of tuition and fees or guarter-

time depending on DVA Chapter. Students who are classified by the University as postbaccalaureate must meet the same semester hour requirements as undergraduates and will be paid at the undergraduate rate, regardless of the course level.

Students intending to enroll simultaneously at UCF and another institution have the option of receiving DVA benefits, but first must consult with the Office of Veterans' Affairs and obtain a Transient Permission Form from UCF Student Records.

Veterans and eligible dependents who wish to change their major, or pursue a double major or dual degree, or add a minor may also receive VA benefits but must first make arrangement through the Office of Veterans' Affairs before taking any of the new courses. This includes a minor in Military Sciences. Note: some majors have room in the program for extra electives that can be filled with courses for a minor or for another major.

In order to receive veterans' educational benefits, students must maintain satisfactory academic progress, and conduct. Accordingly, benefits will be terminated for individuals who are disqualified, excluded, suspended or expelled from the University. If reinstated by the University following disqualification, exclusion, suspension or expulsion, the veteran or eligible dependent must contact the Office of Veterans' Affairs to have their DVA educational benefits re-started. Individuals placed on academic probation will continue to receive benefits as long as a 2.0 or higher GPA is earned each semester. For students who fail to maintain satisfactory academic progress, benefits will be terminated once the required semester hours of course work for the program of study are completed, regardless of the GPA or eligibility for graduation.

Veterans and eligible dependents may also draw VA benefits during the periods of eligibility while on cooperative education assignments. The recipient may choose to receive benefits at the "co-op rate" which is approximately 80 percent of the entitled monthly DVA benefit. Payment is received during both the on-campus semester and the off-campus work terms. Contact the Office of Veterans' Affairs at (407) 823-2707 for more specific benefit information on Cooperative Education.

See also:

Academic Advising Services Office of Minority Student Services (OMSS) Student Academic Resource Center (SARC)



ADMISSIONS SERVICES

The Admission Services Office coordinates the admission and enrollment process of all; undergraduate first-time-in college, transfer, non-degree, dual enrollment, and non state university transient students to the Orlando, Daytona, and Brevard campuses. The office seeks to identify, attract and enroll the desired number of academic, diverse, and able students that can contribute and achieve academic growth from the multitude of programs offered through the university and community we serve. Through managed communication, a data management system and scholarships, the office is able to attract students that are motivated, challenged and have the desire to achieve academic prominence.

Office functions include administering programs for prospective students, such as campus tours, open houses, area receptions, high school and community college visits. Students, parents, high school and community college counselors are consulted with on a continual basis regarding all aspects of admissions and general information on the academic, social, and living components of the university. The office is committed to providing accurate and timely information to all constituents.

APPLICATION FOR ADMISSION

HOW TO APPLY: Applicants should complete the State University System application for admission, and include a 20-dollar non-refundable application fee. Applicants should also request official transcript(s) from each educational institution attended to be forwarded directly to Admissions Services. Students are encouraged to apply several months in advance. Applications will be accepted up to one year prior to the start of the term desired. **The priority application deadlines are July 15 for the Fall semester, December 15 for the Spring semester, and April 15 for the Summer term.** The priority deadline for most financial assistance and scholarships is March 1. Housing requests are reviewed by date of receipt of housing applications. Applications should be mailed to Admissions Services, University of Central Florida. PO Box 160111, Orlando, FL 32816-0111.

The University encourages applications from qualified persons of both sexes from all cultural, racial, religious, and ethnic groups. The University does not discriminate on the basis of disability in admission or access to its programs and activities.

A summary of the general requirements for admission or readmission to the University is as follows:

 A satisfactory academic record. Each applicant must furnish a complete chronological record of educational institutions previously attended. Official transcripts must be submitted in accordance with instructions on the application form.

• Satisfactory scores on the Scholastic Aptitude Test (SAT) or the American College Test (ACT). Students whose native language is not English must also submit a Test of English as a Foreign Language (TOEFL) score. The required minimum TOEFL score is 550.

A satisfactory conduct record.

NOTE: Furnishing false or fraudulent statements or information in connection with an application for admission or residence affidavit may result in disciplinary action, denial of admission, and invalidation of credits or degrees earned.

Applicants should understand that minimum requirements are given and that admission to the University is a selective process. The satisfaction of minimum requirements does not automatically guarantee admission. Conversely, Florida Board of Regents policy allows the University to admit students to any semester as exceptions to the minimum requirements. Admissions Services and the Admissions and Standards Committee are responsible for the admission of undergraduate students under this policy. See also: International Students.

CAMPUS TOURS

Campus Tours leave from the Information Booth on the second floor of the Administration Building at 11:00 a.m. and 2:00 p.m. Monday-Friday except on holidays. Group tours may be scheduled by calling Admissions Services at (407) 823-5439.

REACTIVATION

Students who submit an application for admission to UCF and do not attend, may reactivate the original application within two years of the term for which they first applied. To update the application, complete the Reactivation Form by the published deadline. This form is available in the Admissions Services Office.

READMISSION

Readmission of Previously Enrolled Students is the responsibility of the Registrar's Office. Students who are in good academic standing but have broken their enrollment by being absent from the University for two major (Fall or Spring) terms must submit a readmission application. Students who have been disqualified and have been absent from the University for at least two semesters, and students who have been Excluded and been absent from the University for one calendar year, are eligible to apply for readmission. The University Registrar is the contact person for this process. The University Registrar's Office is located in Administration Building 161L and phone is (407) 823-5454.

A. Students must complete the Readmission Application available in the Registrar's Office.

B. If the student has attended another regionally accredited institution, the student must request official transcripts be sent to the Registrar's Office.

C. If the student was previously admitted to a limited access program, they will be placed in "Pending" status of that major and must be readmitted by the college or department to the limited access program.

D. If the student has left the state of Florida for a period of at least one year, the student may be required to complete the Florida Residency Affidavit.

Immediate Readmission (or Readmission as exception to University policy) following disqualification or exclusion is the responsibility of the Admissions and Standards Committee. The contact person for these requests is the chair of the committee. The chair's office is located in Enrollment and Academic Services, Administration Building Room 210. Their phone number is (407) 823-2691.

A. Students seeking immediate readmission must complete the Immediate Readmission Form in the Registrar's Office.

B. Students are required to request six transcripts (at the student's cost) from the Registrar's Office.

C. Students are not allowed to make personal appearance before the Admissions and Standards Committee when seeking immediate readmission.

D. Appeals to decisions of the Admissions and Standards Committee are made to the Associate Vice President for Enrollment and Academic Services.

Any former student readmitted whose all-college or UCF cumulative grade point average was less than 2.0 ("C") at the time of withdrawal will be readmitted on academic probation.

All applicants seeking readmission who have attempted coursework at another institution since last attending UCF will normally be required to be in good standing (2.0 grade point average with no allowance for grade forgiveness) and eligible to return to the last institution attended.

ADMISSIONS AND STANDARDS COMMITTEE

The Admissions and Standards Committee is composed of representatives from the University: representatives from the Faculty Senate, Minority Student Services, Student Affairs, Enrollment and Academic Services, the Student Body, and Admissions Services. This committee normally meets on a regular schedule to review marginal cases and to consider the appeals of applicants. A letter of explanation to the Chair, Admissions and Standards Committee is recommended in establishing the basis for an appeal. Students have the option of appealing a decision in person before the Admissions and Standards Committee.

LIMITED ACCESS PROGRAMS

A limited access program uses selective admission to limit program enrollment. Limited access status is justified when student demand exceeds available resources, such as faculty, instructional facilities, or equipment, or when specific accrediting requirements apply. Criteria for selective admissions include indicators of ability, and indicators of performance creativity or talent to complete required work within the program. Community college transfer students with Associate of Arts degrees from Florida community colleges are given equal consideration with UCF students. Admissions to such programs are governed by 6A-10.24(8), the Articulation Agreement, and by 6C-6.01, FAC, of the Board of Regents rules.

RECORDS

Validity of Documents

All supporting admissions documents must be received directly from the issuing institution or testing agency. If the University finds that an applicant has made a false or fraudulent statement or a deliberate omission on his application, residency affidavit, health report, or any accompanying document or statement, that applicant may be denied admission. Should the student be enrolled when such fraud is discovered, he may be immediately withdrawn (with no refund), further enrollment denied, and credit earned and any degree based upon such credit invalidated.

STUDENT HEALTH HISTORY

Each student accepted for admission shall, prior to registration, submit a Student Health History provided by the University. *Documentation of appropriate immunization for measles and rubella is required. Proof of immunization must be provided.* This proof is a minimum requirement, and the University may require, in addition, such other evidence of examination as may be determined necessary. Where physician examinations or certificates are required, they must be signed by a doctor of medicine or a doctor of osteopathy.

Students 40 years of age or over are exempt from the Immunization Requirement but are required to submit the Student Health History.

The University reserves the right to refuse registration to any student whose health record or report of medical examination indicates the existence of a condition which may be harmful to members of the University community.

The Student Health History form will be mailed to the applicant at the time of acceptance. Applicants should return the Health History report to the Registrar's/Records Office.

Deadline for Required Documents

In some cases applicants may be allowed to register on a temporary basis without all records if eligibility for admission can be determined from available records or consultation with the student. All final supporting admissions documents, such as official transcripts and test scores should be received by Admissions Services no later than 20 days after the first day of classes.

TRANSFER SUMMARY INFORMATION

A Transfer Summary Report (TSR) will be prepared on a priority basis for students from whom all final transcripts from each institution attended have been received by the 20th class day. Those students who have not submitted completed records by the 20th class day will be placed on administration hold. Students with incomplete records will not be permitted to register for a future term until all transcripts and other required documentation have been received. Students whose records are not satisfactory may be placed on Academic Probation and may, in certain instances, be removed from classes.

FRESHMAN APPLICANTS

Any student who meets the minimum admission requirements is encouraged to submit an application. The University will do everything possible to accept all qualified applicants who apply before the application deadline date. If the number of qualified applicants exceeds the number the University is permitted to enroll, admission will be on a selective basis. An applicant's total high school record including grades, test scores, educational objective and pattern of courses completed, school recommendation, and personal record will be considered in the selection process. An application pool will be maintained when the number of applicants exceeds the number of qualified students to whom admission may be offered. Based on the number of cancellations received, selections will be made from the applicant pool approximately two months prior to the first day of classes.

The University reaffirms its Equal Educational Opportunity (EEO) commitments and seeks to increase the enrollment of minority students.

High School Diploma

Freshmen who are applying for admission to the University are normally required to have a diploma from an accredited high school. Foreign diplomas must meet the requirements specified in Florida Statutes, section 229.814 and must be evaluated by Joseph Silny & Associates, Inc. or World Education Services, Inc.

Entrance Examination Scores

All applicants for admission must submit test scores from the Scholastic Aptitude Test (SAT) or from the American College Testing (ACT) program. Any student whose native language is not English must submit a test of English as a Foreign Language (TOEFL) score.

High School Academic Units and Grade Point Average

All applicants must have earned a minimum number of high school academic units (yearlong courses which are not remedial in nature) as shown in the table below to be considered for admission. The academic grade point average (GPA) will be computed only on these units. Grades in honors courses, advanced courses, International Baccalaureate, and Advanced Placement (AP) courses will be given additional weight in the computation of the academic grade point average.

The high school academic unit requirements are as follows:

ACADEMIC SUBJECT	UNITS REQUIRED
English (Three of which must have included substantial writing.)	4
Mathematics (At or above the Algebra I level.)	3
Natural Science (Two of which must have included substantial	
laboratory requirements.)	3
Social Science (Included: History, Civics, Political Science,	A DAY OF THE PARTY OF THE
Economics, Sociology, Psychology, and Geography.)	3
Foreign Language (Both credits must be in the same language.)	2
Additional academic electives from the above five subject areas	
and courses recommended by the Florida Association of School	1 1 1 1 1
Administrators, or other groups, and courses recommended by	
the Articulation Committee, and approved by the Department of	
Education.	4
TOTAL	19

Eligible Applicants

Eligibility for admissions is subject to satisfactory receipt and review of all items required in the admission process.

All applicants must meet the following State University System (SUS) minimum eligibility index standards:

If the High School GPA	One of the following composite		
in academic core	admission test	admission test scores must	
courses is:	equal or e	exceed:	
*HS GPA	*SAT or	*ACT	
2.0	1050	25	
2.1	1020	24	
2.2	990	23	
2.3	960	22	
2.4	930	21	
2.5	900	21	
2.6	890	21	
2.7	880	20	
2.8	870	20	
2.9	860	20	
3.0+	*	en transition	

*Academic eligibility for admission is determined by academic grade point average and admissions test scores.

Students who have been enrolled in dual enrollment courses will be required to have a "C" average (2.0 GPA) for all dual enrollment course work attempted.

A student applying for admission who does not meet these requirements may bring to the University other important attributes or special talents and may be admitted if, in the judgement of the Admissions and Standards Committee, the student can be expected to do successful academic work. The University will provide an individual learning plan for each student admitted under this alternative.

Any student admitted without two years of one foreign language in high school or the equivalent (minimum 8 semester hours) at the post-secondary level, must satisfy this admission requirement prior to earning 60 semester hours of credit.

TRANSFER APPLICANTS

Transfer applicants are encouraged to review the current edition of UCF's TRANSFER STUDENT COUNSELING MANUAL available in Florida community college counseling offices. The manual gives the recommended community college course requirements for all majors as well as other helpful information.

Applicants with Fewer Than 60 Credit Hours

All college transfer applicants with fewer than 60 semester hours of acceptable credit must meet freshman high school unit entrance requirements and must meet the high school academic grade point average and minimum SAT or ACT scores (as listed on previous page), have at least a 2.0 grade point average on a 4.0 system for all college-level academic courses attempted, *and* be in good standing (minimum 2.0 grade point average) and eligible to return as a degree-seeking student to the last institution attended.

Applicants with 60 or More Credit Hours

In addition to the requirements outlined below, all college transfer applicants with 60 or more semester hours of acceptable credit must have a grade point average of at least 2.0 on a 4.0 system for all college-level academic course work attempted *and* be in good standing (minimum 2.0 grade point average) and eligible to return as a degree-seeking student to the last institution attended.

Applicants with an A.A. Degree from a Florida Public Institution

Admission of Associate of Arts (A.A.) degree graduates from Florida public community colleges and Florida state universities will be governed by the Articulation Agreement between the state universities and public community colleges of Florida, as approved by the Board of Regents and the State Board of Education. The agreement states that except for limited access programs, admission as a junior to the upper division of the University shall be granted to any graduate of a state-approved Florida community college or State University System institution who transfers directly to UCF, who has completed the university parallel program and who has received the Associate of Arts degree which included all of the following:

- At least 60 semester hours of academic work exclusive of occupational courses and basic required physical education courses.
- An approved general education program of at least 36 semester hours.
- A grade point average of at least 2.0 on a 4.0 system on all college-level academic courses attempted. (Only the final grade received in courses repeated by the student shall be used in computing the average.)
- One year of college instruction in a single foreign language. (This requirement applies to those students without the required two units of foreign language in high school.) Students who receive an Associate of Arts degree from a Florida public community college or university but have not met the foreign language requirement and do not qualify in one of the exempt groups defined below may be admitted to the University on a provisional basis. Admission to the upper division will be granted when the foreign language requirement is satisfied.

Two groups of students are exempt from the foreign language portion of the admission requirement. These groups are:

- A. Students who received an Associate of Arts from a Florida public community college degree prior to September 1, 1989.
- B. Students who enrolled prior to August, 1989 in an Associate of Arts program at a Florida public community college and who maintain continuous enrollment through the completion of the A.A. degree and transfer to UCF. Continuous enrollment is enrollment for a minimum of one term every 12-month period beginning with the

student's first enrollment at a community college and continuing until the student enrolls in the University.

Any student admitted without two years of one foreign language in high school or the equivalent (minimum 8 semester hours) of such instruction at the post-secondary level, must satisfy the admission requirement prior to graduation.

Florida Community College Associate in Arts graduates are guaranteed the following rights under the Statewide Articulation Agreement (State Board of Education Rule 6A-10.024):

- Admission to one of the nine (9) state universities, except to "limited access" programs (programs that have additional admission requirements).
- Acceptance of at least 60 credit hours by the state universities toward the baccalaureate degree.
- Adherence to university requirements and policies based on the catalog in effect at the time the student first entered a community college, provided the student maintains continuous enrollment.
- 4. Transfer of equivalent courses under the Statewide Course Numbering System.
- Acceptance by the state universities of credit earned in accelerated programs (e.g., CLEP, AP, PEP, Dual enrollment, Early Admission and International Baccalaureate).
- 6. No additional General Education Core requirements.
- 7. Advanced knowledge of selection criteria for limited access programs.
- 8. Equal opportunity with native university students to enter limited access programs.

Should any guarantee be denied, students have the right of appeal through the University Articulation Office, Office of Community College Relations.

Applicants with an A.S. Degree

Applicants who have received an Associate of Science degree in Engineering Technology from a Florida public college or university will be admitted only to the Bachelor of Science in Engineering Technology program.

All other A.S. degree applicants must meet the appropriate admission requirements defined in this section.

The A.S. degree does not certify the student as having completed General Education requirements.

Any student whose native language is not English must submit a Test Of English as a Foreign Language (TOEFL) score.

Applicants — More Than 60 Hours, Received an A.A. Degree from a Florida Public Institution

In addition to meeting the requirements which apply to all transfer applicants, undergraduate transfer students who wish to be admitted to UCF as upper division students must have met all of the following requirements:

- · A minimum of 60 semester hours of academic coursework.
- The English and Mathematics requirements of the Gordon Rule.
- Passing scores on three of the four parts of the College Level Academic Skills Test.
- Eight to 10 semester hours of college instruction in a single foreign language. (This
 requirement applies to those students admitted to the University without the required
 two units of foreign language in high school.)

Applicants who have not met the above requirements may only seek admission into the lower division.

Any student whose native language is not English must submit a Test Of English as a Foreign Language (TOEFL) score.



Applicants from Unaccredited Institutions

Transfer applicants who otherwise meet all requirements, but who enter from a "regionally" unaccredited college or university will be considered on an individual basis. Admission may be granted on a probationary and/or non degree-seeking basis, depending upon the applicant's record including high school units, entrance examination scores, and high school GPA. The "Transfer Credit" portion of this section provides information relating to transfer of credit for courses taken at unaccredited colleges or universities.

TRANSFER CREDIT

All grades at a regionally accredited college or university in transfer courses that are normally a part of a baccalaureate degree program are shown on the student's permanent record. Credits earned in courses transferred with "D" grades will count toward the credits required for the baccalaureate degree; however, the department or college offering the major determines whether courses with "D" grades in the major may satisfy requirements in the major field.

No credit will be awarded for college-level General Education Development (GED) tests, for courses given without a grade, or for courses carrying grades but not credit hours.

Military Service School Courses

Completed military service school courses may be evaluated on the basis of the recommendations of the American Council of Education (A.C.E.) when official credentials have been properly presented. Credit may be granted when courses are equivalent to those offered by the University. However, recommendations by the A.C.E. are not binding upon the University.

Military credit is not accepted through transfer. Even though military records may have been evaluated by another regionally accredited institution, it is important to have official credentials sent to the University for evaluation.

Credit is not awarded based on job descriptions, for Basic training, DANTES credit, CLEP scores below the 50th percentile, life experience, or coursework that is non-academic.

General Education Transfer Credits

Transfer students from Florida public community colleges or universities may satisfy the General Education Program requirements of UCF by completing the general education program prescribed by the previous community college or university. Transfer applicants with incomplete general education programs from state (SUS) institutions and those from all other institutions will have their credits evaluated on a course-by-course basis.

Grade Forgiveness Transfer

UCF honors grade forgiveness if it has been awarded as part of an A.A. degree from a Florida public community college or university, with the exception of courses taken previously at UCF.

Credits from Private and Out-of-State Institutions

The credit of transfer applicants from private junior and senior colleges and out-of-state institutions will be evaluated on a course-by-course basis. Each student must submit the necessary petition(s) to the appropriate office(s) to determine which courses will transfer with regard to degree progress at UCF. Transfer courses which meet the requirements of the General Education Program and the Gordon Rule are determined through the process described in this catalog under "University Degree Requirements." Each College has different petition procedures, but generally the petitioning of transfer courses for satisfaction of college and major requirements should be done during the second full term of the student's residency at UCF so the accepted transfer courses are clearly understood by the student and the faculty advisor early in the student's program.

Credits from a Previous Baccalaureate Degree

Graduates from other accredited four-year U.S. institutions who apply for admission to work toward a second undergraduate degree must meet the regular requirements of the University (as defined in the "Undergraduate Degree Requirements" section of this catalog). A baccalaureate degree or higher from another accredited four-year U.S. institution satisfies the General Education Program requirements and also provides exemption from the foreign language requirements for admission and graduation.

ACCREDITED INSTITUTIONS

For the purposes of this catalog "Accredited Institutions" means those institutions accredited by any of the following six regional associations:

- New England Association of Schools and Colleges
- Middle States Association of Colleges and Secondary Schools, Commission on Institutions of Higher Education.
- North Central Association of Colleges and Schools, Commission on Colleges and Universities
- Northwest Association of Secondary and Higher Schools, Commission on Higher Schools
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities and Accrediting Commission for Junior Colleges.

Foreign institutions are evaluated through Josef Silny & Associates, Inc. or World Education Services, Inc.

COLLEGE PREPARATORY INSTRUCTION

State statutes require that new students be evaluated in terms of their potential to successfully complete required coursework at the University. Those students who are identified as likely to have difficulty in the areas of mathematics, writing, or reading may be required to take college preparatory courses prior to enrollment in college-level courses in those areas. Students must begin any required preparatory instruction during their first 12 semester hours and finish all such coursework within 3 semesters. New students will be notified of the need to take placement examinations during orientation, or of coursework that will be

required. For further information, contact Student Academic Resource Center, PC-102, Phone (407) 823-5130.

INTERNATIONAL STUDENT ADMISSION

The University of Central Florida is authorized under Federal law to enroll non-immigrant alien students. Undergraduate applicants should refer to the "Admission" section of this catalog, and graduate applicants to the graduate catalog. In addition, the following is required for admissions:

- International student applications and records required for admission must meet all applicant deadlines.
- Only those students with an Associate of Arts degree from a Florida public community college, or those who have completed their general education requirements (as defined in the Articulation Agreement) with a minimum 2.0 GPA, with no allowance for grade forgiveness, and at least three parts of the College Level Academics Skills Test (CLAST), or those students with superior academic records (i.e., upper 20th percentile or U.S. "B" average equivalent) will be considered for admission. Students who have attended any foreign institution(s) must provide an official course-by-course evaluation from Josef Silny & Associates, Inc. (Evaluation applications may be obtained from Admissions Services or by writing Josef Silny & Associates, Inc., P.O. Box 248233, Coral Gables, FL 33124.) World Education Services, Inc. (WES) Evaluations will also be accepted.
- All applicants whose native language is not English must submit an official score report from the Test of English as a Foreign Language (TOEFL). Undergraduates who have not earned an Associate of Arts degree, or completed the general education requirements (as defined in the Articulation Agreement) from a Florida public community college and passed at least three parts of the CLAST must have a minimum TOEFL score of 550. Graduate applicants should consult the coordinator of their respective program to determine minimum TOEFL scores as well as any other requirements.
- All students who have not earned an A.A. degree from a Florida public institution must also submit an official SAT or ACT score and a high school transcript and Josef Silny & Associates, Inc. evaluation, where applicable, in order to be considered for admission.
- Applicants must file a Confidential Financial Statement confirming availability of finances for each year of study.

The Admissions Office may require additional documents and/or transcripts before an admission decision is made.

INTERNATIONAL STUDENT MANDATORY HEALTH AND ACCIDENT INSURANCE

Each international student accepted for admission shall, prior to registration for classes, submit proof of compliance with the State University System of Florida's mandatory health and accident insurance requirement.

Minimum coverage limits may be obtained from the office of International Student Services. Written proof of insurance must also be provided to this office (AD 123).

If insurance is issued by a foreign carrier or underwriter a statement must be provided in English that the policy meets the State of Florida minimum levels of insurance coverage.

The University reserves the right to refuse registration to any international student that fails to comply with this insurance requirement or is unable to supply satisfactory proof of insurance. The University also reserves the right to withdraw from classes any international student who fails to maintain insurance coverage, cancels insurance coverage or avoids in any way the responsibility to comply with the insurance requirement.

TEMPORARY STUDENTS

Any student who applies before the application deadline date and is permitted to register and attend classes without a complete admission file is granted a maximum of 4 weeks (first 20 class days) to furnish all required records. Records indicating ineligibility may result in cancellation of the student's registration.

TRANSIENT STUDENTS

Students in good standing with a 2.0 overall academic average in any accredited college or university who wish to enroll for one term at UCF may be considered for admission as transient students. Such enrollment terminates at the end of one term and does not presuppose regular acceptance by any college or department of the University. A transient student must be in good standing with a minimum "C" (2.0) grade point average at the parent institution and at the last institution attended and must submit an official transcript to support the application for admission. Transient student applications must be received by the appropriate deadlines.

AUDIT STUDENTS

To audit a class, a student must file a regular application and be accepted as a degreeseeking or non degree-seeking student, obtain a form in the Records Office, and take it to his/her instructor for approval. The student must take the signed form to the "Help" table at walk-by registration during the last hour of regular registration or at any time during the add/drop period. A student must be registered for at least one course, either for credit or audit, by the end of regular registration or a late fee will be assessed if registration takes place thereafter.

Students registering for credit during regular or late registration, or during add/drop, may not change to audit status, but must remain in the course or withdraw through normal withdrawal procedures.

NON DEGREE-SEEKING STUDENTS

This classification allows **qualified** students to enroll in selected courses at the University without satisfying requirements for admission to degree-seeking status. Successful completion of courses while in this classification does not necessarily provide a basis for regular admission at a later date. Non degree-seeking status is granted in exceptional cases only, and will usually be reviewed by the Admissions and Standards Committee.

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

- Students are required to provide evidence of their educational qualifications for attending classes in order to meet the intent of this enrollment classification.
- Non degree-seeking students are subject to the same rules and regulations as degree-seeking students.
- Registration is permitted on a space-available basis. Students should consult the registration calendar in the Schedule of Classes or contact the Admissions Office for the appropriate registration time.
- A maximum of 15 undergraduate baccalaureate semester hours earned as a non degree-seeking student may be applied toward a degree if a non degree-seeking student is later accepted as a baccalaureate student.
- An applicant who has been denied admission or who has been disqualified or excluded may not register as a non degree-seeking student.
- International students may not register as non degree-seeking since immigration regulations prevent foreign nationals from enrolling without admission to a degree or certificate program.

TRANSCRIPT REQUESTS

Transcripts of a student's UCF academic record may be requested by the student through the Office of the Registrar. A **student's academic record can be released only upon written authorization by the student.** Include in the request the full name and social security number. Indicate names and complete addresses to whom transcripts are to be sent. If grades or degree statements for the current term are needed, indicate that the transcript request is to be held until the final semester reports are posted. The first three transcripts are provided at no cost to the student. For additional transcripts, there is a charge of \$2.00 each. The check or money order should be made payable to: UCF. Cash payments can be accepted only by the Cashier's Office (Monday 9-6:30; Tues-Fri 9-3:30). Students requesting transcripts may do so in person or by writing to: Transcript Request, Office of the Registrar, University of Central Florida, PO Box 160114. Orlando, FL 32816-0114.

SECOND BACHELOR'S DEGREE

Second Bachelor's Degree applications are made through the Admission Services Office or Registrar's Office.

A. Students who have never attended the University of Central Florida as degree seeking students must apply to the Admissions Services Office. Students would complete the regular undergraduate application form.

B. Students who have attended the University of Central Florida as a degree seeking student apply through the University Registrar's Office. These students complete the Readmission Application form.

SENIOR CITIZENS

Senior citizens who are Florida residents and who are 60 years old or over may enroll as <u>audit</u> students by completing the Senior Citizen Audit Form in the Registrar's Office. A Florida Residency Affidavit is required to establish Florida residency. A completed Student Health History must be filed prior to registration. All audit students register on a space available basis.

Dates for Senior Citizen registrations are found in the University Calendar and the Schedule of Classes. It is necessary to complete the required forms at the Enrollment and Academic Services Office (AD Bldg. 210) no later than the last day of Add/Drop for the term for which a senior citizen wishes to enroll as an audit student.

TUITION AND FEES

SCHEDULE OF FEES

A student's basic expenses at the University will be for registration and course related fees, room and board, textbooks, and miscellaneous items.

Required fees are established by the Board of Regents and the Florida State Legislature and are subject to change without notice. Fees are affected by residency status. Information on Florida residency for tuition purposes is on the following page.

All University fees must be paid at or before the end of the add/drop registration period. Tuition not paid by the payment deadline date for each term may result in late fees or class cancellation.

The following schedule applies to all University of Central Florida students:

General Fees and Costs (All fees are subject to change without notice)

- A. Application fee. Must be paid by U.S. check or money order (required with all applications for admission to the University and not refundable)......\$20.00.
- B. Registration Fees per semester for campus, centers, and continuing education courses. The student is assessed tuition for one credit hour, Florida Resident Tuition rate, at the level student is classified for zero hour registration.

Please note: 1994-1995 rates had not been determined at the time of this printing.

	ida Resident
Category U-Grad Graduate U-Grad	Graduate
(0000-4999) (5000-7999) (0000-4999	9) (5000-7999)
Fees per Credit Hour:	
Matriculation \$ 38.08 \$ 87.53 \$ 193.71	\$ 328.51
Building Fee 2.32 2.32 2.32	2.32
Capital Improvement Fee 2.44 2.44 2.44	2.44
Undergraduate Financial Aid Fee 1.90 4.37 9.68	16.41
Activity & Service Fee 6.95 6.95 6.95	6.95
Athletic Fee (students taking 5 or	
more credit hours)* 5.50 5.50 5.50	5.50
Total per Hour \$ 57.19 \$109.11 \$220.60	\$362.13
Other Fees:	
Health Fee (per term — on	
	47.30
	47.30
Health Fee (summer term — on campus only) 35.20 35.20 35.20	35.20
	35.20
Mat & Sup Fee (approved	
courses only - varies	0.00 15.00
per course) 2.00-15.00 2.00-15.00 2.00-15.00	2.00-15.00
Late Registration Fee 50.00 50.00 50.00	50.00
Late Payment Fee 50.00 50.00 50.00	50.00
Returned Check Fee 20.00 or 5% 20.00 or 5% 20.00 or 5%	20.00 or 5%
(whichever (whichever (whichever	(whichever
is greater) is greater) is greater)	is greater)

*The athletic fee for students taking courses as area campuses and/or for 5 or less credit hours is \$4.50 per hour.

C. Room and Board (Based on accommodations and meal plan selected)	
Residence Hall Rooms (per semester)	\$925-\$1480
Board (meal plans, per semester)	\$800-\$950
Charge for late housing payment.	\$50.00
D. Books and supplies (estimated) per semester	\$300.00

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E. Late Registration and Late Payment Fees

- A \$50 late registration fee will be assessed all students who register during the late registration period and pay fees by the deadline.
- A \$50 late payment fee will be assessed all students who pay fees after the deadline.

 Both a \$50 late registration fee and a \$50 late payment fee will be assessed all students who both register late and pay fees after the deadline.

All payments accepted **after** drop cards are mailed, approximately the third week of classes, must be cash, cashier's check or money order.

venicle Registration (required of everyone operating a motor-powered venicle on cam-
pus) per calendar year for full-time, part-time students, and courtesy students from other
institutions. Student's fee\$45.00
Student Health Fee
Mandatory fee assessed to all students except those enrolled at area campuses, (Brevard
CC, SOC, Daytona Beach CC) and exclusively in Continuing Education courses.
Fall & Spring Semesters\$47.30
Summer Semester\$35.20
Certificate of Participation HolderLab fees/out-of-state fees
I.D. Card replacement
Course Related fees - fee per student on specific course(s)\$2.00-\$15.00
Return Check Charge

Service charge on all returned checks is \$20.00 or 5%, whichever is greater, and results in the loss of check cashing privileges.

APPEALS

Students who wish to appeal a late registration, late payment, or return check service charge fee may make their appeal to the Appeals Committee by initiating a student petition (Form 41-561). This form can be obtained from Enrollment and Academic Services, Student Affairs, University Cashier, or the Student Accounts Section of Finance and Accounting. Students must submit their petitions to Student Accounts, Room 112, Administration Building, and may appear (not mandatory) before the committee.

CHECK CASHING

The University Bookstore cashes personal checks not exceeding \$50.00. The University collects a \$20.00 service fee, or five percent (5%) of the check amount, whichever is greater, for personal checks, drafts, or orders which are returned as uncollectible. Future check-cashing privileges may be denied.

PAST-DUE ACCOUNTS

All financial obligations to the University must be met if good standing is to be maintained. Failure to meet obligations can result in the withholding of grades and transcripts, and denial of registration and readmission to the University. The services of a professional collection agency and recourse to the courts may also be invoked if deemed necessary. All costs of collection, including attorney's fees, are borne by the debtor.

PAYMENT PROCEDURES

Payment may be made in the Cashier's Office, AD 108, from 8:30 a.m. to 6:30 p.m. on Monday, and 8:30 a.m. to 4:00 p.m., Tuesday through Friday. A photo ID (if paying by check) is required.

Payments (NO CASH) may be placed on the Cashier's night depository; INCLUDE SS# ON CHECK OR MONEY ORDER.

Payments mailed must be postmarked no later than the published deadline date in Fee Schedule. **DO NOT SEND CASH.**

Address Payment to: University Cashier University of Central Florida P.O. Box 620000 Orlando, FL 32891-8449 Penalty for Late Payment is \$50.00. Do not assume your registration will be cancelled if you do not pay fees or attend classes.

Payment guidelines for off-campus registration are contained on the off-campus registration form.

REFUND OF FEES

A refund of fees will be made under the following conditions upon presentation at the Student Accounts Office of a Certification of Withdrawal issued by the Registrar. No refunds will be made under this policy except upon proper application. Any debts to the University will be deducted up to the full amount of the refund.

A. A full refund when:

- 1. Any class is dropped before the end of the Add/Drop period.
- 2. Cancellation of the course by the University.
- Student is denied admission to an offered course by the University for whatever reason.
- B. Partial refund (25% of the total registration and non-resident fees paid less building and capital improvement fees):
 - Complete withdrawal from the University prior to the end of the fourth week of classes, during a 16- (or 17-) week semester or at the end of the first quarter of classes during a mini-semester or summer semester (rounded out to the end of the week in which the first quarter occur). Student must present withdrawal slip and request the refund from Student Accounts.
- C. Refunds for exceptional circumstances at any time upon withdrawal for one or more courses.
 - Up to 100% of tuition and registration fees due to circumstances determined by the University to be exceptional, including but not limited to sickness, death, involuntary call to military service or administrative errors created by the University.

D. Pro rata refunds for first term at UCF students:

 Between 60% and 90% of tuition and dorm charges for students who fully withdraw before 40% of the term has elapsed. Applies only to first term at UCF students. An administrative fee defined as the lesser of 5% of all charges or \$100 will be deducted from the refund.

TUITION FEE WAIVERS FOR STATE OF FLORIDA EMPLOYEES

State employees, faculty and staff who utilize a tuition fee waiver for coursework (up to 6 credit hours) without payment of the registration fees must register on the day and time provided by the Registrar. **Employees who register prior to the prescribed time and date will have an invalid fee waiver, and will be liable for all applicable fees on courses enrolled.** It is the responsibility of the employee to register only on a space-available basis; and this is only during the prescribed time as indicated above by the Registrar. In addition, the tuition fee waiver cannot be used for courses which require increased costs. These courses include, but are not limited to: courses offered through the Center for Continuing Education, independent study, supervised research, supervised teaching lab, thesis hours, dissertation, internships, co-ops, practicums or applied, individualized instruction in music, art or dance, etc. State employees must pay all applicable course related fees.

TUITION FEE WAIVERS FOR SENIOR CITIZENS

Persons 60 years of age or older who meet Florida residency requirements may register to audit classes without payment of tuition and application fees. **Registration is on a space available basis; see the current schedule of classes for dates and times.** The tuition fee waiver cannot be used for courses which require increased costs (such as Thesis, Dissertation, Directed Individual Study).

A Florida Residency Affidavit is required in order to establish Florida residency. A completed Student Health History must be filed prior to registration. Inquiries should be directed to the Registrar's Office, Administration Building, First Floor or Enrollment and Academic Services, Administration 210.

STATE TUITION EXEMPT PROGRAM (STEP)

Eligible members of the active Florida National Guard may receive a waiver of 50% of tuition and lab fees. Registration is on a space available basis only during the time designated by the Registrar.

FLORIDA PREPAID COLLEGE PLAN

For any student enrolled who has a Florida Prepaid College Plan, the University will automatically defer the portion of the tuition covered under the plan. The plan will pay \$44.74 per credit hours (graduate or undergraduate level) for the 1993-94 academic year. The plan does not cover the Local Fees of \$12.45 per hour, Health Fee of \$47.30 per term, and Lab Fees of \$2.00-\$15.00 per lab class. The student is responsible for paying these remaining fees by the fee payment deadline. The Local Fees are reduced to \$11.45 per hour for students registered for 5 credit hours or less and for area campus courses. IF YOU DO NOT WISH TO UTILIZE THE FLORIDA PREPAID COLLEGE PLAN, PLEASE NOTIFY THE STUDENT ACCOUNTS OFFICE, AD 112, BY THE FEE PAYMENT DEADLINE. NOTE: THESE FEES MAY CHANGE FOR THE 1994-1995 ACADEMIC YEAR.

FLORIDA RESIDENCY FOR TUITION PURPOSES

To qualify as a Florida Resident for tuition purposes, students must:

Be a U.S. Citizen, Resident Alien, Parolee, Cuban National, Vietnamese Refugee, or other refugee or asylee so designated by the U.S. Immigration and Naturalization Service,

AND

Have established a legal residence in this state and maintained that legal residence for 12 months immediately prior to the term in which they are seeking Florida resident classification. The student residence in Florida must be as a bona fide domiciliary rather than for the purpose of maintaining a mere temporary residence or abode incidental to enrollment in an institution of higher education, and should be demonstrated as indicated below (for dependent students, as defined by IRS regulations, a parent or guardian must gualify),

AND

Submit the following documentation (or in the case of a dependent student, the parent must submit documentation) prior to the last day of registration for the term for which resident status is sought:

- Documentation establishing legal residence in Florida (this document must be dated at least one year prior to the first day of classes of the term for which resident status is sought). The following documents will be considered in determining legal residence:
 - A. Declaration of Domicile.
 - B. Proof of purchase of a home in Florida in which the student resides.
 - C. Proof that the student has maintained residence in the state for the preceding year (e.g., rent receipts, employment records).
- Documentation establishing bona fide domicile in Florida which is not temporary or merely incidental to enrollment in a Florida institution of higher education. The following documents will be considered evidence of domicile even though no one of these criteria, if taken alone, will be considered as conclusive evidence of domicile:
 - A. Declaration of Domicile.
 - B. Florida voter registration.
 - C. Florida vehicle registration.
 - D. Florida driver license.
 - E. Proof of real property ownership in Florida (e.g., deed, tax receipts).
 - F. A letter on company letterhead from an employer verifying permanent employment in Florida for the 12 consecutive months before classes begin.
 - G. Proof of membership in or affiliation with community or state organizations or significant connections to the State.
 - H. Proof of former domicile in Florida and maintenance of significant connections while absent.
 - I. Proof of reliance upon Florida sources of support.
 - J. Proof of admission to a licensed practicing profession in Florida.
 - K. Any other factors peculiar to the individual which tend to establish the necessary intent to make Florida a permanent home and that the individual is a bona fide Florida resident, including the age and general circumstances of the individual.

- · No contrary evidence establishing residence elsewhere.
- Documentation of dependent/independent status (notarized copy of most recent IRS tax return).

OR

Become a legal resident and be married to a person who has been a legal resident for the required 12-month period, OR

Be a member of the Armed Forces on active duty stationed in Florida, or a spouse or dependent,

OR

Be a member of the full-time instructional or administrative staff of a state public school, community college or university in Florida, a spouse or dependent,

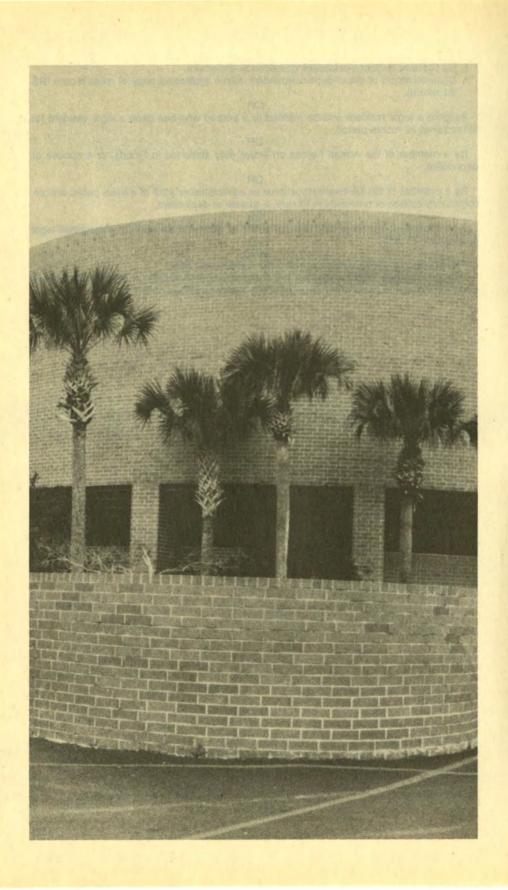
OR

Be a dependent and have lived five years with an adult relative who has established legal residence in Florida,

AND

File a notarized residence affidavit with the Admissions Office.

The Admissions Office reserves the right to require additional documentation as seen necessary to accurately determine the resident status of any student.



STUDENT FINANCIAL ASSISTANCE

The primary role of this office at the University of Central Florida is to provide financial assistance to students and families, allowing them to participate fully in the total educational experience. We encourage all students to apply for financial assistance by completing the Free Application for Federal Student Aid (FAFSA).

The following Financial Assistance policies and procedures are based upon federal, state and University regulations current for the 1994-95 academic year. Regulations are subject to change at any time.

DETERMINING ELIGIBILITY

In order to qualify for federal and state financial aid programs, a student must be a citizen or permanent resident of the United States, the Mariana Islands, or the Pacific Trust Territories. Some financial aid programs are available to part-time students; generally at least 6 credit hours enrollment per term is required.

The Student Financial Assistance office encourages all such students to apply for financial aid and to begin the process early. There are many grant, loan, and employment programs available. Almost all programs require the determination of financial need.

Financial need is calculated by a Federal processor who uses a standardized formula: financial need equals the cost of education (specific to the school to be attended) minus the expected family contribution (specific to each applicant) and minus any Veteran's Educational Benefits or other expected resources available. Students and/or parents provide detailed financial information on a Free Application For Student Aid (FAFSA) which generates a need analysis form. The results are forwarded to the UCF Student Financial Assistance office by the federal processor.

MORE SPECIFIC ELIGIBILITY REQUIREMENTS ARE LISTED BELOW:

The applicant must have a high school degree and must not be enrolled in an elementary or secondary school.

The applicant must be admitted as a degree-seeking student at UCF in an eligible program. The applicant must be a U.S. citizen or an eligible non-citizen (e.g. resident alien).

Eligible non-citizens include I-151, I-551 and I-688 cardholders as well as some I-94 classifications.

The applicant must be maintaining Satisfactory Academic Progress toward his/her degree. See the Satisfactory Academic Progress Requirements.

The applicant must not be in default on any Federal Student Loan and must not owe a repayment on any grant program.

The applicant must be registered with Selective Service (if applicable).

The applicant must sign a Statement of Educational Purpose.

The applicant must not have received Federal loans in excess of the established annual or aggregate limits.

The applicant must show a financial need as computed on the FAFSA (for need based programs).

The applicant must meet minimum hours of enrollment and other program-specific criteria.

The student who fails to pass CLAST must enroll in at least one course for credit each term which is related to the acquisition of skills to meet the minimum State Board of Education standards regardless of the number of subtests failed. In addition, the student must register to retake the CLAST. This requirement begins after the student has completed 60 semester hours of academic credit.

See also: ROTC scholarship opportunities.

UCF APPLICATION DEADLINES

Federal Pell Grants and Federal Stafford Loans are available on a year-round basis. Students may apply for financial aid in advance of any term and receive aid from these programs if eligible.

To be considered for the full range of aid available for the academic year (beginning with the Fall Term), the need analysis report must be received from the federal processor by **March 1** of the preceding Spring.

Incoming students should not wait to be admitted to UCF before applying for financial aid. All students must **reapply yearly** for financial aid.

APPLICATION PROCEDURES

The following steps can take 4 to 6 weeks to complete. Students should apply well in advance of the **March 1** deadline of the year for which aid is being requested. Students who wish to enter UCF in Spring Term must apply by the **March 1** deadline of the preceding spring in order to be considered for the maximum aid available.

1. File a Free Application for Federal Student Aid.

UCF requires that you complete the Free Application for Federal Student Aid (FAFSA). *IMPORTANT:* The results of your FAFSA must be in our office by **March 1** for the next Fall and Spring semesters, to meet our priority deadline, so that you may be considered for all aid available.

Read the instruction booklet carefully as you fill out the form. Errors and omissions can prevent you from receiving aid for which you could be eligible. Keep copies of all documents filed.

Follow-up promptly on all corrections to your FAFSA. If your record is "rejected in analysis" by the federal processor, be sure to provide them with the information they request as soon as possible. Processing of your file will be held up until corrections are made.

 Request Financial Aid Transcripts (in addition to academic transcripts) from every post-secondary institution you have ever attended, whether or not you received any financial aid.

To request financial aid transcripts, provide the school with your SSN and the name under which you attended that school. Ask them to make sure your SSN is on the transcript they send to UCF. Allow 2 to 4 weeks for processing. If you are enrolled at another institution at the time you are involved in the UCF application process, wait until you have completed that term of enrollment **before** requesting the financial aid transcript.

3. Follow-Through.

Your application will not be complete until all documents requested have been filed and reviewed in our office.

Whenever you receive financial aid correspondence, **review** it thoroughly and **follow** directions promptly. Delays can be frustrating, as well as costly.

4. Verification.

Federal regulations require that some students verify the information submitted on their applications. If selected for verification, you will be asked to provide additional information (such as copies of tax return forms, documentation of household size, untaxed income, etc.). It is not unusual for additional documents to be requested after the initial review of the file. Prompt response to requests for additional documentation will expedite completion of this process. Financial aid cannot be processed or received until verification is complete and all necessary corrections have been made.

5. Professional Judgment.

Contact the Student Financial Assistance office if you experience a circumstance that may affect your financial situation.

HELPFUL TIPS:

Make a copy of tax return forms before submission to IRS.

Start a folder NOW to save financial aid information and photocopies of all documents filed and received.

Include student's name and SS# on all documents submitted to Student Financial Assistance.

Maintain a current address in the REGISTRAR'S OFFICE; all financial aid correspondence is mailed to that address.

Complete all items necessary to apply for both a Federal Pell Grant and a Federal Stafford Loan, even if it doesn't seem advantageous at the time. The law requires that students be considered for a grant before a loan is offered; choosing a lender now does not obligate the student to process a loan, but will make it easier if additional funds are needed.

If you have extenuating circumstances or run into major problems at anytime, call our appointment line, (407-823-5285).

TRANSFER STUDENTS

The UCF Student Financial Assistance office must have on file a Financial Aid Transcript from every post-secondary school ever attended, whether or not financial aid was received. If you are eligible to receive aid at another institution for the academic year in question, please be aware that the only transferable programs are the Federal Pell Grant and the Florida Student Assistance Grant (FSAG).

To apply for financial aid at UCF, complete all the application procedures listed with one exception. If a need analysis for the year in question has already been filed, the student need only request that the processor forward a copy to UCF.

To transfer the remainder of a Federal Pell Grant, students should request the need analysis processor to send a duplicate set of their Student Aid Reports (SAR's) to them. These must be submitted to the UCF Student Financial Assistance office once the student has received them.

To transfer the remainder of an FSAG, send a copy of the state award letter and UCF's name and address to: State of Florida, Office of Student Financial Assistance, Department of Education Center, Tallahassee, FL 32399. Please do this before their stated deadline.

DUAL ENROLLMENT

Students who have been approved to take classes at another institution will have those hours counted toward meeting financial aid requirements at UCF by:

Submitting to the Student Financial Assistance office a copy of a completed UCF Transient Student form with all required signatures. This will confirm that the hours will be accepted by UCF toward your degree.

Submit a copy of your registration form and/or invoice confirming that you actually enrolled for the hours appearing on your *Transient Student* form.

Dual enrolled students must make arrangements for paying tuition and fees at the visited school, since there is no deferral mechanism. In addition, it is the studentis responsibility to assure that the visited school **promptly** furnishes UCF with academic transcripts, confirming that the attempted hours are completed. This will help avoid academic progress problems. Keep in mind, if you expect to receive funds under any of the Federal Loan Programs, you must enroll for a minimum of **six hours at UCF** to meet eligibility requirements.

Also, please keep in mind that you may not receive financial aid from two institutions at the same time. You must decide which of the two institutions is your **primary** school and apply for aid there. Students will sometimes be paid aid at both schools if the schools are not aware of the dual application; however, a monitoring system has been put into place at the federal level to identify these students. This will result in a mandatory repayment back to one of the two schools for the overpayment.

INDEPENDENT STUDENT STATUS

The financial resources of parents/guardians do not have to be included in the determination of student's financial need if the student is:

- · 24 years of age or older as of the award year
- an orphan or ward of the court
- · a veteran
- · legally responsible for dependents other than a spouse
- married
- accepted into a Graduate/Professional Program

UCF FINANCIAL ASSISTANCE PROGRAMS

If determined eligible, you will receive an award letter offering you a financial aid package composed of one or more of the following programs. Your admission to UCF must be finalized, you must be classified as Degree-Seeking, the verification process must be completed before a financial aid award will be disbursed and you must be meeting the standards for Satisfactory Academic Progress. Other loan and employment programs not based on need are provided below.

Your awards will be based upon: your financial need (as determined by a standardized formula applied to data provided on your applications), the amount of funds available to UCF, the number of UCF students who qualify for aid, as well as the date you complete the

application process. The amounts listed on your award letter will be estimates based on full-time registration.

Check the chart below to see in how many hours you must enroll for each semester in order to receive an award from each program.

the program and the first of the desired the	Priority Deadline	Minimum Credit Hrs. Required	Available to Graduate Students	Second Undergraduate Degree Seeking
			Students	Degree Seeking
Federal Pell Grant	Available	Assistance	Nie	Ma
You must be considered for a Federal Pell Grant before other forms of aid will be offered; covers	Year Round*	Prorated based on hrs.	No	No
a maximum of two full-time semesters a year.	Hound	based on hrs.		
Federal SEOG (Supplemental Educational Opportunity Grant)	March 1	12	No	No
FSAG (Florida Student Assistance Grants) Read State information sheet, available from Student Financial Assistance, for residency requirements and application procedures; must maintain 2.0 GPA	May 1	12	No	No
Federal College Work Study On campus jobs; award earned as hourly wage. Not available to post-baccalaureate students.	March 1	12	Yes	Yes
CCWEP				
(College Career Work Experience Program) Off campus jobs, students paid an hourly wage		6	No	Yes
Federal Stafford Loan Program, repayment may be deferred. Loan amounts vary, as well as	Posted each term	6 at UCF	Yes	Yes
interest rates and repayment options	eachtenn			
Federal Perkins Loans are currently made at 5% interest rate; loans deferred until 6 or 9 months after you graduate or drop below 6 hours. Not available to post-baccalaureate students.	March 1	6	Yes	Yes
Scholarships	Varies	6	Yes	Yes
There is a broad range of scholarships available	year			
through federal, state, institutional, and private	round			
sources. Each has different eligibility criteria.	1111 24 6101			
Check with the Scholarship Office for more information				
Federal Unsubsidized Stafford Loans These loans operate under the same terms as regular Federal Stafford Loans except that	Posted each term	6 at UCF	Yes	Yes
financial need is not necessary. In addition,				
the student is responsible for the payment				
of interest as it accrues, (alternatively				
the interest can be capitalized into the loan				
balance). This loan now replaces the				
Supplemental Loan for Students (SLS) previously available				
to independent students.				
Federal Parent Loans to Undergraduate	Varies	6 at UCF	No	Yes
Students (PLUS) These are loans which	Vaneo	o at oor	110	100
parents take out on behalf of their children				
(student must be dependent for financial aid				

parents take out on behalf of their children (student must be dependent for financial aid purposes).

LOANS

Federal Family Educational Loans are made through private lenders. Students must be enrolled for a minimum of 6 credit hours at UCF at the time of disbursement to receive a loan check. First-time borrowers at UCF must attend an Entrance Interview before a loan check will be released to them. The times and location of Entrance Interviews will be posted. Exit interviews are required upon graduation, or when enrollment becomes less than one-half time (6 credit hours) at UCF. Payment is deferred until students graduate or drop below 6 hours enrollment at UCF. Once eligibility has been determined by a need analysis, students must request a Loan by the dates printed below so that processing can be completed in time to receive funds during the term indicated.

October 15 — Fall Term Loan February 15 — Spring Term Loan June 15 — Summer Term Loan

EMPLOYMENT

Federal College Work Study jobs are awarded as part of a student's financial aid package if need so indicates: a minimum of 6 hours enrollment is required. Jobs are on-campus and efforts are made to match job assignments with the student's academic program. Awards are paid as an hourly wage.

The Florida College Career Work Experience Program provides off-campus jobs related to the student's major to help fill unmet financial need established by a current need analysis. Six hours enrollment is necessary. This program is administered by the Office of Cooperative Education, (407) 823-2667.

Co-operative Education (CO-OP) jobs related to students' educational goals are available off-campus and are not based on need. Contact the office of Cooperative Education, (407) 823-2667.

OPS (Other Personnel Services) jobs are available on-campus and are not related to financial need. Application is made directly to the Department advertising the position.

OTHER SERVICES

UCF Emergency Short Term Loans are available to currently enrolled students. Loans are granted at the beginning of the semester for books and emergencies. This is **not** for the payment of tuition and fees. A \$5.00 non-refundable service charge will be assessed for processing the loan. This service charge, like other debts owed the University, will be deducted at the time of check disbursement. If the loan is cancelled, or not picked up, the \$5.00 service charge still must be paid. The specific repayment date of the loan is noted on the loan contract.

Food Service Loans are available to students who have already been awarded sufficient financial assistance to cover all debts owed the University and who live on campus. Food Service Loans are processed by Student Financial Assistance. A \$5.00 non-refundable service charge will be assessed at the time of processing.

SCHOOL COSTS

Cost of Attendance 1994-95 (Full Time)

	100100 (1 011 11110)		
	OFF-CAMPUS	ON-CAMPUS	WITH-PARENT/RELATIVES
Tuition/Fees	\$1,740	\$1,740	\$1,740
Books/Supplies	690	690	690
Room/Board*	5,240	4,220	1,660
Personal Exp.	1,710	1,710	1,710
Transportation	1,720	400	1,720
Total (In State)	\$11,100	\$8,760	\$7,520
Out-Of-State Fee	4.800	4,800	4.800
Total (O/S)	\$15,900	\$13,560	\$12,320
		and the second se	and the second s

DEFERRALS OF TUITION AND FEES

Financial assistance awards will normally result in the student being granted a deferment of tuition and fee payments. This process occurs automatically if the student has enrolled for sufficient hours, is meeting all general eligibility requirements, and is making Satisfactory Academic Progress. This program makes up for the time lag that normally occurs between the date that tuition and fees are due and the date on which financial aid disbursements are made which is normally three (3) to four (4) weeks after the semester begins.

1. Your fee invoice (class schedule) reflects the dollar amount of your deferment. If the total amount of your tuition and fees exceeds the amount of your deferment, the difference must be paid by the due date on your fee invoice (class schedule). Different financial assistance programs require different hours of enrollment for eligibility. Make sure you are registered for the required number of hours. Students must register for at least 12 hours to receive a FSAG and FSEOG; 6 hours to receive a Federal Pell, Federal Stafford, and Federal Perkins award. (Note: You must have 6 hours at UCF for the Federal Stafford loans.)

- The following programs are not included in the Automatic Deferral Program: work study programs, third party deferrals, and other waivers, and direct-pay scholarships.
- Dual enrolled hours (transient hours) taken at another institution are not considered for automatic deferral purposes.

NOTE: Both Subsidized and Unsubsidized Federal Stafford Loans will result in a deferral in the amount of 92% of the award, since origination fees are taken out by the lender and the guarantee agent in the amount of 8%. Automatic deferments can work against students who believe they will be administratively dropped from classes by not paying tuition. An active deferment will keep this from happening. It is the responsibility of the student who is on financial aid to properly drop classes prior to the end of the add/drop period to avoid becoming fee liable. Additionally, under any circumstance where previously estimated financial aid cannot be paid and a deferment must be cancelled, the student is liable for the cost of tuition, whether or not he/she attended classes.

FUND DISBURSEMENTS

Financial assistance disbursements are not available at the time of registration. Checks, including Federal Stafford and Short Term Loan checks, will be disbursed after the first day of classes. Therefore, students should make themselves aware of the Automatic Deferment policies and procedures and be prepared to use personal savings or a UCF Short Term Loan for books and other expenses anticipated.

Financial assistance funds for most programs are mailed directly to the student by the UCF Office of Student Accounts. Initial disbursements should take place after the third week of each semester. Most grant and scholarship checks go through a "net checking" process in which debts owed to the University are deducted from the available assistance. Federal Perkins Loan checks must be picked up at the Cashier's Office upon notification by Student Accounts.

Federal Stafford checks are mailed to the student without any deduction for debts owed to the University. It is the student's responsibility to pay outstanding debts to the school within 21 days of the date of the transmittal letter to avoid a late charge. You must be enrolled in at least 6 credit hours at UCF at the time of disbursement of each Federal Stafford Loan check. Borrowers under the Federal Stafford program who have not yet successfully completed their first year of undergraduate study cannot receive their initial checks until 30 days into the semester.

NOTE: The verification process must be complete before financial assistance funds will be released. Students on Financial Assistance Cancellation will **not** receive funds.

Federal Stafford Loans

Your student loan check(s) will be mailed to the University of Central Florida after your lender has received a completed application/promissory note. We strongly suggest that you follow-up with the lender if you have not received your loan check within 20 days of mailing your promissory note. Please note to estimate when your Federal Student Loan check will be mailed, refer to the Disclosure Statement from your lender, it indicates a date the lender intends to send the check to UCF. If that date is before the semester starts, please allow 10 working days from the first day of classes before inquiring about your check. If the date is after the semester begins, please allow 10 working days from the disbursement date for UCF processing. LOAN CHECKS WILL BE DISBURSED AFTER THE BEGINNING OF CLASSES.

- First-time borrowers at UCF: Must attend an Entrance Interview before a check can be disbursed. The time and location of Entrance Interviews will be posted.
- 2. Two-term loans: To receive the second half of a two-term loan, you must complete at least 6 hours of UCF during the first term. If you did not complete the required 6 hours or if you did not accept your first term loan disbursement, you cannot receive the second term disbursement. You must cancel the original loan request and reapply for a new loan through Student Financial Assistance.
- 3. One-term loans: Disbursement of a one-term loan will be divided into two payments. You must maintain eligibility throughout the term to be eligible for each disbursement. The second disbursement cannot be made until at least 1/2 of the term is over.
- Students who have not successfully completed their first year of undergraduate study (e.g., First Year Freshman = 1F) will not receive their checks until 30 days after classes have begun.

 Summer Term: You must have a minimum of 6 hours to receive assistance. If your hours include Summer B hours are needed to meet the minimum requirements, funds will not be disbursed until Summer B term.

EXIT INTERVIEWS ARE REQUIRED UPON GRADUATION OR DEPARTURE FROM UCF. REMEMBER: You <u>must</u> maintain your proper address with the Registrar's Office.

AWARD LETTERS

In the Spring of each year, most students will be notified of the estimated awards they should receive in the coming school year. Award notices may not go out to students who were selected for verification, but have not completed that process, since verification corrections often alter award eligibility. Notification will also not go out to students who have been cancelled from financial assistance due to a problem with academic progress. Award letters which are sent out anytime prior to the beginning of the semester will disclose estimated awards based on an assumption of full time enrollment. If the student enrolls for less than 12 hours, some estimated awards may change. In addition, new information brought to the attention of our office (such as third party benefits, waivers or deferrals, prepaid tuition plans, or newly awarded scholarships) can cause a reduction in the amount of previously estimated need-based assistance.

Award letters are also sent out to the students who miss the application priority deadline once there is enough information on file to make an awarding decision. Verification students will receive their award notification once that process is complete. Regardless of when the notification is sent out, it will be accompanied by a comprehensive information insert. Students should read this insert carefully and follow the instructions.

All students are required to return signed appropriate documents to our office within 20 days of receipt to acknowledge acceptance of the award. Please note that although an estimated Federal Stafford loan may appear on the award letter to notify students that they are eligible for that form of assistance, a **student must still apply** for the loan by completing the requested information.

REFUND AND REPAYMENT POLICIES

Students should be aware that if they withdraw from the University after having received financial assistance, they may have to repay a portion of that assistance. Students who received Federal Stafford Loans should also know that the Student Financial Assistance office is required to notify lenders of student withdrawals.

Refunds

Financial assistance recipients planning to withdraw from UCF should first consult the University's Withdrawal Policy published under Academic Policies and Procedures in the UCF Catalog. If the student is due a refund according to this policy, the financial assistance program(s) from which the student received assistance will first be reimbursed. Any remaining balance after refunding all appropriate assistance programs will be refunded to the student. In no case will the amount refunded to the assistance program exceed the amount disbursed.

Repayment

A portion of the financial assistance disbursed to the student for non-instructional costs may have to be repaid by the student to the University. The amount of repayment due from the student will be based upon the schedule printed below.

A student who owes a financial assistance repayment will not be allowed to receive further financial aid funds until the repayment is paid in full. In addition, academic and financial assistance transcripts will be withheld until repayment is complete.

Fall and Spring Terms Week of withdrawal 1st week 2nd or 3rd 4th or 5th week 6th or 7th week 8th week or after

Amount of repayment

100% of total aid* received

75% of total aid*- book allowance - tuition and fees 50% of total aid*- book allowance - tuition and fees 25% of total aid*- book allowance - tuition and fees No repayment due

Week of withdrawal
1st week
2nd week
3rd week
4th week or later

Summer A, B and C Terms Amount of repayment 100% of total aid* received 75% of total aid* - book allowance - tuition and fees 50% of total aid* - book allowance - tuition and fees No repayment due

*Total aid excludes monies received from the following programs: Federal College Work Study, Federal Stafford Loans, and Federal Parent Loans for Students.

Students should schedule an appointment with or come to the Student Financial Assistance office prior to withdrawing from classes to confirm the consequences of that withdrawal. The appointment number is (407) 823-5927.

CONDITIONS AND REQUIREMENTS FOR RECEIVING ASSISTANCE

- . You must enroll for a minimum of six semester hours. Twelve hours are required for some programs including FSAG and most Scholarships. However, Pell Grants will be paid on less than six hours of enrollment.
- Upper-level students must pass the CLAST in order to receive State assistance.
- · You must maintain UCF's standards for Satisfactory Academic Progress (printed on a following page).
- · Your signed award letter is an agreement which requires you to inform us of any additional assistance you receive beyond that listed on your award letter. Any subsequent awards or income may necessitate a revision of your financial assistance award.
- · You must not be in default on any educational loan or owe repayment on a grant at this or any other institution.
- · You must provide all information requested for the completion of your file. If selected, verification must be completed prior to the receipt of any funds or certification of a Federal Stafford Loan.
- You must supply a financial aid transcript from all previously attended post-secondary institutions, whether or not you received any financial assistance.
- You must notify the Student Financial Assistance office of any changes in your employment, housing, marital, or financial status from that listed on your assistance application.
- You must reapply yearly for financial assistance.

SATISFACTORY ACADEMIC PROGRESS POLICY

Federal regulations require the University to establish standards of Satisfactory Academic Progress as a general eligibility requirement for financial assistance. A student must maintain Satisfactory Academic Progress in a course of study regardless of whether the student was a previous recipient of financial aid. Students who are unclear about these policies should schedule an appointment. The factors required to measure satisfactory progress are as follows:

GPA

UNDERGRADUATE STANDARDS

Freshmen/Sophomore

No minimum overall GPA required as long as the student is not disqualified/excluded by the Admissions office. (See UCF Catalog under academic policies.)

Junior/Senior/PostBaccalaureate

MInimum overall GPA of 2.0 is required and must not be disqualified or excluded by the Admissions office.

HOURS COMPLETED

GRADUATE STANDARDS

A GPA of at least 3.0 is required for those courses specified in the graduate student's program. (Please see the Academic Standards section of the UCF Graduate Student Catalog.)

Students MUST complete a specified number of credits as determined by their enrollment status (see below chart):

	STREET	MINIMUM		MINIMUM
	HOURS	HOURS	HOURS	HOURS
	ENROLLED	REQUIRED	ENROLLED	REQUIRED
Full-time	12 or more	10	9 or more	7
³ / ₄ time	9, 10, 11	8	and the second second	-
1/2 time	6, 7, 8	5	6, 7, 8	4

Hours completed will be monitored at the end of the spring term of each academic year. Successful completion of a class is defined as having earned a grade of A, B, C, D or S. Unsuccessful completion is defined as having earned a grade of F, I, W, X, N, or U.

TIME LIMIT

Undergraduate students MUST obtain their degree within 12 full-time terms or the equivalent thereof for $\frac{3}{4}$ time, $\frac{1}{2}$ time, and less than $\frac{1}{2}$ time students.

Transfer students: entering UCF with either an AA degree or 70 or more hours MUST complete their degree within 6 fulltime terms or the equivalent thereof. Graduate students will be given 5 full-time terms (or the equivalent thereof) to obtain their Master's Degree. Doctoral candidates may have 5 additional full-time terms to earn their Ph.D.

Cases will be reviewed on an individual basis (through the appeal process) for programs requiring more terms than the assigned time limit.

CANCELLATIONS

Time Limit: Students who are unable to graduate within the required number of terms will be cancelled at the end of the term.

- Hours completed: Students who are unable to complete the required number of hours for Previous Summer, Fall and Spring will be cancelled at the end of the Spring term of each academic year.
- GPA: Junior and Senior level students with an overall GPA of less than 2.0 will be placed on Cancellation at the end of each term.
- **Disqualified or Excluded:** Students who are Disqualified or Excluded by the Admissions Office will be placed on Financial Aid Cancellation status.
- Failed Probation: Students who were placed on probation and were not successful in meeting probation requirements described below will be placed on cancellation at the end of that term.

PROBATIONS

Students will be placed on probation status for the next term of enrollment for the following reasons:

- INITIAL PROBATION: Students who have been enrolled for one term only (first term at UCF) by the end of the spring term of each academic year and did not complete the minimum required hours for that term.
- · REINSTATEMENT: As a result of a committee review.

When students are placed on Probation, they must complete the minimum required hours for the next term of enrollment with a minimum term GPA of 2.0 to avoid cancellation of aid at the end of the Probationary term.

PROCEDURE FOR APPEALS

Warning — Students who do not appeal within the established deadline, may forfeit their right to appeal for that term of enrollment.

- Any student who was placed on Financial Aid cancellation may appeal to the Financial Aid Review Committee. To appeal, the student must:
- A) Complete the Satisfactory Academic Progress Appeal Form before the established deadline.
- B) Submit acceptable documentation supporting the extenuating circumstances.

After a thorough evaluation of the written request and all documentation, the Financial Aid Review Committee will notify the student in writing, of its decision. Aid remains cancelled unless you receive written notification of reinstatement.

FINANCIAL ASSISTANCE FOR GRADUATE STUDENTS

There are several sources of financial assistance available to UCF graduate students. Federal Perkins and Federal Stafford loans and the Federal College Work Study Program described previously, require that financial need be established.

Out-of-State Tuition Waivers are offered by each college and the Office of Minority Student Services to non-Florida residents. Some colleges give priority to graduate students in making award selections.

Eligibility and application guidelines for Teaching or Research Assistantships and Graduate Assistant positions are established by the colleges or in some cases by departments, as are pay scales. To apply for an assistantship position, contact the Dean's Office in the College of Business Administration or Education or the department's graduate coordinator in the College of Arts and Sciences, Engineering, and Health and Professional Studies.

There are also scholarships available to graduate students. Please check the monthly scholarship listing posted on the bulletin board outside the Student Financial Assistance office.

Federal Perkins and Federal College Work Study are available only to students who are fully admitted into a Graduate Program. Post-Baccalaureate students are not eligible for these assistance programs.

STUDENT RIGHTS AND RESPONSIBILITIES

- Students have the right to full information about the financial aid programs available at UCF, our application procedures and deadlines, and the criteria used to determine a financial package.
- Students have the right to appeal decisions made by The Student Financial Assistance office.
- Students have the right to equitable treatment of their financial assistance applications. Although each student's case is analyzed individually, eligibility standards are applied uniformly without regard to race, gender, religion, creed, national origin, or physical handicap.
- · All students' records are confidential.
- It is the student's responsibility to review and understand all information and instructions, meet all deadlines, and provide all information and documentation accurately. Errors and omissions can cause delays and prevent students from receiving assistance. Misrepresentation is a violation of the law.

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ACADEMIC POLICIES AND PROCEDURES

ACADEMIC BEHAVIOR STANDARDS

The University of Central Florida is committed to a policy of honesty in academic affairs. Examples of conduct for which students may be subject to academic and/or disciplinary penalties including expulsion are:

Cheating whereby non-permissible written, visual or oral assistance including that obtained from another student is utilized on examinations, course assignments or projects. The unauthorized possession or use of examination or course related material may also constitute cheating.

Plagiarism whereby another's work is deliberately used/or appropriated without any indication of the source, thereby attempting to convey the impression that such work is the student's own. Any student failing to properly credit ideas or materials taken from another has plagiarized.

NOTE: A student who has assisted another in any of the aforementioned breach of standards shall be considered equally culpable.

In cases of cheating or plagiarism, the instructor may take appropriate academic action ranging from loss of credit for a specific assignment, examination or project to removal from the course with a grade of "F". Additionally, the instructor may request disciplinary action through the Dean of Students Office as outlined in *The Golden Rule*.

STUDENT CLASSIFICATIONS

Students will be classified by level, on the basis of semester hours satisfactorily earned:

Freshman:	Through 29 semester hours.
Sophomore:	30-59 semester hours.
Junior:	60-89 semester hours and have fulfilled CLAST and Golden Rule requirements.
Senior:	90 or more semester hours, prior to completion of baccalaureate requirements.
Post-	Any student enrolled in courses, regardless of course level
Baccalaureate:	(except one working toward another baccalaureate degree), who has a baccalaureate degree but has not been admitted to a graduate program.
Graduate:	Any student enrolled in graduate courses who has been admitted to a graduate program.
Other student classif	ications:
Auditor:	A student registered for any credit course who is not seeking credit.
Co-op Student:	A student enrolled in the Cooperative Education Program remains a
	registered student during all off-campus assignment semesters.
	Furthermore, there is no lapse in continuity in the co-op school cal- endar: a co-op student is either on assignment or attending class during each school semester. (See Veterans' Benefits for co-ops.)
Special Student:	A student of demonstrated academic ability who does not meet the
and the family of the	regular requirements for admission (Early Admission, non degree-
	seeking, transient, and auditor).
Temporary:	A student who applied before the deadline and is permitted to regis-
NUCLEAR AND	ter and attend class pending completion of the admission file.
Transient:	Students temporarily registered (for one semester) at the University
	of Central Florida with the approval of some other university or col-
	lege where they are regularly enrolled, or a UCF student temporar-
	ily in attendance at another university or college, with the approval

of UCF. A UCF student may not be enrolled as a transient student in another institution during the term in which the baccalaureate

degree or the Associate of Arts degree is to be awarded.

Non-Degree-Seeking: Provisional:

A student earning credit, but not working on a degree program.

A student entering from a regionally unaccredited high school, college, or university may be admitted on provisional status where appropriate. By obtaining a 2.0 GPA ("C" average) or better at the end of the first semester of attendance, the provisional status will be removed. Earning less than a "C" average the first term would result in disgualification.

SEMESTER HOURS DEFINED

The graduation credit value of each course of instruction is stated in terms of semester hours. A semester hour of credit represents one class hour of work (or two or more laboratory hours of work) per week for a semester.

Classes may be offered for a six-week period during the summer semester. During this shortened semester, two class hours of work (or four or more laboratory hours of work) per week are required to represent a semester hour of credit.

MAXIMUM COURSE LOAD

The University reserves the right to establish maximum course loads for students at any level. Course load limitations will be published in the term Class Schedule and made available prior to the beginning of the term.

GRADE SYSTEM

The University uses an alphabetic system to identify student grades and other actions regarding student progress or class attendance. This system, with a grade point equivalent per semester hour, is as follows:

Grades

A	- Excellent	4 grade points
В	— Good	3 grade points
C	- Average	2 grade points
D	- Passing	•
F	- Failure	

Other Actions

W	- Withdrawn0 grade point
WP	- Withdrawn Passing0 grade point
WF	- Withdrawn Failing0 grade point
WM	- Medical Withdrawal0 grade point
1	- Incomplete0 grade point
Х	- Audit (no credit)0 grade point
S	- Satisfactory (with credit)/Satisfactory Progress
	(Research, Thesis, or Dissertation)0 grade point
U	- Unsatisfactory (no credit)0 grade point
Т	- (followed by grade)
	- Subsequently repeated (no credit)0 grade point
R	- (followed by grade)
	- Repeated course (grade forgiveness)
N	- No grade reported by professor0 grade point

The grade point average (GPA) is the average number of grade points per semester hour attempted and is computed by dividing the total number of grade points assigned by the total number of semester hours attempted, less hours resulting from W, WP, and I grades.

The grade point average for graduation requirement is 2.0 ("C") and will be computed on both the student's total academic program and the UCF program. The designation of "N" will be temporarily assigned by the Records Office only in the

case when a grade has not been submitted by the faculty by the "grades due" deadline. The designator will be replaced by the earned letter grade at the earliest opportunity in the semester which immediately follows. The "N" designator may not be assigned by faculty.

A request for grade change will be considered only during the term immediately following the one in which the grade was assigned, except that grades assigned during the spring semester may be changed during either the following summer or fall terms. Academic Actions do not change when an incomplete grade is completed nor when a course is repeated. A change in a grade must be approved by the dean of the college. A grade will not be changed after a degree has been conferred.

ACADEMIC STANDING

All Academic Actions are shown on grade reports and transcripts. The action is generated due to course completion. Changing a course grade does not necessarily change academic action. An exception can be made when an error is committed and is so stated on the Change of Grade request form by the professor.

Semester Average	Grade Point Average on work attempted during any given semester.
UCF Average	Grade Point Average on all work attempted while in attendance at
	the University of Central Florida.
Overall Average	Grade Point Average on all work attempted since entering college,

Overall Average

Academic Warning

including work from all previously attended institutions. Some first-time-in-college applicants who do not meet University admission requirements may be admitted on Academic Warning. By obtaining a 2.0 GPA ("C" average) or better at the end of the first semester of attendance, Academic Warning will be removed. Earning less than a "C" average the first term will result in Academic Probation. A student may be on Academic Warning only once.

Action taken when a Student's UCF cumulative or overall GPA

drops below 2.0. A student may also be admitted on Academic Probation. Academic Probation will continue until the current term,

A student on Academic Probation is disgualified upon failure to

achieve a 2.0 GPA during the subsequent semester. A student who

UCF cumulative, and overall GPA reach 2.0 or better.

Academic Probation

Disgualified (First Suspension)

is disgualified may not enroll at the University for two semesters following disgualification. Readmission after two semesters is not automatic. A disqualified student must submit an application for readmission supported by a letter indicating the reasons for previous academic difficulties and plans for achieving a GPA of 2.0 or better. The total record will be reviewed and action on readmission will be taken by the Director of Admissions. When the Director of Admissions can not make a favorable decision, cases will be referred to the Admissions and Standards Committee.

A student readmitted following disgualification who fails to achieve a 2.0 GPA is excluded from the University. Exclusion is most serious and readmission will not be considered prior to a minimum suspension period of one year.

Readmission

Suspension)

Exclusion (Second

If a student has dropped out of the University for any reason, he or she must reapply on the appropriate form (see calendar for deadline).

First-time-in-college students may be admitted on Academic Warning (see above) or Academic Probation at the discretion of the Admissions Office or the Admissions and Standards Committee. Transfer students may be admitted on Academic Probation at the discretion of the Admissions Office or the Admissions and Standards Committee. Academic Probation is intended to inform students making unsatisfactory progress of their need to alter study habits and to seek additional counseling. Early recognition will indicate to the student the possible jeopardy to academic goals, and will also allow an opportunity to demonstrate acceptable performance.

EARNING CREDIT WHILE DISQUALIFIED OR EXCLUDED

Students disgualified or excluded while a Freshman or Sophomore who subsequently receive an A.A. degree with a "C" average (2.0 GPA) on all college work attempted from a Florida public community college may be readmitted to the University with credit earned in accordance with standard University policies.

Students who attend other colleges or universities following disqualification will be classified as transfer students and their readmission will be based on their total educational record.

INCOMPLETE GRADE

A grade of "I" (incomplete) is assigned by the instructor when a student is unable to complete a course due to extenuating circumstances, and when all requirements can be completed in a short time following the end of the term. The student is responsible to arrange with the instructor for the completion of the incomplete grade by the deadline published in the Academic Calendar for the next term. If the incomplete is not changed by the established deadline, it may become a part of the student's permanent record with no credit given for the class, or the instructor may assign a grade of "F". An "I" can not be removed by Grade Forgiveness. Academic actions are not affected by the change of an "I".

INSTRUCTORS PLEASE NOTE: A grade is assigned using the Change of Grade Form. After the form is signed by the Dean of the College offering the course, the Dean sends it to the Registrar's Office.

SCHEDULE CHANGES - ADD/DROP POLICY

Add: A student may add a course during the official add/drop period (the first three to five days of each term, as listed in the academic calendar). After the add/drop period, no course may be added.

Drop: A student may drop a course during the official add/drop period. The fact that the student was enrolled in a class so dropped will not appear on the permanent record. For withdrawal after the add/drop period, the Withdrawal Policy must be consulted.

WITHDRAWAL POLICY

A student may withdraw from a class and receive the notation of "W" until the end of the eight week of any regular semester or until the midpoint of any summer term by completing a Course Withdrawal form available in the Office of Records and Registration, first floor of the Administration Building.

A student is never automatically withdrawn from a class for not attending, nor can an instructor withdraw a student from a class. Upon request, however, the instructor will provide the student with an assessment of the student's performance in the course prior to the last day of withdrawal.

No withdrawal is permitted after the deadline except in extraordinary circumstances such as serious medical problems. Unsatisfactory academic performance is not an acceptable reason for withdrawal after the deadline. Students who need to petition for a late withdrawal should consult Enrollment and Academic Services, Administration Building, Room 210. At the time of the request an Assistant Dean from Enrollment and Academic Services will ascertain from the instructor whether the student was passing or failing the course. If the student was passing, a "WP" will be recorded on the student's permanent record; if failing, a "WF" will be entered. Medical and late withdrawals are normally for all courses in the semester.

Students who seek withdrawal because they are ill must apply for the withdrawal no later than that term following the one from which the withdrawal is sought. Students seeking a late withdrawal because of medical conditions must follow the medical withdrawal procedure. The student's physician provides the University physician with the appropriate medical information, using the forms available in the Office of Undergraduate Studies. The University physician evaluates this information and forwards a recommendation to Undergraduate Studies.

If a medical withdrawal is approved, a "WM" will be recorded for each course.

If a medical withdrawal is not approved, the request may be approved as a late withdrawal, and grades of "WP" or "WF" will be recorded.

A grade of "WF" will affect the calculation of the student's grade point average (the procedure used for calculating is further defined in the paragraph titled "Grading System" earlier in this section).

If a student withdraws from a course while an alleged academically dishonest act is under consideration, and the case is not subsequently resolved in favor of the student, the University reserves the right to assign the appropriate grade for the course.

TRANSIENT ENROLLMENT AT OTHER INSTITUTIONS

A UCF degree-seeking student who wishes to earn credit at another college or university for transfer back into a degree program must obtain prior approval for specific courses from the Dean or Department Chair of his respective college. Approval of courses for the General Education Program should be obtained from Enrollment and Academic Services. Credit earned without this transient approval may not be accepted. Students who are taking courses in transient status during the term in which they expect to graduate and who have been approved by the procedures indicated above, must provide an *official* transcript to the Graduation Area of the Records Office no later than two weeks after commencement. It is the student's responsibility to request this transcript from the transient institution. Students, whose transcripts not received by the deadline date, may not be approved for graduation that semester. Transient forms are available in the college of the student's major. Transient credit cannot be used to reduce the last 30 semester hour residency requirement for a baccalaureate degree or the last 20 semester hour residency requirement for an Associate of Arts degree.

GRADE FORGIVENESS

Policy

Limits: Grade forgiveness is limited to two courses.

- Grade forgiveness can be used only for courses taken at UCF. Grade forgiveness is not retroactive, and therefore may not be used for a course repeated before Fall 1981.
- UCF does not honor grade forgiveness granted at other institutions unless it is part of an Associate of Arts degree transferred to UCF from a Florida public community college or university. Because of the two-course limit, a student who has used grade forgiveness twice at another institution, and has included those courses in the transfer of an Associate of Arts degree may not use grade forgiveness again at UCF.
- A course taken at UCF may not be repeated at another institution for forgiveness by UCF.
- Grade forgiveness may not be used twice for the same course.
- Registration for grade forgiveness must be completed by the end of the add/drop period in the term in which the course is repeated.

Exception: If a student who repeated a course at UCF before Fall 1981 did not use the previous forgiveness policy and wishes to repeat the course again to take advantage of the forgiveness policy, he or she may do so. In this case, the lower of the previous two grades will be forgiven. This special circumstances is the only one in which a student will be allowed to repeat a course more than once.

General Policy: All grades will remain on the student's official transcript. The original course grade will be marked with a "T" to indicate that the course has subsequently been repeated, and the repeat course grade will be marked with an "R." The original grade will not be computed in the grade point average except in a case in which the student withdraws from a course he or she is repeating or takes a grade of incomplete.

With prior approval of the dean of the college in which the course is offered, the student may substitute a course different from the original one if (1) the substitute course has been changed in prefix, number, hours, or title, but not in substance, or (2) the substitute course replaced a course no longer offered by UCF.

Grade forgiveness awarded for repeated courses will not retroactively alter any previous academic action. For example, a Probation or Disqualification status will not be removed from the records of the quarter or semester in which the student originally took the course. In addition, no academic records can be altered after a student graduates.

If it is determined that the student is ineligible for the forgiveness policy, neither a refund of fees nor automatic withdrawal from the course will be made.

Procedure

Students who wish to exercise Grade Forgiveness must complete the following steps before registering to repeat a course:

1. Complete a "Grade Forgiveness Request Form" from the Office of Records and Registration for each course to be repeated.

- If the course is a substitution for the original one (see above), secure the signature of the dean of the college in which the course is offered.
- 3. Turn the completed form in to the Office of Records and Registration *no later than the last day of add/drop.* No petitions will be accepted after the deadline.

Any questions about Grade Forgiveness should be directed to Enrollment and Academic Services, AD 210, Phone (407) 823-2691.

ACADEMIC HONORS

1. President's Honor Roll Certificate

The President's Honor Roll Certificate is awarded in recognition of scholastic honors to regular undergraduate students who register for and complete 12 or more hours, excluding pass-fail coursework, and maintain a 4.0 GPA with no incomplete or "U" grades for the given term or who complete 15 semester hours during any 2 consecutive terms at UCF with no more than 11 hours in any one term, excluding pass-fail work, and maintain a 4.0 GPA for the 2 terms.

Hours utilized in the awarding of a President's Honor Roll Certificate may not be utilized in the determination of a subsequent certificate.

2. Dean's List

The Dean's List is compiled in recognition of scholastic honors for students who earn a 3.4 GPA with no grade less than "C" and no incomplete or "U" grades during a term. To be eligible for the Dean's list students must register for and complete a minimum of 12 semester hours in a Fall or Spring semester or 9 semester hours in a Summer semester.

3. Baccalaureate Honors

The University shall confer baccalaureate honors recognition on those students who have completed a minimum of 48 semester hours at UCF and who:

- A. Attain an overall grade point average which is in the upper 10% of the range established by all students graduating in the same college during the previous two years
- B. Attain at least a 3.2 overall grade point average
- C. Honors awarded will be
 - 1. Summa Cum Laude for those students in the upper 2.5%
 - 2. Magna Cum Laude for those students in the upper 5%. but not in the upper 2.5%
 - 3. Cum Laude for those students in the upper 10%, but not in the upper 5%

Since records for the semester of graduation are incomplete at the time of graduation, that term is excluded in determining recognition in the commencement bulletin and at graduation. Identification of these students at graduation is therefore presumptive of honors and not conclusive since final term grades may result in changes in relative rankings.

TIME-SHORTENED DEGREE OPPORTUNITIES

The University of Central Florida provides a number of options by which students may shorten the time required to complete the baccalaureate degree. These options permit the University to recognize high levels of academic achievement and acquisition of knowledge prior to or during attendance at the University. Procedures which may be used include the Early Admission Program, the College Level Examination Program (CLEP), the Advanced Placement Program (AP), the International Baccalaureate, and University Course Credit by Examination.

Early Admission Program

Students who have demonstrated exceptional academic ability may be permitted to enroll as students at the University of Central Florida any time after completion of their junior year in high school. To be considered for Fall Semester Early Admission, applicants must have:

- Superior test scores (SAT 1100 or above, ACT 27 or above).
- · "A"-"B" grades in high school.
- A recommendation from the student's high school counselor.
- · A letter of permission from parents or guardian.
- A campus interview to ascertain the student's maturity and ability to adjust to collegiate responsibilities.

Qualified students may enroll dually on a part-time basis, taking one or two courses while completing their high school programs. An interview and letters of recommendation from parents and principal are required in addition to a superior record. Students desiring admission prior to high school graduation should contact the Admissions Office for an appointment.

College Level Examination Program (CLEP)

The University of Central Florida grants University credit for examinations taken under the CLEP program provided the score obtained is at the 50th percentile or above on the National Sophomore CLEP norms. The University of Central Florida will award up to 45 semester hours of University credit under the CLEP program.

CLEP credit may be earned by the following methods — CLEP general examinations, CLEP general examination subtests, and CLEP subject examinations. A student may earn a maximum of 45 semester hours of credit through this program. Successful completion of CLEP examinations means performance at or above the 50th percentile.

Awarding of CLEP credit is subject to the conditions listed below.

- 1. Credit may be awarded in the CLEP general examination, CLEP general subtest area, or CLEP subject examination area, provided the student (a) is not within 60 semester hours of graduation, (b) has not previously received comparable college course credit in the CLEP examination area, (c) does not receive comparable college credit in the CLEP examination area in the same semester the examination is taken or in a subsequent semester, (d) has not previously completed nor received credit by UCF (transfer or otherwise) in a more advanced course in the examination area, and (e) does not complete nor receive credit by UCF (transfer or otherwise) in a more advanced course in the examination is taken.
- 2. Partial credit may be awarded in Humanities and Social Science-History general examinations to students who have course duplication in one subtest area but not in the other subtest area. For example, a student who has completed Humanities but has not completed Introductory Literature or a more advanced literature course would be eligible to receive credit in the literature subtest area, provided that he or she receives a satisfactory total score and a satisfactory subtest score.

The following table provides information related to the CLEP general examination areas and subtest areas for which credit may be awarded. In addition, this table delineates the number of credit hours per examination, and the minimum qualifying score. A table is also provided which contains information about CLEP subject examinations. The table delineates CLEP subject examinations which are available, qualifying scores for each examination, the UCF course for which each examination can substitute, and semester hours which will be awarded.

It is important to note that a maximum of 45 semester hours in any combination of extension, correspondence, CLEP, Armed Forces Service School Credits, and University Credit by Examination will be accepted by the University for application toward an undergraduate degree. In addition, CLEP credit can not be used to reduce a grade point deficiency. For example, CLEP can not be substituted for a grade awarded for a previously completed course. CLEP may not be used to fulfill the senior institution requirements.

CLEP GENERAL EXAMINATIONS

Qualifying scores on CLEP General Examinations earn only general (lower division) elective credit.

CLEP General Examination	Qualifying Score	Semester Hours
English Composition with Essay*	500	6
Humanities	489	6
Mathematics	497	6
Natural Science		
Biological Science	50	3
Physical Science	49	3
Social Science	488	6

*The General Examination in English Composition with Essay is not given in July or August.

CLEP SU	JBJECT EXAMI	NATIONS	
CLEP Subject Exam	Semester	Qualifying	UCF
10-	Hours	Score	Courses
Afro-American History	3	50	None
American Government	3	50	POS 2041
American History I ***	3	49	AMH 2010
American History II***	3	49	AMH 2020
American Literature***	6	50	AML 3031 and
			AML 3051
Analysis and Interp. Lit.***	6	51	ENC 1101 and
is program, succeedably completelar at			LIT 3000
Calculus w/Elem. Functions	4	49	MAC 3311
Calculus w/Anal. Geometry	3	49	MAC 3253
Clinical Chemistry**	6.7	50	MLS 4630
College Algebra	3	48	MAC 1104
College Algebra & Trigonometry	3	50	MAC 1104 or
(Duplicate CLEP Exam - Subj: Trig)			MAC 1114
College Comp. w/Essay***	6	50	ENC 1101
(Duplicate CLEP Exam -			
Subj: Freshman Comp. w/Essay)			
Computer Programming	3	51	CGS 1060
Educational Psychology	3	49	None
English Literature***	6	49	ENL 3031 or
re for the same testions and minimum			ENL 3051
Freshman English w/Essay***	6	51	ENC 1101
General Biology****	6	49	BSC 1020
General Chemistry****	6	50	CHM 1020 and 1032
			or CHS 1440
General Psychology	3	50	PSY 2013
Hematology**	6.7	51	MLS 3305
Human Growth and Development	3	51	None
Immunohematology**	6.7	50	MLS 4550
Introduction to Accounting	3	50	ACG 2001
Introduction to Business Law	6	51	None
Introduction to Management	3	49	None
Introduction to Macroeconomics	3	50	ECO 2013
Introduction to Microeconomics	3	50	ECO 2023
Introduction to Marketing	3	50	MAR 3023
Introduction to Sociology	6	50	SYG 2000
Languages: French	6/9/12	44/49/56	Corresponding
German	6/9/12	43/52/55	1120 and 1121,
Spanish	6/9/12	45/48/55	2200* and 2201*,
			2230 and 2231*
			language courses
Microbiology (Clinical)**	6	49	MLS 4405
Programming - Fortran IV	3	48	COP 1200
(Duplicate CLEP Exam -			
Subj: Comp. and Data Proc.)			
Trigonometry	3	54	MAC 1114
(Duplicate CLEP Exam -			
Subj: College Alg & Trig)			
Western Civilization I***	3	49	EUH 2000
Western Civilization II***	3	48	EUH 2001

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*Those students receiving six or nine hours are allowed to complete these courses. **Each student must also satisfactorily complete a lab and an essay exam. Both exams will be given by the College of Health. ***Satisfactory completion of these exams does not reduce the 24,000 word requirement of the Gordon

Rule.

****Does not satisfy General Education Program science laboratory requirement.

Advanced Placement Program (AP)

Students who have participated in the Advanced Placement Program in high school and received a score of three, four, or five on the national examinations will receive college credit in the appropriate subject areas. Students should consult their high school guidance counselor or write to the Educational Testing Service, Princeton, NJ 08540, for additional information.

ADVANCED DI ACEMENT EVAMINATIONS

ADVANCED PLACEMENT		EXAMINATIONS		
	Passing	Semester		
Examination	Score	Hours	UCF Courses	
Distantes intering	1- 9205	Awarded	500 1000	
Biology*	3-4	3	BSC 1020	
VOLTANDAL AND N	5	6	BSC 1020 + 3 hours general elective	
Chemistry*	3	3	CHM 2045	
NOTIRONNOT LIVE	4-5	7	CHM 2045 and 2046	
Computer Sci A	3-4	3	no specific equivalent	
Computer Sci B	5 3-5	3	no specific equivalent	
Computer Sci AB	3-5	3	no specific equivalent	
Language	0.5		ENO 1101	
& Composition** Literature****	3-5	3	ENC 1101	
& Composition**	3-5	3	ENC 1101	
Microeconomics Macroeconomics	3-5 3-5	3	ECO 2023 ECO 2013	
			the second second of the second s	
French Lang.	3-4 5	3	FRE 1120	
-due add to render on the auto-	14 100 100 000	the second s	FRE 1120 + 3 hours general elective	
French Lit.	3-4	3	no specific equivalent	
mandaria I	5	6	no specific equivalent	
German	3-4	3	GER 1120	
	5	6	GER 1120 + 3 hours general elective	
History (AM)**	3-4	3	AMH 2010	
	5	6	AMH 2010 + 3 hours general elective	
History (EUR)**	3-4	3	EUH 2001	
	5	6	EUH 2001 + 3 hours general elective	
Psychology	3-5	3	Psy 2013	
Latin	3-4	3	LAT 1120	
	5	6	LAT 1120 + 3 hours general elective	
Latin (Catulus, Horace)	3-4	3	no specific equivalent	
	5	6	no specific equivalent	
Math — Cal AB*****	3-5	4	MAC 3311	
Math — Cal BC*****	3-5	4	MAC 3312	
Am. Gov.	3-5	3	POS 2041	
Comp. Gov.	3-5	3	CPO 3103	
Music — List & Lit	3-4	3	MUL 2010	
Music List & Lit	5	6	MUL 2010 + 3 hours general elective	
Music Theory	3-4	2	MUT 2111	
Music Theory	5	5	MUT 2111 + 3 hours general elective	
Physics B*	3	3	PSC 1512	
r nysics D	4	3	PSC 1512 PHY 3053	
	5	6	PHY 3053 and PHY 3054	
Physics C*	3	3	PHY 3053	
(Mechanics)	4 or 5	3	PHY 3048	
(moonanios)	1010	0	111 0010	

Physics C* (Electricity and Magnetism)	3 4 or 5	3 3	PHY 3054 PHY 3049
Spanish Lang.	3-4 5	3 6	SPN 1120 SPN 1120 + 3 hours general elective
Spanish Lit.	3-4 5	3 6	no specific equivalent
Classics	3-4 5	3 6	HUM 2211 HUM 2211 + 3 hours general elective
History of Art	3-4 5	3 6	ARH 2050 ARH 2050 + hours general elective
Studio Art	3-5	3-6	to be assigned by Art Department

* DOES NOT SATISFY GENERAL EDUCATION PROGRAM SCIENCE LABORATORY REQUIREMENT

** MAY BE USED TO SATISFY THREE HOURS OF GORDON RULE COMPOSITION REQUIREMENT

*** DOES NOT SATISFY GORDON RULE COMPOSITION REQUIREMENT

**** STUDENTS WHO RECEIVE CREDIT FOR BOTH OF THE AP ENGLISH EXAMS WILL RECEIVE CREDIT FOR ENC 1101 AND SUBSTITUTE A JUNIOR-LEVEL WRITING CLASS FOR ENC 1102

ADVISED TO REGISTER FOR THIS COURSE IF THEY PLAN TO TAKE HIGHER LEVEL COURSES LATER.

International Baccalaureate Program

Students who have participated in the International Baccalaureate program in high school may receive a maximum of thirty hours of credit for scores of 4 or higher in the subsidiary and higher level program areas.

Subject Area	Qualifying	Credit	UCF
	Score	Awarded	Courses
Applied Chemistry	1 09LT R30	8	
Higher Level	4,5,6,7	3	CHM 1032
Subsidiary	4,5,6,7	3	CHM 1032
Art Design	1000		- HIG - HIGHAL
Higher Level	4,5,6,7	3	
Biology	E DIS WIT	5	A PARTICIPACIÓN A PARTICIPACIPACIPACIPACIPACIPACIPACIPACIPACIP
Higher Level	4,5,6,7	3	*
Chemistry	the project the	8	
Higher Level	4,5,6,7	3	CHM 1032
Subsidiary Level	4,5,6,7	3	CHM 1032
Computer Science			The second second second second second
Higher Level	4,5,6,7	3	No direct equivalent,
			will satisfy GEP computer science requirements
Economics	COLOR COLOR	-	science requirements
Higher Level	4,5,6,7	3	No direct equivalent
	4,0,0,7	0	No difect equivalent
English Higher Level	4,5,6,7	3	
	4,5,0,7	3	yuran serie
Experimental Psychology	4507	0	
Higher Level	4,5,6,7	3	Prevenue -
Foreign Languages			
Higher Level	4,5,6,7	3	ERE 2420 CRN 2420
French, Spanish German		3	FRE 3420, SPN 3420 GRE 3420
Others		3	No direct equivalent
0.1.010			no anosi oquitaloni

Subsidiary Level French, Spanish Others	4,5,6,7	3 3 3	FRW 3100, SPW 3100 No direct equivalent
Geography Higher Level Subsidiary Level	4,5,6,7 4,5,6,7	6 3	GEO 1200 & GEO 3370 GEO 3370
History Higher Level	4,5,6,7	3	No direct equivalent
Mathematics with Further Studies		nin anko	now water a common a must of a second s
Higher Level	4,5,6,7	3	Between holes and cannot work of the
Mathematics Higher Level Subsidiary Level	4,5,6,7 4,5,6,7	3 3	MAC 3311 MAC 1104
Music Higher Level	4,5,6,7	3	 Construction of contraction (20) out Construction (20) dominant of contraction (20) out
Organizational Studies Higher Level	4,5,6,7	3	No direct equivalent
Philosophy Higher Level Subsidiary Level	4,5,6,7 4,5,6,7	3	PHI 2010
Physics	nothinedroots you an	Ender Truberta	Apple of chart man a stant of
Higher Level Subsidiary Level	4,5,6,7 4,5,6,7	8 8	PHY 3053C & PHY 3054C PHY 3053C & PHY 3054C
Psychology Higher Level	4,5,6,7	3	PSY 2013
Social Anthropology	allow with the priority of	No bient	· Fully the CLAST repulpingent de
Higher Level	4	3	ANT 2003
Higher Level Subsidiary Level	5,6,7	3	ANT 3422 ANT 2003
Subsidiary Level	5,6,7	3	ANT 3410
* to be determined by depend	an and has done	10000	A CONTRACT OF A

* - to be determined by department review

Credit by Examination

Regularly enrolled* undergraduate students at the University of Central Florida may obtain credit for specific university courses through department examinations. Those who feel they have acquired the knowledge and/or skills of a specific University course should consult their advisor and the chair of the department in which the course is offered to arrange for an examination. Degree credit will be awarded for those courses successfully completed by departmental examination. Credit by examination may not be used to reduce the 30 semester hours residency requirement. *Credit by examination will not be given for any course lower in content than courses in the same discipline (i.e., with the same rubric) in which students are currently enrolled or which they have already completed.* Permission to take an examination is approved by the chair of the department and the Dean of the college in which the course is offered.

*Excludes transient and non degree-seeking students.

UNDERGRADUATE DEGREE REQUIREMENTS

REQUIREMENTS FOR GRADUATION

Students must fulfill both the requirements for a major and University graduation requirements to receive a degree from the University of Central Florida.

To earn a bachelor's degree from UCF, students must:

- Fulfill the requirements for the chosen major
- Earn a minimum of 120 unduplicated semester credit hours with at least a "C" average (2.0 GPA, both UCF and overall) for coursework attempted. Some majors require more than 120 hours.
- Earn a minimum of 60 of these 120 semester credit hours from a senior institution (an institution which offers baccalaureate degrees).
- Earn at least 48 of these 120 semester credit hours in 3000-level courses or above.
- Earn the last 30 semester hours in regular courses at UCF. Credit by examination may not be used to satisfy this requirement.
- Earn a minimum of 25% of the total hours required for the degree in residence at UCF.
 For programs which require the minimum of 120 total hours, residency will be 30 hours.
 For programs which exceed 120 hours, the specific residency requirement increases proportionally and is listed with the requirements for the specific degree program.
- Earn a minimum of 60 semester hours after CLEP credit has been awarded.
- Apply no more than 45 semester hours in any combination of extension, correspondence, CLEP, University Credit by Examination and Armed Forces credits toward an undergraduate degree.
- Fulfill the General Education requirements defined elsewhere in this section.
- Fulfill the Gordon Rule requirements defined elsewhere in this section.
- Fulfill the Foreign Language Proficiency requirements defined elsewhere in this section.
- Fulfill the CLAST requirement defined elsewhere in this section.
- · Earn a minimum of nine semester hours during summer terms, if applicable.
- Complete an Intent to Graduate form by the end of the first full week of classes of the term of graduation.

CHOICE OF CATALOG AND CONTINUOUS ENROLLMENT

A student must graduate under the provisions of any UCF catalog in effect since the student began continuous enrollment at UCF. However, students transferring from Florida public community colleges or state universities may use the UCF catalog in effect at the time they began the most recent period of continuous enrollment in academic good standing at any of the Florida public institutions. Continuous enrollment is defined as being enrolled in classes without a break of two or more consecutive regular semesters (i.e., Fall and Spring, or Spring, Summer, and Fall). Continuous enrollment is automatically broken when a student moves from one transfer institution to another following academic disqualification or exclusion.

Students must use a single catalog and not a combination of catalogs for graduation. In cases when required courses are no longer taught by the university, the appropriate department, college, or university office may designate a reasonable substitute.

If students should wish to change their catalog for graduation, they should first discuss with their advisors how such a change would affect university, college, and major requirements. If student should decide to request a change, they should fill out a catalog change form in the Records Office, Administration Building, First Floor.

GENERAL EDUCATION PROGRAM

The General Education Program (GEP) is designed to provide insight into the major areas of knowledge at the University. The GEP further supplies the background for making a more knowledgeable selection of major and elective courses.

Courses which fulfill the General Education requirements are specified, but in some cases an advanced course in the same discipline may be substituted for GEP requirements with the approval of Enrollment and Academic Services. Students should consult both with an advisor and with Enrollment and Academic Services before submitting any course.

Undergraduate students who have not completed requirements for the Associate of Arts degree and who wish to transfer to another Florida public university can have their transcripts stamped GENERAL EDUCATION REQUIREMENTS MET if they have completed UCF's GEP requirements with a GPA of 2.0 or better. UCF will accept a similar statement on transcripts received from Florida public community colleges and universities in lieu of completion of the University's General Education Program.

GENERAL EDUCATION PROGRAM COURSES (40 semester hours required)

Α.	Communication Foundations	9
	1. ^{1,2} ENC 1101 English Composition I 3(3,0)	
	2. ¹² ENC 1102 English Composition II PR: ENC 1101 3(3,0)	
	3. SPC 1600 Fundamentals of Oral Communication 3(3,0)	
Β.	Cultural and Historical Foundations	9
	1. Take one of the following two-semester sequences:	6
	² EUH 2000 Western Civilization I	3(3,0)
	² EUH 2001 Western Civilization II	3(3,0)
	or	
	² HUM 2211 Western Humanities I	3(3,0)
	² HUM 2230 Western Humanities II	3(3,0)
	Or	
	² AMH 2010 U.S. History: 1492-1877	3(3,0)
	² AMH 2020 U.S. History: 1877-present	3(3,0)
	2. Take one course from the following:	3
	ARH 2050 The History of Art I	3(3,0)
	ARH 2051 The History of Art II	3(3,0)
	MUL 2010 Enjoyment of Music	3(2,1)
	THE 1020 Theatre Survey	3(2,1)
	THE 2071 Cinema Survey	3(2,2)
	REL 2300 World Religions	3(3,0)
	PHI 2010 Introduction to Philosophy	3(3,0)
	² LIT 2110 World Literature I PR: ENC 1102	3(3,0)
	² LIT 2120 World Literature II PR: ENC 1102	3(3,0)
C.	Mathematical Foundations	6
	Take one course from each group. Some majors require a specific course or a	higher
	level course in this area. Consult your advisor:	
	1. ³ MAC 1104 College Algebra	3(3,0)
	³ MGF 1203 Finite Mathematics	3(3,0)
	2. ³ CGS 1060C Introduction to Computer Science	3(3,0)
-	3STA 2014 Principles of Statistics	3(3,0)
D.	Social Foundations	9
	ECO 2013 Principles of Economics I POS 2041 American National Government	3(3,0)
	3. Choose one:	3(3,0)
		2/2 0)
	PSY 2013 General Psychology SYG 2000 General Sociology	3(3,0) 3(3,0)
	ANT 2003 General Anthropology	3(3,0)
E	Science Foundations	3(3,0)
- .	Take one course from each group; one of which must include a laboratory. Some	
	require a specific course or a higher level course in this area. Consult your advisor.	inajois
	1. PSY 1121 Physical Science PR: MAC 1104 or MGF 1203	3(3,0)
	PHY 3053C College Physics PR: MAC 1104 or MGF 1203	4(3,3)
	CHM 1020 Concepts in Chemistry PR: MAC 1104 or MGF 1203	3(3,0)
	2. BSC 1020C Biological Principles	4(3,2)
	BSC 1030C Biology and Environment	4(3,2)
	GLY 1030 Geology & Its Applications	3(3,0)
	GEO 1200 Physical Geography	3(3,0)
	BOT 1000C Plant Science	4(3,2)
	ANT 3511 Human Species	3(3,0)
1A	grade of C is required in this course	(-,-)

²A grade of "C" in this course satisfies three hours of the Gordon Rule requirement in English composition. In addition any upper-division course in composition or literature taught by the UCF English Department and selected upper-division courses taught by the UCF History Department also satisfy three hours of the English composition requirement, if the course is completed with a grade of "C" or better. A list appears in "The Golden Rule" this section.

³A grade of "C" or better satisfies three hours of the Gordon Rule requirement in mathematics. In addition, a grade of "C" or better in any higher level course in mathematics, statistics, or computer science also satisfies three hours of the mathematics requirement.

Substitution Of Courses — General Education Program

The Office of Academic Advising Services routinely coordinates the evaluation of transfer courses for the University's General Education Program and Foreign Language Proficiency requirements. When the transfer coursework is entered into the UCF computer system (usually during the first semester at UCF), Academic Advising Services will request course descriptions and other information to provide a sufficient basis for evaluation. Courses are evaluated on the basis of equivalency with the content of the courses required by the university. The evaluation conducted by Academic Advising Services is entered into a computerized Degree Audit System and is then available to the colleges and departments through the University's computer network.

Appeals of decision made by Academic Advising Services should be directed to Dr. David Dees, Assistant Dean, Enrollment and Academic Services.

Substitution requests for college or major requirements are processed within those administrative offices.

Alternative Courses - General Education Program

Courses which may be taken in substitution for the stated GEP requirements are given below.

GEP REQUIREMENTS MAC 1104 (College Algebra)

ECO 2013 (Macro Economics)

PHY 3053C (Physics)

CHM 1020 (Chemistry) BSC 1020C or BSC 1030C (Biology) GEO 1200 (Geography) CGS 1060C (Intro to Computer) STA 2014 (Statistics) ACCEPTABLE SUBSTITUTIONS MAC 1114, MAC 3233, MAC 3253 MAC 3254, MAC 3311, MAC 3312, MAC 3313 Any higher level ECO course which has ECO 2013 as a prerequisite. PHY 3048, PHY 3049, PHY 3054C, PHY 3014C, PHY 5015 CHM 2045, CHM 1032, CHS 1440 BSC 2010C GEO 3370 CGS 3000, CGS 3422, COP 1200, COT 3100 STA 3023, STA 3032

FOREIGN LANGUAGE PROFICIENCY REQUIREMENT

Students graduating with a Bachelor of Arts degree must demonstrate proficiency in a foreign language equivalent to one year of college instruction. This requirement may be met either by successful completion of the appropriate college-level course or by examination. Languages which may be used include those taught at UCF and any others for which the University can obtain standardized proficiency tests. Students who have previously received a baccalaureate are exempt from this requirement.

For specific guidelines concerning proper placement in foreign language classes, please see section: Dept. of Foreign Languages and Literatures, under the heading, Placement and Proficiency.

Some Departments and Colleges have additional requirements. See "special college and/or departmental requirements" within each departmental listing.

- This requirement is for proficiency and not a requirement for a particular number of hours of coursework. For example, successful completion of only SPN 1121 (Elementary Spanish Language and Civilization II) would satisfy the B.A. requirement. Appropriate scores on Advanced Placement and CLEP examinations will also satisfy the requirement.
- 2. This is a University-wide requirement for all B.A. majors.

- The Testing Administrator of the Office of Counseling and Testing will offer the Foreign Language Proficiency Examination periodically in each semester. Students must register in advance with that office to take the examination (RS203).
- The foreign language proficiency requirement does not apply to students seeking a second baccalaureate degree.
- 5. A student who is required to furnish a passing TOEFL (Test of English as a Foreign Language) score for admission to the university and does so is considered to have satisfied the requirements.

State University System Foreign Language Proficiency Requirement

Students who have not satisfied the Foreign Language Admission Requirement at the time they are admitted to the University must satisfy this requirement prior to graduation. This requirement applies to all undergraduates and is separate from the University of Central Florida Foreign Language Proficiency requirement. For detailed information on the Admission Requirement, see the Admission chapter of this catalog.

THE GORDON RULE

The Gordon Rule (State Rule 6A-10.30) applies to students who first enrolled in any college or university after October 1982. The rule requires students to complete 24,000 words of composition in 4 courses (12 semester hours) and to complete 2 courses (6 semester hours) of mathematics at the level of college algebra or higher. Each course must be completed with a grade of "C" or better. CLEP and other forms of credit by examination may not be used to satisfy the composition portion of the Gordon Rule Requirement.

UCF courses which are required by the General Education Program may also be used to satisfy the Gordon Rule. Gordon Rule requirements may be satisfied by the General Education Program as follows:

Gordon Rule Requirement:

1. 6 hours of math at the level of college algebra or higher

GEP Courses Which Satisfy:

- (1) college algebra or finite math
- (2) statistics or computer science

Any 3000-level or above course in math, statistics, or computer science may also be used toward fulfillment of the math portion of the Gordon Rule Requirement.

- 12 hours of coursework in which the student must complete 24,000 words of composition
- (1) 6 hours of English Composition
- (2) 6-hour sequence of Western Humanities, U.S. History, or Western Civilization

All literature and composition courses taught by the Department of English, and each of the courses listed below fulfill 6,000 words of the composition portion of the Gordon Rule Requirement.

Additional specific upper level courses may also be used to meet the Gordon Rule composition requirement. Consult the OASIS and Academic Advising Services office for information.

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Each of the courses listed below fulfill 3,000 words of the composition portion of the Gordon Rule Requirement.

AMH	3402	History of the South to 1865	AMH	3560	Women in American History
AMH	3403	History of the South Since 1865	AMH	3570	Black American History
AMH	3441	History of the Frontier:	AMH	3800	Canadian History
		Eastern America	AMH	4110	Colonial America, 1607-1763
AMH	3442	History of the Frontier:	AMH	4130	The Age of the American
		Western America			Revolution 1763-1789
AMH	3445	Spanish Borderlands	AMH	4140	Jeffersonian America
AMH	3460	History of Urban America	AMH	4160	Jacksonian America
AMH	3540	Military History	AMH	4170	Civil War and Reconstruction

AM	H 4201	Robber Baron Era	EUH	4284	Facisim & the Totalitarian
AM	4 4231	United States History:			Dictatorships
		1914-1945	EUH	4456	France, 1914-Present
AMI	4 4270	United States History:	EUH	4461	Rise of Modern Germany
		1945-Present	EUH	4465	Hitler's Third Reich
AM	4 4311	American Culture I	EUH	4500	English History to 1485
AM	4 4313	American Culture II	EUH	4501	English History to 1485-1815
AM	4 4510	Rise of the US to World Power,	EUH	4502	British History: 1815-Present
		1776-1914	EUH	4530	British Empire & Common-
AMH	4 4511	US as a Great Power:			wealth
		1914-Present	EUH	4571	History of Russia to 1801
ANT	3145	Archae of Complex Soc	EUH	4574	History of Russia 1801-1917
ANT	3162	Archae of Mid & S. Am	EUH	4576	History of the Soviet Union:
ANT	3163	Mesoam Arch			1917-Present
ANT	3328	Maya Arch	EUH	4620	European Great Powers:
ANT		Seminar in Arch Meth			1815-1914
ARH		Baroque Art	EUH	4621	War & International Politics in
ARH		19th Century Art	LOII	1021	Europe 1914 to present
ARH		Art After 1945	FIL	4201	Film Production II
ARH		Asian Art	HIS	4150	History and Historians
ARH		20th Century Art	HUM	1000	Hebrew & Christian Heritage
ARH	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Meso American Art	HUM	3431	Ancient World: Greece
ARH		Early Italian Renaissance Art	HUM	3432	Ancient World: Rome
ARH		Late Italian Renaissance Art	JOU	4300	Feature Writing
ASH		Survey of East Asia	JOU	4104	Public Affairs Reporting
ASH		China in 19th and 20th	JOU	4306	Critical Writing
ASI	4404	Centuries	LAH	3130	Latin American History I
ASH	4442	Modern Japan, 19th & 20th	LAH	3200	Latin American History I
AOI	4442	Centuries	LAH	3400	History of Mexico & Central
EUH	3121	Age of Transition	LAH	3400	America
EUH		Medieval Society and	LAH	3470	History of the Caribbean
LUI	1 5122	Civilization	LEA	3012	Legal Writing
EUH	3142	Renaissance and Reformation	PHH	3100	Ancient Philosophy
EUF		Romanticism and Realism	PHH	3200	Modern Continental Philosophy
and the second second	and the second se	The Emergence of Modern Soc.	PHH	3300	
EUH	1 3242				Modern British Philosophy Ethics
FUR	0004	1870-1930	PHI	3600	
EUH	3281	Second World War &	PHI	3800	Aesthetics
-	0.004	Rebirth of Europe	PHI	3803	Philosophy & Creativity
EUH		Ancient Greece	RTV	4403	Radio TV & Society
EUH		Ancient Rome		3104	Assessing Human Development
EUH	3651	War and Society	SYP	3400	Social Change

COLLEGE LEVEL ACADEMIC SKILLS TEST - (CLAST)

The College-Level Academic Skills Test (CLAST) is designed to ensure that students have achieved communication and computation skills commensurate with successful completion of the Lower Division. All students seeking an Associate of Arts or Baccalaureate degree from UCF are required to pass CLAST. CLAST must be taken no later than the term in which a student enrolls for the 45th credit hour.

Transfer students with more than 55 credit hours who have not had the opportunity to take CLAST may be admitted, but must take CLAST during their first term at UCF.

Students with 70 or more hours of credit who have not taken the CLAST will be restricted to enrollment in 1000- and 2000-level classes until they have taken CLAST.

Students who have not passed all four subtests of CLAST may enroll for an additional thirty-six (36) semester hours of upper division credit after qualifying for admission to upper-division status. If the CLAST requirement has not been satisfied and the additional 36 hours of upper division credit have been earned, enrollment in future terms at UCF will

be prohibited until the CLAST requirement has been satisfied. An appeal to continue enrollment must be approved by the University Admissions and Standard Committee.

There are additional guidelines which apply to students receiving financial aid. Contact the Office of Financial Aid for further information.

CLAST is offered statewide once per term. Students must register in advance at the Records Office, Administration Building, First Floor. Additionally, students may retake the English Language skills, Reading and/or math subtests on computer at the student Academic Resource Center. A fee will be charged for the computer-adapted CLAST. Information regarding CLAST may be obtained from the Student Academic Resource Center, PC1-102, phone (407) 823-5130.

CORRESPONDENCE COURSES

The Department of Independent Study by Correspondence, Division of Continuing Education, University of Florida, Gainesville, FL 32611, administers all correspondence instruction for the State University System. Phone: (904) 392-1711.

SUMMER ATTENDANCE REQUIREMENT

A student entering the State University System with less than 60 semester hours of credit is required to enroll in a minimum of 9 hours of credit in the summer at a state university. Courses taken at the University during the summer for which the student receives a "W" or "F" may be counted toward this requirement. Petitions for exemption are sent to Dr. David Dees in Enrollment and Academic Services on the form supplied by Enrollment and Academic Services (AD 210).

ADMISSION TO THE UPPER DIVISION

To be classified as an upper-division student at the University of Central Florida, a student must complete the following:

- 1. A minimum of 60 semester hours of academic work.
- 2. The English and mathematics requirements of the Gordon Rule.
- Passing scores on three of the four parts of the College Level Academic Skills Test (CLAST)
- 4. One year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required two units of foreign language in high school.)

STEPS IN THE GRADUATION PROCESS

A student should apply to the Registrar for graduation before registering for his final semester of attendance and not later than the end of the first week of classes of the term of graduation.

Upon completion of 100 undergraduate semester hours of coursework, the student is notified to report to his Academic Advisor.

The following steps are required of students who are near or in their last semester before graduation:

- 1. The student must complete an "Intent to Graduate" form, available in the Registrar's Office, not later than the end of the first full week of the term of graduation.
- 2. The candidate for graduation must initiate a checksheet for graduation with his/her advisor. At the end of the semester the checksheet will be completed and forwarded for approval to the Dean of the college in which the student is enrolled. If approved, the Dean will forward the checksheet through appropriate channels to the Registrar's Office for inclusion in the student's permanent University record.

Successful completion of the degree requirements stated in the catalog under which the student wishes to graduate shall constitute a recommendation of the respective college faculty that the degree be awarded, assuming the student is in good standing in the University.

A student must complete all requirements for a baccalaureate or graduate degree no later than the date of the semester graduation ceremony. A student may not be enrolled as a transient student in another institution during the term in which the baccalaureate degree or the Associate of Arts degree is to be awarded.

TEACHER CERTIFICATION REQUIREMENTS

Since July 1, 1980, initial certification requirements (Temporary Certificate) in Florida have included three basic components with a fourth now added as prerequisite to (Regular Certificate) full certification. The components are:

1. General Preparation

Courses included in this category are normally classified as general education (i.e., General Education Program). A graduate with a Bachelor's degree from an accredited institution shall be considered to have met the General Preparation requirements.

- Teaching Specialization Courses included in this category are normally classified as the major area in a student's college program. Other subjects can be shown if the specific requirements in 6A-4.07 through 6A-4.35 Florida Requirements for Teacher Certification have been met.
- 3. Professional Preparation

Students can complete a program of Professional Preparation by one of two means at UCF. These means are:

- A. The State-Approved Program of Teacher Education (i.e., a major in the College of Education) and satisfaction of state requirements for SAT or ACT scores.
- B. The Basic Certification Program (i.e., a major in some other college) and admissibility to the professional phase of the program.
- 4. Comprehensive Examination

Competency must be demonstrated on a written examination in the area of Mathematics, Reading, Writing, and Professional Skills. Examinations will be administered at least three times per year throughout the State of Florida.

Beginning July 1, 1981, a Regular Florida Teacher's Certificate may be issued to persons meeting all requirements for the Temporary Certificate and satisfactorily completing a year-long beginning teacher program approved by the State Board of Education.

ENROLLMENT AND ACADEMIC SERVICES

Associate Vice President: Thomas Huddleston, Jr., AD 210, Phone (407) 823-2226 Associate Dean: Paul R. McQuilkin, AD 210, Phone (407) 823-2691 Assistant Dean: David Dees, AD 210, Phone (407) 823-2691

The primary purpose of Enrollment and Academic Services is the identification, enrollment, retention and graduation of students from the University of Central Florida. Among the services provided are: undergraduate admissions; advisement and academic exploration; college and community outreach; community college articulation; financial assistance; multicultural academic support; academic records; registration; retention; academic publications; commencement; information planning and research. These responsibilities are integral to the mission of the University, addressing the immediate needs of students and faculty, while also responding to the concerns of other constituencies such as business and industry, parents, alumni, and other educational institutions.

Enrollment and Academic Services provides support through the offices of Academic Advising Services, Academic Services for Student Athletes, Community College Relations, Student Financial Assistance, Minority Student Services, Office of the Registrar, Student Academic Resource Center and Undergraduate Admission Services.

ACADEMIC ADVISING SERVICES

Director: Russell Tiberii, PH 202, (407) 823-5322

Academic Advising Services is a student centered source of academic support and information for students who are undecided about their choice of study. It is also the focal point for undergraduate academic advising support for undecided students.

Academic advising and support programs are coordinated or directed through Academic Advising Services: early admission program advising and administration, pre-major (undecided) advising, and displaced major advising. The Academic Exploration Program (AEP) is also coordinated through Academic Advising Services. The objective of the AEP is to assist undecided students in defining their goals relative to academic major choice and professional goals. Central to all academic advising and support is a developmental approach to assisting students toward the fulfillment of their academic and life goals. Through individual and group advising programs, Academic Advising Services provides general support for self-assessment, exploration of academic disciplines, and decision making. Course selection assistance is provided during each registration period, and long range academic planning assistance is provided throughout the academic year.

COMMUNITY COLLEGE RELATIONS

Interim Director: Paul R. McQuilkin, AD 210, Phone (407) 823-2691 Assistant Director: Robert Snow, AD 210, Phone (407) 823-2231

Community College Relations is responsible for: keeping community colleges informed about UCF's programs and policies; making state-wide visits to community colleges; conducting advanced orientations for AA transfers; annually publishes the UCF "Transfer Student Counseling Manual"; annually providing updated transfer information for the developing "Student OnLine Advisement and Articulation (SOLAR)" Statewide Network; monitoring the state-wide community college/university articulation agreement; serving as liaison with community college officials; and conducting appropriate workshops/meetings to maintain and improve community college relations.

MINORITY STUDENT SERVICES

Director: TBA, AD 145, Phone (407) 823-2716

The Office of MInority Student Services (OMSS) provides comprehensive academic support, cultural enrichment, consultation and referral services that promote the recruitment, admission, retention and graduation of African-American, Hispanic-American, Asian-American and Native-American students. The OMSS offers personalized advising and counseling, monitors academic progress, sponsors a six week summer program, Seizing Opportunities for Academic Retention (SOAR), formerly EOP, and designs and coordinates cultural and social activities to assist ethnic minority students in realizing their academic, career and personal goals.

The OMSS serves as the focal point of operations in addressing the specific needs, issues and concerns that confront ethnic minority students. In addition, the OMSS plays a major role in developing and implementing multicultural diversity initiatives throughout the University and greater Orlando communities.

REGISTRAR'S OFFICE

The Registrar's Office is responsible for: maintaining student records for the University; coordinating all aspects of registration, room scheduling, and graduation checks; processing student transcript requests; providing descriptive data on registration, and providing a variety of services to students related to student records and registration. The Office's organizational structure is centered around the concept of updating records in a timely manner and maintaining accurate student files. The Registrar's Office is service oriented and strives to deliver efficient and timely services and data to all constituents.

For information: Registrar's Office, AD 161, Phone (407) 823-3100.

STUDENT ACADEMIC RESOURCE CENTER (SARC)

Director: Mary Helen Callarman, PC1-102, (407) 823-5130

The Student Academic Resource Center (SARC) provides students with free individualized and small-group tutoring in biology, chemistry, English, foreign language, math, physics, reading, statistics, and many other disciplines.

Every semester the SARC offers a series of CLAST Review Workshops for each of the four CLAST subtests. The SARC staff can also prescribe self-paced programs specifically designed for CLAST preparation. Additionally, students may retake the English language skills, Reading, and/or math subtests on computer at SARC. A fee will be charged for the computer-adapted CLAST.

The SARC provides classes and English grammar materials for non-native students who want to develop their written English skills.

The Academic Mentoring Program provides academic assistance to at-risk students through study skills workshops, academic and career advisement, tutoring, and weekly meetings with mentors. Students are equipped with the knowledge and skills they need to be successful in college.

Each semester the SARC provides a series of study skills workshops and materials on time management, note taking, test taking, memory, creative & critical thinking, and test anxiety. Additionally, classes are offered for those preparing for the GRE, GMAT, SAT, and ACT.

The SARC is designed to meet the individual needs of students. Its major objective is to provide students with academic support to ensure their success in college.

ACADEMIC PROGRAMS

UNDERGRADUATE DEGREES

Associate of Arts Degree

University of Central Florida students who satisfactorily complete 60 semester hours of acceptable college work may apply for an Associate of Arts degree. University requirements include achievement of an overall and UCF grade point average of 2.0 or above, fulfillment of the General Education Program requirements, and completion of the last 20 credit hours in residence at UCF. In addition, any student who wishes to receive an A.A. degree must have satisfied the Gordon Rule requirement and passed the College Level Academic Skills Test.

The Associate of Arts degree is awarded only upon application. The application form may be obtained in Enrollment and Academic Services, AD 210 and should be completed by the end of the first week in the semester in which the Associate of Arts degree is to be awarded. A student may not be enrolled as a transient student in another institution during the term in which the Associate of Arts degree is to be awarded. An Associate of Arts degree will not be awarded in the same term that the baccalaureate degree is to be awarded or in any term following the completion of the baccalaureate degree.

Baccalaureate Degrees

The University offers the degrees of Bachelor of Arts, Bachelor of Engineering Technology, Bachelor of Fine Arts, Bachelor of Science, Bachelor of Science in Business Administration, Bachelor of Science in Engineering, Bachelor of Science in Nursing, and Bachelor of Science in Social Sciences. These degrees are available in the following Colleges with majors or areas of specialization as indicated:

College of Arts and Sciences

Bachelor of Arts (B.A.)

Majors: Anthropology, Art, Economics, English, Foreign Languages (General), French, History, Humanities, Interpersonal Communication, Journalism, Motion Picture Technology, Music, Music Education, Organizational Communication, Philosophy, Political Science, Psychology, Radio-Television, Sociology, Spanish, Theatre

Bachelor of Fine Arts (B.F.A.)

Majors Art, Theatre

Bachelor of Science (B.S.)

Majors: Biology, Botany, Chemistry, Computer Science, Forensic Science, Limnology, Mathematics, Physics, Psychology, Social Sciences (interdisciplinary), Statistics, Zoology

College of Business Administration

Bachelor of Science in Business Administration (B.S.B.A.)

Majors: Accountancy, Economics, Finance, General Business Administration, Hospitality Management, Management, Marketing

College of Education

Bachelor of Science (B.S.)

Major: Elementary Education, Exceptional Child

Major: K-12 — Art Education, Physical Education

Major: Secondary Education, English Language Arts, Foreign Language, Mathematics, Science Education Social Science, Speech, Vocational Education and Industry Training

College of Engineering

Bachelor of Science (B.S.)

Majors:

Aerospace Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Environmental Engineering, Industrial Engineering, Mechanical Engineering; plus programs leading to B.S. degree in Electrical Engineering Technology or Engineering Technology

College of Health and Public Affairs

Bachelor of Arts (B.A.)

Majors: Communicative Disorders, Criminal Justice, Legal Studies, Public Administration

Bachelor of Science (B.S.)

Majors: Cardiopulmonary Sciences, Communicative Disorders, Health Information Management, Health Services Administration, Medical Laboratory Sciences, Molecular Biology and Microbiology, Radiologic Sciences, Physical Therapy

Bachelor of Science in Nursing (BSN)

Major: Nursing

Bachelor of Social Work (B.S.W.) Major: Social Work

Double Majors

Any UCF student working toward a single bachelor's degree (a B.A. degree or a B.S. degree) who satisfies the requirements for two majors will be awarded one diploma, but both majors will be indicated on the student's permanent record. Since the requirements for Bachelor of Arts and Bachelor of Science degrees are different, a student completing a major with a B.A. and a major with a B.S. must satisfy the requirements for both the B.A. and the B.S. degrees. Although both majors will be indicated on the student's permanent record, only one diploma (a B.A. or a B.S., at the student's option) will be awarded. A double major does not require a minimum number of hours beyond those necessary for completing degree requirements, while a second degree has specific minimum requirements. (See Second Baccalaureate Degree.)

Second Baccalaureate Degree

Any UCF student desiring to obtain two baccalaureate degrees must meet the requirements for both degrees and earn a minimum of 150 hours. A separate diploma will be awarded for each degree.

Transfer graduates from accredited four-year U.S. institutions who apply for admission to work toward a second baccalaureate degree at the University of Central Florida must meet the regular admission requirements of the major department and the UCF residency requirement for that degree (see residency requirement discussion in the chapter, Undergraduate Degree Requirements). Students holding the baccalaureate degree from accredited U.S. institutions are considered to have completed all General Education Program Requirements. Students who hold degrees from foreign institutions may be required by the Dean of Undergraduate Studies to fulfill all or part of the UCF General Education Program requirements.

The University requirements specified in the preceding paragraphs are minimum requirements. Departments and colleges may require more than 150 hours for a second degree or more than 30 hours to be taken in residence at UCF. Students should confirm department and college requirements with their academic advisors.

Minors

Minors in a limited number of programs have been authorized for certification with baccalaureate degrees. Minors must be indicated on the Intent to Graduate card and must be certified at the same time as the student's baccalaureate degree. Unless a second baccalaureate degree is earned, certification will not be made at a later time even if additional courses have been completed.

ACADEMIC MINORS COLLEGE OR DEPARTMENT AWARDING MINOR*

NAME OF MINOR

College of Arts & Sciences	Russian Area Studies, Latin American and Iberian Area Studies, African American Studies, Judaic Studies, Canadian Studies, American Studies, Women's Studies
College of Business Administration	Business Administration (one minor for
College of Business Administration	majors and one for non-majors)
	Economics (for non-Business
	Administration majors)
	International Business (for Business
	majors only)
	Hospitality Management
	Management Information Systems
College of Engineering	Technology and Society
College of Health and Public Affairs	
	Justice, Health Sciences, Legal Studies,
rements adolicantia. For soundid, phile some	Public Administration
Multidisciplinary	
Department of Art	
Department of English	
Department of Foreign Languages	Writing, Literature, Linguistics
and Literature	French German Italian Bussian
	Spanish
Department of History	
Department of Philosophy and Humanities	
Department of Music	
Department of Theatre	
Department of Biology	Biology
Department of Chemistry	Chemistry
Department of Computer Science	
20 Risena of American Jonan alcohol united	Computer Science
Department of Mathematics	
Department of Physics	
Department of Statistics	
Department of Aerospace Studies Department of Military Science	
School of Communication	
	Organizational Communication
Department of Political Science	
	Pre-Law
Department of Psychology	Clinical, Human Factors,
Deposition and Anna Medicales and sum and success	Industrial/Organizational
Department of Sociology and Anthropology	Anthropology, Sociology

*Contact the College/Department for the requirements for each minor.

GRADUATE PROGRAMS

See listing at the beginning of each college section. For further information on a particular program, contact the departmental office in the respective college or see the Graduate Catalog.

PRE-HEALTH PROFESSIONS ADVISEMENT OFFICE

Preprofessional Coordinator:

Dr. O.M. Berringer, HPB 350, Phone (407) 823-2670

The Pre-Health Professions Advisement Office was established to function as a service to all students preparing for and seeking admission to professional schools of chiropractic, dentistry, medicine, osteopathic medicine, optometry, pharmacy, podiatry, and veterinary medicine. The services afforded students through this office are numerous and range from basic counseling in pre-health professions matters to providing a Composite Evaluation of the student (upon his/her request) to each professional school to which the student applies. However, in order to be considered for a Composite Evaluation, the student must have a minimum overall GPA of 2.8 and at least 30 semester hours of typical undergraduate pre-health professional schools, (usually between the junior and senior year). Additionally, all pre-health professions students are strongly encouraged to affiliate with and participate in the activities of the Preprofessional Medical Society.

Pre-Health Professional Planning

Pre-health professions students should bear in mind that admission to a health professional school is competitive. For this reason, pre-health professions students should pay close attention to the characteristics of successful applicants. For example, while some dental and medical schools require only two and three years of college preparation, approximately 91 percent of all predental and 95 percent of all premedical students accepted throughout the nation each year have completed four years of college. Consequently, since pathways such as "premed" do not result in a degree, each pre-health professions student is urged to carefully select a degree-granting major. This will not only allow one to become more competitive for admission, but also to prepare for an alternate career in the event admission to a professional school is denied. Any degree-granting program offered by the University may be selected as a major; however, those programs within the sciences will generally lend themselves most adequately to pre-health professions preparation due to the nature and content of their curricula. While satisfying degree requirements, students will find in their curricula many courses required for admission to most professional schools. Additionally, prudent use of elective hours in the curricula will permit other appropriate prehealth professions courses to be obtained. Obviously, prehealth professions students are expected to be high achievers, and to obtain good grades with heavy credit hour loads and rigorous course combinations. Most professional schools expect applicants to present at least a B average and to carry a minimum of 15 credit hours each term, with the exception of summer terms. Sustained high-level performance while carrying 15 or more credit hours is one of the strongest predictors of success in professional school.

Preprofessional advisement should not be confused with academic advisement. Class scheduling and progress toward a given degree should be carefully monitored by the students faculty (academic) advisor.

Curricula Guidelines

All pre-health professions students are strongly encouraged to enroll in **SLS 2311**, OVERVIEW OF SELECT MEDICAL CAREERS, the first fall semester they are enrolled. This course provides a broad exposure to guest speakers representing the various fouryear health professions. In addition, the entire preprofessional process (academic preparation, applications, prescreening, interviews, admission exams, admissions, scholarships etc.) is explained in depth. Following this focus on **awareness**, students are prepared to make informed decisions relative to planning their pre-health professional studies.

Concerning required courses, all pre-health professions students are required to complete the General Education Program (GEP) plus the following courses (many of which are applicable to the GEP):

General Biological Sciences, BSC 2010C, ZOO 2010C Genetics, PCB 3063 and 3063L General Chemistry, CHM 2045, 2046, 2046L Organic Chemistry, CHM 3210, 3211, 3211L Microbiology, MCB 3013C English Composition, ENC 1101, 1102 Calculus, MAC 3233 (although MAC 3233 is acceptable, the MAC 3311, 3312, sequency is preferable)

Physics, PHY 3053C, 3054C (although the preceding courses are acceptable, the sequence PHY 3048, 3048L, 3049L, is preferable) Statistics, STA 3023

Additional required/strongly recommended courses not common to all preprofessional students are the following:

Premedical and predental students should take: Molecular Cell Biology, PCB 3023

Comparative Anatomy, ZOO 3713C or

Human Anatomy, ZOO 3733C

Embryology, ZOO 4603C

HIstology, ZOO 4753C

Microbiology, MCB 3203C, and PCB 3233

Analytical Chemistry, CHM 3121C plus either (or both) Biochemistry, BCH 4053, 4054, or Physical Chemistry, CHM 3410.

Preoptometry students must take

General Botany, BOT 2010C

MIcrobiology, MCB 3203C and it is *strongly recommended* they take Human Anatomy and/or Human Physiology, ZOO 3733C, PCB 3703C

Prepharmacy students must take

General Botany, BOT 2010C

Microbiology, MCB 3203C and it is *strongly recommended* they take Histology, ZOO 4753C; and Biochemistry, BCH 4053

Preveterinary students must take General Botany, BOT 2010C Analytical Chemistry, CHM 3121C Microbiology, MCB 3203C

*Animal Science, ASG 3003, and ASG 3402.

*These courses to be taken as a transient student at the University of Florida, preferably during the summer following the sophomore year.

It is strongly recommended they also take:

Comparative Anatomy ZOO 3713C; Histology ZOO 4753C;

Embryology ZOO 4603C; and

Biochemistry BCH 4053

For Maximal Preparation: Additionally, the UCF courses Biochemistry (BCH 4053) Histology (ZOO 4753C), Embryology (ZOO 4603C), Genetics (PCB 3063), Immunology (PCB 3223), Neuroanatomy (ZOO 5745C) and Human Anatomy (ZOO 3733C), are strongly recommended for maximum preparation for the Basic Medical Sciences of most first year professional school curricula.

Meaningful Electives:

All pre-health professions students are strongly encouraged to make prudent selections of elective courses complementary to their pre-health professions preparation. Listed below are a number of appropriate courses from which elective selections can be made.

Accountancy: (ACG 2001 and 2011) or ACG 3023. Biochemistry: BCH 4053. Communication: SPC 3301 or 4330. Endocrinology: PCB 5806C Health Sciences: APB 3600; HSC 3122; 3110; 4411; SPA 3001. Human Anatomy: ZOO 3733C. Human Physiology: PCB 3703C. Literature: LIT 2110 and 2120. Management: GEB 3004. Philosophy: PHI 3600; 3630. Political Science: PUP 4602. Psychology: CLP 3143; DEP 3004; 3202; 3212; EAB 3704; DEP 3464, PSB 3002, 3442 4013C; PCO 4203.

Choosing A Major and Academic Advisement

The advantage of declaring a major early is to be linked with a UCF faculty member who will serve as the student's **academic** advisor within his or her chosen degree tract. Problems are less likely when students remain in contact with conscientious advisors.

Students are encouraged to investigate several degree pathways and to talk with a number of students who have selected those majors. Thorough investigation at the start of the student's academic career will help him or her in making a reasonable choice. The following information offers a general guideline in selecting an academic major.

Choice of Major: The aspiring pre-health professional student is expected to declare a major within one of the degree-granting departments of the University. Terms such as premed or prevet are simply descriptive labels, as UCF does not award pre-health professional degrees.

Students may elect **any** major described in the UCF Catalog. This includes such varied pursuits as Psychology, Engineering, or Liberal Studies.

Traditional vs. Non-Traditional Majors: Traditional majors for pre-health professionals are characterized by degree requirements which overlap most professional school admission requirements. Chemistry, Biology, Molecular Biology and Microbiology are the majors most often chosen at UCF, but others such as Psychology, Physics and Mathematics are also appropriate choices.

Non-Traditional Majors: Such majors as English, Philosophy, Music, Engineering, and so forth, have the disadvantage of not overlapping with admission requirements. If a student elects a non-traditional pathway and does not complete more than the minimum science requirements, s/he will be expected to have accomplished an outstanding performance record in the science classes taken.

Ultimately, **the choice belongs to the student.** Professional schools are less concerned with what undergraduate major one chooses than with how well s/he performed and his/her choice of enrichment electives. Factors to consider are personal interests, finance for college, and career alternatives. The curriculum for the first two years is very similar for all prehealth professions students.

DATES OF IMPORTANCE

All pre-health professions students should be aware of registration deadlines and test dates for their specific admissions exam (DAT, MCAT, OAT, GRE, etc.) In addition, most four-year health professions schools subscribe to professional application services (MMCAS, ADDSAS, ACOMAS, etc.) The applicant must be aware of which schools are members of the service and thus require completion of a thorough application packet provided by the various Application Services. Some professional schools do NOT subscribe and therefore, the student applicant must deal directly with the admissions office of such schools.

The preprofessional screening process is initiated in April. Application packets are available at the Pre-Health Professions Advisement Office during the month of April. Dental applicants must return completed packets by the first Friday in May. All other applicants (Chiropractic, Medical, Optometry, Podiatry, Pharmacy, and Veterinary) must return completed packets by the third Friday in May.

Student applicants are scheduled for their Screening Committee interviews in the order of their return of completed application packets. A master schedule of all interviews for Fall term is posted on the Pre-Health Professions Advisement Office bulletin board and copies are available at the Pre-Health Professions Advisement Office, HPB 350.

ADMISSIONS EXAMINATIONS

Various standardized examinations are required of applicants as a part of the admissions process to the professional schools [dentistry-DAT; medicine-MCAT; optometry-OCAT; pharmacy-PCAT; podiatry-MCAT; veterinary medicine-GRE or VAT]. These examinations are generally offered twice each year; in the Spring and Fall. Pre-health professions students are advised to take the appropriate examination in the *Spring* preceding application to the professional school rather than waiting for the Fall examination. There are numerous support systems and review programs available to assist applicants with their preparation. All applicants are encouraged to maximize their preparation before registering to take any of these exams the first time. Taking an admissions exam on a trial basis is not recommended.

RELATED REFERENCES

Publications of special interest and usefulness to pre-health professional students include the following:

- Admission Requirements of U.S. and Canadian Dental Schools, published by the American Associate of Dental Schools, 1625 Massachusetts Avenue, N.W., Washington, D.C. 20036;
- Medical School Admission Requirements, United States and Canada, published by the Association of American Medical Colleges; One Dupont Circle, N.W., Washington, D.C. 20036;
- The Education of Osteopathic Physicians, published by the American Association of Colleges of Osteopathic Medicine; 4720 Montgomery Lane, Suite 609, Washington, D.C. 20114;
- Information for Applicants to Schools and Colleges of Optometry published by the Association of Schools and Colleges of Optometry; 213 East Ohio Street, Chicago, Illinois 60611;
- Pharmacy School Admission Requirements, published by the American Association of Colleges of Pharmacy; 1730 "M" Street, N.W., Washington, D.C. 20036;
- Podiatric Medical Education, Information for the Prospective Student, published by the American Association of Colleges of Podiatric Medicine and American Podiatry Association, 20 Chevy Chase Circle, N.W. Washington, D.C. 20015;
- Veterinary Medicine, A Career Of Choices: A Handbook for Advisors, prepared by the Office of Student Affairs and Admissions, New York State College of Veterinary Medicine, Cornell University, Ithaca, New York 14853.

Preprofessional students are encouraged to obtain a copy of the admissions publication appropriate to their preprofessional area. Several of these publications are available in the University bookstore.

Other Health Professions

For Nursing and other Allied Health Professions, see College of Health and Public Affairs.

COOPERATIVE EDUCATION

Director: Sheri Dressler, PH, 208, Phone (407) 823-2667

Many university students actively plan their careers through participation in cooperative education. Co-op is an academic program combining on-campus classroom study with offcampus major-related work experience for which the student receives a salary. It offers a blend of theory and practice, integrating formal university preparation with practical work experience. Through this program, students develop professional work skills, test career goals, improve academic performance, generate income, and increase prospects for full-time employment upon graduation. Students may also earn credit for objectives accomplished on a co-op assignment when this credit counts toward a student's degree requirements.

Students choose between two scheduling options, the alternating plan in which they alternate terms of full-time work with full-time school and the parallel plan in which they attend classes full time and work part time concurrently. As an additional option, Co-op administers the Florida Work Experience Program (FWEP) through which employers are reimbursed 70% of the student's salary for providing career-related work opportunities.

Eligibility requirements for co-op include 1) full-time enrollment in an undergraduate or graduate degree program at UCF 2) completion of a minimum of 20 college semester hours 3) having a minimum of 1 academic semester remaining before graduation, and 4) maintenance of a minimum of a 2.5/4.0 UCF grade point average.

Co-op is available to students on all campuses in all five colleges.

UNIVERSITY HONORS PROGRAM

Director: TBA, PH 203, Phone (407) 823-2076

The University Honors Program at the University of Central Florida is designed to attract and challenge students who have demonstrated an ability to achieve academic excellence. The Honors Program also seeks students with particularly exceptional talents. It is committed to diversity in both the composition of its student body and the programs which it supports. UCF's University Honors Program combines the close atmosphere of a small college with the intellectual stimulation of a major research university. Honors students receive an education that prepares them to enter the best graduate and professional schools, as well as distinguished careers in business and public service.

Honors classes are small, and coursework crosses traditional discipline boundaries to encourage critical thinking among honors students. Beyond the classroom, special guest lecturers and presentations, field trips, and University-related service activities expand the horizons of honors students.

Students in the University Honors Program are actively involved in social activities and course programming. Honors students have access to an honors lounge and to housing on campus. They also have early registration privileges.

Students may pursue honors courses through two distinct programs. University Honors and Honors in the Major.

University Honors. Admission into the University Honors Program is granted by the Honors Director. Students who seek admission into the program must apply directly to the Honors Director. It is the student's responsibility to obtain the appropriate Honors Program admissions information from the Director and to follow the procedures necessary to enter the program. Prospective Honors students and their parents are strongly encouraged to visit with the Honors Director as part of the admissions process. Due to the highly selective nature of the Honors program and the limited enrollment available, there are two categories of admission: Early Decision and Alternate Decision.

Early Decision. An incoming Honors freshman will be eligible for Early Decision if he or she has achieved one or more of the following distinctions: National Merit Scholarship Finalist or National Achievement Scholar Finalist or Semi-Finalist, Valedictorian or Salutatorian of a regionally accredited high school. In addition, students who meet the following academic criteria will also be eligible for Early Decision.

HIGH SCHOOL GRADE POINT AVERAGE (WTD.)	COMBINED SAT SCORE	COMBINED ACT SCORE
3.9 +	1000	24
3.7 - 3.89	1100	26
3.5 -3.69	1200	28

Students who meet any of the above criteria but apply to enter the program after the first 130 seats in the entering freshman Honors class are filled will be placed in the Alternate Decision category.

Alternate Decision. Students with (1) a 3.25 or better GPA and a total score of 1300 or better on the SAT or 30 or better on the ACT or (2) a 3.0 or better GPA and a total score of 1400 or better on the SAT or 33 or better on the ACT, or (3) the credentials which meet the Early Decision criteria, but who applied for entry into the program after the first 130 places were filled, may be admitted into the program under the Alternate Decision procedure. An Alternate Decision applicant must file a letter of application for admission with the Honors Director and must also submit a 500 word essay stating his or her contribution to the program. Students who seek to enter the program under the Alternate Decision procedure may be required to visit with the Honors Director for a personal interview. At least thirty students in each entering freshman Honors class will likely be chosen from the Alternate Decision category.

Acceptance. A student who plans to enter the University Honors Programs and who is notified of acceptance into the program must file with the Honors Director a written statement of intent to enter the program and a \$60.00 payment to secure membership in the Honors Club.¹ The student must complete this within thirty (30) days of acceptance into the program, or a place may not be available. Once the student has completed the procedures he or she will be provided with timely notice of Honors registration and orientation.

'The \$60.00 payment will normally be by check or money order made out to: UCF Foundation-Honors Endowment. If for any reason any applicant cannot make this payment, he or she should discuss this with the Honors Director. No student will be denied entry into the program because of inability to pay the Honors Club membership fee.

A student who is not admitted to the program as an entering freshman may apply for admission after completing at least fifteen (15) semester hours at the University of Central Florida with at least a 3.5 GPA. Mature students who are returning to do college work after having been out of college for a period of several years, or who have never been previously enrolled in college, are especially encouraged to apply for admission to the program after one or more semesters of at least 3.5 GPA work at the University. Transfer students who seek admission will have their requests considered if they meet the high school GPA and SAT/ACT criteria listed above and have at least a 3.5 GPA in their transfer work from a regionally accredited college or university.

Students must maintain a 3.2 overall GPA and 3.0 GPA in Honors Courses in order to remain in the University Honors Program. In addition to meeting the GPA requirements, to graduate with University Honors a student must also meet the following requirements: (1) complete 12 hours of course work in Honors Sections of the General Education Program;² (2) complete, with a "satisfactory" grade, "Honors Symposium I" and "Honors Symposium II";³ (3) complete one "Honors Lecture" course;⁴ and (4) complete two upper division "Honors Seminars" outside of the major field of study.⁵

Students who complete a semester abroad or receive six or more hours of upper-division credit for study abroad as part of the University International Studies Program, will receive credit for completion of one upper division "Honors Seminar."

By the end of the second week of the term in which a student plans to graduate with honors, the student must file a completed "Intent to Graduate with Honors" form with the University Honors Director.

A student who completes all of the requirements for University Honors will have the designation of "Graduation with University Honors" entered on the Diploma and the University transcript.

²When a student has an exceptionally high number of dual enrollment, Advanced Placement, CLEP or other work which is substituted for GEP course hours, he or she may petition the University Honors Committee to substitute, on a credit for credit basis, Honors Lecture course work or Honors Seminar course work for Honors GEP course work.

³"Honors Symposium I" and "Honors Symposium II" designate one credit hour courses which will be offered, respectively, in the Fall and Spring semester of each year. This course will include guest lectures, video and film presentations, and live performances by guest artists, e.g., musicians or poets. During each semester a field trip will be included as part of the Honors Symposium. Attendance at this series will be mandatory for all students seeking University Honors. Only one unexcused absence is permitted. The course is graded on a "satisfactory"/"unsatisfactory" basis.

"Each Fall and Spring term a three credit "Honors Lecture" course will be offered. The Lecturer will offer an integrative and original course that will be open only to Honors students. The purpose of this course is to explore cross-disciplinary domains and broaden the student's perspective beyond the usual notion of a "major" field of study. Students may take more than one Honors Lecture course, but at least one such course must be taken as part of the requirements for graduation with University Honors.

⁵The three credit hour "Honors Seminar" is offered within the department major areas or programs, but is broad-based in the topics which are pursued. These seminars are designed especially for Honors students and are intended for non-major participation. With the consent of the Instructor, majors will also be invited into an Honors Seminar.

Honors in the Major⁶. Application for admission to the Honors in the Major program will be made to the department or college in which Honors are sought. Requirements for admission to Honors in the Major are: the completion of sixty hours of college credits; a cumulative 3.2 or higher grade point average, including at least twelve graded upperdivision hours at the University of Central Florida; permission of the department in which such Honors are sought; and permission of the Director of the University Honors Program. Upon application and approval of the major department or college, and with notification to the University Honors Committee, GPA requirements may be waived in cases where prior work at the college level was taken at least three years previous to the current period of continuous enrollment at the college level. Participation in the University Honors Program is not a requirement for participation in Honors in the Major.

Honors in the Major is awarded upon completion of an advanced Honors Project or Thesis, and the completion of at least one upper division Honors Seminar or an Honors Directed Readings course in the department in which Honors is taken. Each department or college reserves the right to set additional requirements for Honors in the Major to be achieved.7 Upon petition to the Honors Committee and with the consent of the major department, a student may be awarded credit for an Honors Seminar in the major if six hours of upper-division credit accepted by the major department or college is taken abroad as part of the University International Studies Program or other overseas program directly connected with the University. The Honors Project or thesis is to be completed under the direction of a committee of three faculty members, one of whom is the major adviser. Up to six hours of 4000-level thesis credit may be awarded for student work on the Honors Project. This program is designed to encourage original and independent work on the part of the student. A copy of the thesis, creative work or project that is the expected outcome of this course will be placed in the library. With the approval of the major department or college and notification to the University Honors Committee, an Honors student may be permitted to waive any and all of the usual requirements for completion of the major and pursue a course of study designed to fit his or her individual needs.

A student who completes all of the requirements for Honors in the Major will have the designation of "Honors in the Major" noted on the diploma and the University transcript.

Univ. Honors	GEP* 12 Hrs.	Semina 6 Hrs		oosium* Hrs.	Lecture* 3 Hrs.
	Thesis*		Dir. Rdgs.*		Hon. Major Sem.
Hon. in Major	Up to 6 Hrs.	AND	3 Hrs.	OR	3 Hrs.

Summary Table of Minimum Requirements for University Honors and Honors in the Major

*Denotes Honors Hours

⁶Honors in the Major also designates a program in which a particular college may undertake to award Honors for upper-division work within the college. In the case of a collegewide Honors in the Major program, the student should consult the Office of the Dean of the College for information concerning procedures and requirements related to this program. Honors in the Major work is available only at the option of each department or college.

⁷It is the responsibility of the Honors student to obtain a faculty adviser who will undertake the responsibility of directing the Honors Reading and Study Course. The student is responsible for notifying the Honor Director, in advance, when he or she intends to pursue the Honors Directed Readings Course. Prior to entry in the readings course, the student must file with the department or college and the University Honors Committee a readings list and study proposal signed by the faculty member under whose direction the course will be given. Credit towards Honors in the Major will be awarded by a department or college for a readings course if a grade of "A" or "B" is received by the student.

COLLEGE OF ARTS AND SCIENCES

UNDERGRADUATE PROGRAMS

Anthropology (BA) Art (BA) (BFA) **Biology** (BS) Chemistry (BS) Communication (BA) Computer Science (BS) Economics (BA) English (BA) Film (BA) Foreign Language Combination (BA) Forensic Science (BS) French (BA) History (BA) Humanities (BA) Journalism (BA) Liberal Arts (BA)

Liberal Studies (BA, BS) Mathematics (BS) Music (BA, BM) Music Education (BME) Philosophy (BA) Physics (BS) Political Science (BA) Psychology (BA) (BS) Radio-Television (BA) Social Sciences (Int.) (BS) Sociology (BA) Spanish (BA) Speech (BA) Statistics (BS) Theatre (BA) (BFA)

PREPROFESSIONAL PROGRAMS

Predental Prelaw Premedical Preoptometry

OTHER PROGRAMS

Judaic Studies African-American Studies American Studies Asian Studies **Russian Area Studies Canadian Studies** Women's Studies **Community Arts** See also: Summer Study Programs under Department of Foreign Languages. English as a second language — Department of Foreign Languages.

GRADUATE PROGRAMS*

Biology (MS) Chemistry, Industrial (MS) Communication (MA) Computer Science (MS, Ph.D.) English (MA) History (MA) Mathematical Science (MS)

*See the Graduate catalog.

Prepodiatry Preveterinary

Prepharmacy

Iberian and Latin-American Area Studies

Physics (MS, Ph.D.) Political Science (MA) Psychology, Clinical (MS) Psychology/Human Factors (Ph.D.) Psychology, Industrial (MS) Sociology, Applied (MA) Statistical Computing (MS)

COLLEGE OF ARTS AND SCIENCES

Dean: Edward Sheridan, FA 511, Phone (407) 823-2251 Associate Dean: Kathryn L. Seidel, FA 511, Phone (407) 823-2251 Associate Dean: Ben Morgan, FA 511, Phone (407) 823-2251 Assistant Dean: Bruce A. Whisler, FA 511, Phone (407) 823-2251 Assistant Dean: Diana Velez, FA 511, Phone (407) 823-2251

The College of Arts and Sciences, the largest academic unit in the University, includes the following departments: Art; Biology, Chemistry; Communication; Computer Science; English; Foreign Language; History; Liberal Studies, Mathematics; Music; Philosophy; Physics, Political Science; Psychology; Sociology and Anthropology; Statistics; and Theatre.

In keeping with the aims of the University of Central Florida, the College is responsible for all programs in the broad areas of the humanities, the arts, the natural sciences, and the social sciences. The departments offer more than sixty baccalaureate, graduate, and preprofessional programs in these areas. For additional information concerning graduate programs, please refer to the Graduate Catalog.

In addition to providing strong academic degree programs in the areas noted above, the College of Arts and Sciences functions in a service mode by making available a wide selection of courses designed to complement the offerings of the other four colleges of the University. These offerings include most of the courses necessary to satisfy the University's general education requirement for all students.

A student enrolled in the College as an undergraduate must fulfill all University degree requirements including that for general education, as well as the particular requirements set forth by the department for each area of specialization. To be certified for graduation, a student must achieve at least a "C" grade point average (2.0) in the courses of his or her major and/or minor. Some departments also require a 2.0 in each major course; consult advisors for specific policies.

A student whose written or oral communication in any course is deemed unsatisfactory may be referred to the Dean by the instructor. Additional course work or an individual study program may be assigned consistent with the needs of the student and must be completed before the degree is granted.

PRELAW PROGRAM

Pre-Law Coordinator: Dr. Roger Handberg, FA 407G, Phone (407) 823-2608

There is no preferred major for prelaw. Law schools accept superior students with a good liberal arts background, regardless of major field. A Bachelor of Arts or Bachelor of Science degree with approximately three-fourths of the course work representing theory content is typically suggested. Majors such as English, History, Legal Studies, Philosophy, Sociology, and Political Science meet this criterion. The quality of undergraduate education for the legal profession, according to the Association of American Law Schools, is grounded in three basic skills and insights: comprehension and expression in words, critical understanding of the human institutions and values with which the law deals, and the creative power of thinking. Law schools require that the Law School Admission Test (LSAT) be taken prior to consideration for admission.

General information pertaining to programs of study, LSAT, careers, and law schools can be obtained from the Pre-Law Coordinator.

Advisement of prelaw students will be provided in the area where a major is chosen; for example, a prelaw student who wishes to emphasize the historical foundations should seek advisement in the Department of History; for emphasis in political science advisement should be sought in the Department of Political Science; emphasis in economics should be gained through advisement in economics programs in either the College of Arts and Sciences or the College of Business Administration; emphasis in Legal Studies can be pursued in the Department of Criminal Justice and Legal Studies in the College of Health and Public Affairs.

ADVISEMENT

Office of Academic Support and Information Services (OASIS) Director: Ms. Judith Boyte, FA 202, Phone (407) 823-2492

The Office of Academic Support and Information Services (OASIS) is the primary office for undergraduate academic assistance in the College of Arts and Sciences. OASIS assists students in the College of Arts and Sciences with matters concerning College and University requirements, policies and procedures. The Office oversees General Education course evaluation and substitutions as well as evaluation and application of TSD credits (CLEP and AP) for Arts and Sciences students.

Questions concerning University and College academic policies affecting Arts and Sciences majors should be directed to the OASIS staff in FA 208 or by calling (407) 823-2492.

Program Planning

Although suggested curricula are available in most areas, students will plan their program in consultation with a faculty advisor appointed by the chair of the major department or by the Dean of the College of Arts and Sciences.

Foreign Language Requirements College of Arts and Sciences

B.A. Art History - 2 years (4 semesters)/proficiency Art B.A. B.F.A. Studio Art - 2 semesters/proficiency Biology 2 semesters/proficiency of a foreign language OR 8 hours of 3000/4000 level courses outside the department of major. Chemistry no requirement Communication 2 semesters/proficiency **Computer Science** 2 semesters/proficiency OR approved courses in international or Multicultural Studies (consult department) Economics BA 2 semesters/proficiency English 3 semesters/proficiency **Foreign Languages** 4 semesters + History 2 semesters/proficiency strongly recommends 4 semesters for students aiming for graduate school **Liberal Studies Program** B.A. - 2 semesters with a 3rd or 4th semester recommended in some programs B.S. - no foreign language requirement. One approved multicultural course is required. **Mathematics** 2 semesters/proficiency B.A. - 3 semesters/proficiency Music B.M. - 2 semesters/proficiency B.M.E. - none **Physics** 2 semesters/proficiency Philosophy 2 semesters/proficiency **Political Science** 2 semesters/proficiency Psychology B.A. - 3 semesters/proficiency or 2 semesters/diversity track Social Sciences BS - No foreign language requirement/ Interdisciplinary One approved multicultural course is recommended. Sociology/Anthropology Anthropology - 2 semesters/proficiency Sociology - 2 semesters/proficiency AND either a third semester in the language OR one approved enhancement course (consult department) Statistics no requirement B.A. - 2 semesters/proficiency Theatre B.F.A. - no language requirement

FOREIGN STUDY CENTERS — Undergraduate Interinstitutional Transient Program

The State University System operates study centers in London, England and Florence, Italy during the fall and spring semesters. Students with 27 or more semester hours of credit and a GPA of 2.5 or above in all State Universities are eligible to apply for one or both semesters as interinstitutional transient students. Faculty at the centers are drawn from the nine State Universities. While credits are earned through Florida State University, which administers the program on behalf of the State University System, credits are fully transferable within the System. Students at the Centers are considered to be resident in their home institutions for attendance and degree purposes.

Classes at the Florence Center emphasize art history. Italian, social sciences, and the humanities; at the London Center, theatre, business, English, history and the social sciences. Field trips and museum visits are common to both. For further information consult Dr. Thomas Greenhaw in the Department of History (London Program), (407) 823-2224 or Dr. Robert Flick in the Department of Philosophy (Florence Program), (407) 823-2273.

AFRICAN-AMERICAN STUDIES PROGRAM

The College of Arts and Sciences offers a minor but not a major in Afro-American Studies consisting of a minimum of 18 semester hours.

Course Requirements: any six from this list or approved special topics courses:

- 1. AMH 3570 Afro-American History
- 2. ARH 3520 African Arts
- 3. COM 4461 Intercultural Communication
- LIN 4612 African-American English
 LIT 4354 Afro-American Writers
- 6. PUP 3914 Minorities in Politics
- 7. SYD 3720 Race and Ethnic Minorities in the U.S.
- 8. SOP 3724 Psychology of Racial Prejudice
- 9. SOP 3930 Psychology of Ethnic Minorities
- 10. SOW 4600 Social Work with Minorities

For further information, contact Dr. K. Seidel, Dean's Office, FA 511, (407) 823-2251.

AMERICAN STUDIES PROGRAM

The minor in American Studies requires at least 21 hours of approved upper-division courses. The courses include at least three hours of restricted electives from each of three fields: literature and humanities, social sciences, and history. Other courses may be chosen from the list of approved courses available from the American Studies advisor. For further information, contact Dr. K. Seidel, FA 511, (407) 823-2251.

ANTHROPOLOGY (see Department of Sociology and Anthropology)

DEPARTMENT OF ART

Chair: Robert T. Reedy, VAB 117, Phone (407) 823-2676 Faculty: Chavda, Congdon, Eyfells, Gaudnek, Lotz, Martin, Reedy, Rivers, Skoglund, Wahlman, Wellman

The Department of Art has 10 full-time and 8 part-time faculty members teaching studio arts, graphic design, and art history. The curriculum in Art provides professional preparation in art history, visual arts administration, and in the studio areas of ceramics, P.A.V.E. (Partners in Art for Visual Education), computer graphics, drawing, fibers and fabrics, graphic design, painting, photography, printmaking, and sculpture, as well as combination specializations. Both the Bachelor of Arts and the Bachelor of Fine Arts degrees are offered. Competitive scholarships and awards are available to currently enrolled full-time UCF art majors through portfolio reviews by Faculty. These awards are sponsored by UCF, the Altrusa Club of Winter Park, the Albin Polasek Foundation, San Miguel family & Kathleen Sheridan.

Portfolio Requirements For Studio Majors: A selective portfolio of work representing the student's studio accomplishments in design and drawing is required for faculty review at the end of the sophomore year or at the completion of 12 semester hours of studio art courses. Faculty evaluation of this portfolio will determine if the student should advance further in the B.A. program. The University reserves the right to hold, for exhibition purposes. work done in classes.

Portfolio Requirements for Graphic Design Specialization: Students wishing to transfer courses taken at other institutions must present a portfolio of work for evaluation toward use in the concentration. This program's last two-year curriculum is sequential and at present, portfolio applications are accepted only for Fall semester. Deadline for all portfolio applications is April 1 for commencing the program in Fall semester.

MINORS AND CERTIFICATE

The Department of Art offers 3 minors, one in studio art, one in art history, and one in community art. The Art Department residency requirement consists of 6 semester hours of regularly scheduled 3000-4000 level art courses. These 6 semester hours must be in an area of specialization.

Required courses for the minor in studio art: ARH 2050 & 2051, ART 2201 & 2203, 2300 and 2301 and six semester hours of studio art at the 3000 and 4000 level. To be eligible for a minor in art, a student must have a GPA of at least 2.0 in all art courses subject to the following constraints: no "D" grades in art courses from other institutions are transferable. Total hours: 24.

Required courses for the minor in art history: ARH 2050 & 2051; 3 hours chosen from ART 2201, 2203, or 2300; and 15 hours from the following: ARH 3456, 3520, 3530, 3683, 3710, 3720, 4311, 4312, 4350, 4430, 4450, 4458, 4655, ARH 4892, 5478, 5893. ARH 3930 and 4710 may also apply with approval of an art history advisor. Total hours: 24.

Minor in Community Arts

A minor in Community Arts is offered for the student who is majoring in Art, Music, Theatre, or English (with a Creative Writing focus), and is interested in helping make the arts more democratic and accessible to everyone. Students minoring in Community Arts conduct studies in culture-based aesthetics, multi-cultural education; art and politics, art and economics; art and mental health; issues regarding ethnicity, class, age and occupation; program development; and the functions and purposes of art establishments in our society. Students interested in the minor should contact the department chair.

Graphic Design Specialization

Portfolio Requirements for Graphic Design Specialization: Students wishing to transfer courses taken at other institutions must present a portfolio of work for evaluation toward use in the specialization.

This program's last two-year curriculum is sequential and at present, portfolio applications are accepted only for this fall semester. **Deadline for all portfolio applications is April 1st for commencing this program in the fall semester.**

Gr	aphic Design Specialization		
1	ART HISTORY	a state of the sta	(15)
	a. ARH 2050 (required)	3	
	b. ARH 2051 (required)	3	
	c. Any 3 upper division ARH (3000-4000 level)	9	
11	DESIGN FUNDAMENTALS		(6)
	a. ART 2201 (required)	3	
	b. ART 2203 (required)	3	
Ш	DRAWING FUNDAMENTALS		(6)
	a. ART 2300 (required)	3	
	b. ART 2301 (required)	3	
IV	STUDIO AREA SPECIALIZATION -		
	(Many courses include Computer Graphics Components)	a - De la	(15)
	ART 3239 Graphic Design I	(3)	
	ART 3232 Graphic Design II	(3)	
	ART 3610 Computer Graphics	(3)	
	ART 4235 Adv. Graphic Design	(3)	
	ART 4237 Special Problems in Graphic Design	(3)	

V RESTRICTED ELECTIVES

(Upper Division Hours) Minimum of three (3) areas represented, all courses must be outside of the area of specialization.

Specialization.		
Drawing	3330 (3),	3331 (3)
Painting	3510 (3),	4530 (3)
Printmaking	3400 (3),	4402 (3)
Photography (PGY)	3401 (3),	4420 (3)
Sculpture	3701 (3),	4703 (3)
Ceramics	3110 (3),	4111 (3)
Fibers & Fabrics	3133 (3),	4130 (3)
*Special Topics (Upon approval of Student Advisor)	(3)	ANDORF
TOTAL required hours in major Art: (Graphic Design)	Di Contactori da la	(54)

Graduation Portfolio of representative studio work done in graphic design specialization. Portfolio deadline is the last week of the last semester in which student files an intent to graduate form.

Bachelor of Arts: Art

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- A student must achieve at least a "C" grade point average (2.0) in the courses of his or her major.

No "D" grades in Art courses from other institutions are transferable.

Departmental Residency Requirement consists of at least 18 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Art. Nine of these must be in an area of specialization.

- 3. Required courses Varies with Specialization
- 4. Restricted Electives
 - Varies with Specialization
- Electives
 To be selected primarily from upper level courses outside the Department, with the approval of the student's advisor.

Total	Semester	Hours	Required
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120

(12)

AREAS OF SPECIALIZATION

I. Art History Degree Requirements

	inotory begiee nega	i cilicitto	
1.	Art History Foundation	Courses	9 hours
	ARH 2050, 2051	History of Art I, II	6 hours
	ART 2201C	Design Fundamentals I	3 hours
2.	Art History Core Cours	es	25 hours
	ARH 4310	Early Italian Renaissance Art	3 hours
	ARH 4430	Nineteenth Century Art	3 hours
	ARH 4450	Twentieth Century Art	3 hours
	A Non-Western Art H	History Course (from the following):	
	ARH 3520	African Art	
	ARH 4545	Art of Indian	
	ARH 3530	Asian Art	
	ARH 4655	MesoAmerican Art	3 hours
	One of the following	And a state of the	
	ARH 4350	Baroque Art	
	ARH 4312	Later Italian Renaissance	
	One of the Wome	n in Arts Courses	3 hours
	ARH 4800	Theory and Criticism	3 hours
	ENC 3311	Expository Writing	3 hours
	ARH 4912	Senior Thesis	3 hours
	ARH 4906	Comprehensive Exam	1 hour

3.	Art History Electives		12 nours
	ARH 3520 A	frican Art	
	ARH 3728 A	merican Art	
	ARH 3456 A	art since 1945	
	ARH 5451 A	rtistic World Views	
	ARH 4350 B	aroque Art	
	ARH 5478 C	contemporary Women Artists	
	ARH 4170 G	areek and Roman Art	
	ARH 3710 H	listory of Photography I	
	ARH 3711 H	listory of Photography II	
		listory of Prints	
		ater Italian Renaissance	
		lesoAmerican Art	
		outhern Folk Arts	
		isual Arts Administration	
		Vomen in Art	
	Optional Electives (0-6 hou		
	any AMH 3000-4000 lev		
	any ANT 3000-4000 leve		
	any ART 3000-4000 leve		
	any ENL 3000-4000 leve		
	any HUM 3000-4000 level		
	any LIT 3000-4000 level		
	any PHI 3000-4000 level		
	any EUH 3000-4000 leve		
4	Foreign Language Require		14 hours
4.		preign language or a proficiency	14 110015
Tatal C	exam equivalent is requi		A6 hours
Total S	Semester hours in Art and	Art history courses	46 hours
D	Foreign Longuage		10 hours
U.	Foreign Language		12 hours
2000	2 years of college level of		
E.	Comprehensive Art History		(2)
	ARH 4906 Directed Inde		(3)
		otal Semester hours in Art and	45 40
	Calcinorant log	Art History Courses	45-48
	1	otal Semester Hours Required	120 hours
II. Ar	t (Studio)		
	Required Courses		27 hours
		esign Fundamentals I, II	6 hours
		Prawing Fundamentals I, II	6 hours
		listory of Art I, II	6 hours
		rt History Courses (Any 3)	9 hours
-		Lingerop to	
В.		themseuport (SLEE THAT terme?	15 hours
	3000-4000 level courses		
		ers-Fabrics, *Graphic Design, Painting	
	Photography, Printmakin	ig, and Sculpture.	
	*See specialization in Gr	aphic Design pp 100-101.	
C.	Restricted Studio Electives	THE PARTY AND A JON 2.4 MITTING AND THE	12 hours
	3000-4000 level courses	from at least 3 areas outside the area	
	of specialization: Cerami	cs, Drawing, Fiber & Fabrics,	
		, Printmaking, Photography,	
	Sculpture and Special T		

D. Foreign Language Two semesters/proficiency

E. Portfolio Requirement

Seniors are required to submit a portfolio of representative work in the student's area of specialization, for review by Faculty.

Total Semester Hours in Art & other recommended courses Total Semester Hours Required

54 120

Bachelor of Fine Arts: Art

The B.F.A. degree is recommended for studio art majors who plan to attend graduate school. Admission to the B.F.A. degree program requires the student to submit a formal application and a portfolio to the Faculty no earlier than the first semester of the student's senior year (upon completion of 90 semester hours). Once admitted to the B.F.A. program, the student must complete an additional 30 semester hours at UCF, with 12 hours in Art courses. A senior exhibition is required for graduation. A portfolio is required for Graphic Design specialization.

Degree Requirements

- See University Degree Requirements. Students must achieve at least a "B" grade point average (3.0) in the courses of their major.
- 2. B.F.A. requires 2 semesters/proficiency in Foreign Language
- 3. See Special college and/or department requirements: Students must achieve at least a 3.0 average in courses in the major. No "D" grades in transfer Art courses; Department Residency Requirement consists of at least 18 semester hours of regularly scheduled upper-level courses must be taken from the UCF Department of Art. Nine of these must be in the area of specialization.
- 4. Required Courses 27 hours ART 2201C, 2203C Design Fundamentals I, II 6 hours Drawing Fundamentals I, II ART 2300C, 2301C 6 hours ARH 2050, 2051 History of Art I, II 6 hours ARH 3000-4000 Art History Courses 9 hours 5. Area Specialization 3000-4000 level courses from: Ceramics, Drawing, 15-27 hours *Graphic Design, Painting, Printmaking, Photography, and Sculpture or combinations. In a combination, a student must have a minimum of 15 hours in one specialization. *(See in Graphic Design. Minimum credit hour requirement for Graphic Design specialization will be 18 hours.) 6. Restricted Studio Electives 21 hours *3000-4000 level courses from at least three areas outside the student's specialization: Art History, Ceramics, Drawing, Fibers & Fabrics, Graphic Design, Painting, Printmaking, Photography, Sculpture, and Special Studio Topics Courses. ARE and ARH Community Arts courses are acceptable, with consent of advisor. 7. BFA Exhibit/Seminar (ART 4932) Requirement. 3 hours Total Semester Hours in Art Courses 66-72 Total Semester Hours Required 129

ASIAN STUDIES

This program offers a minor, but not a major, in Asian Studies. The program is interdisciplinary and is administered by the Department of Philosophy. For further information, contact Dr. Kassim, FA 411-J, (407) 823-2273.

DEPARTMENT OF BIOLOGY

Acting Chair: D.H. Vickers, BL 210, Phone (407) 823-2141 Faculty: Ehrhart, Koevenig, Kuhn, Osborne, Snelson, Stout, Sweet, Taylor, Vickers, Whittier, Ellis (Professor Emeritus)

The Department of Biology offers a Bachelor of Science degree program in Biology; a minor in biology; and the Master of Science in Biology. The core curriculum provides a background in the chemical, mathematical, and physical sciences, as well as broad preparation in the biological sciences. This diverse background opens career opportunities for graduates in areas outside of their particular degree program. In addition, graduates are well prepared to further their education in professional or graduate schools. Selection of electives, in consultation with a faculty advisor, permits emphasis on a specific subspecialty within a degree program. Careful selection of restricted and unrestricted electives allows a student to satisfy all requirements for admission to professional or graduate school, while at the same time completing a B.S. degree in Biology. Research experience and exposure to specialized topics not taught through formal courses may be gained through independent study contracts.

SUBSPECIALITIES WITHIN THE BIOLOGY DEGREE PROGRAM

The undergraduate Biology curriculum provides students with the basic principles which undergird the science, and introduces options traditionally only open at the advanced level. Most entry level students need the broad exposure provided by the lower division core curriculum in order to make informed decisions about their career goals. Although some Biology majors are preparing themselves for entry into Medical or other narrowly defined professional areas, these professions all demand that students master broad biological principles prior to beginning more advanced study. Specialization has traditionally been pursued at the postgraduate level, although current trends tend to, unwisely in our opinion, push specialization to lower levels.

Even though all students majoring in Biology receive a single degree (B.S. in Biology), it is still possible to emphasize areas of interest at the upper division. Specialization is dependent upon expertise of existing faculty and course availability. Currently three areas of emphasis are suggested, although other possibilities exist. The specific courses selected must comply with departmental requirements and area distributions, and should be chosen in consultation with a faculty advisor.

ECOLOGY — Limnology I, Limnology II, Aquatic Biology, Plant Geography and Ecology, Population Biology and Evolution, an additional course in Biostatistics.

LIMNOLOGY — Analytical Chemistry, Vertebrate Zoology, Invertebrate Zoology, Entomology, Aquatic Biology, Limnology I and II, Fisheries Management, Plant Taxonomy, Plant Kingdom.

ZOOLOGY — Comparative Vertebrate Anatomy, Animal Physiology, Vertebrate Zoology, Invertebrate Zoology, Embryology, Entomology, Population Biology and Evolution.

MINOR IN BIOLOGY

The Department of Biology offers a minor in Biology consisting of a minimum of 28 hours. Required courses (18 hours): BOT 2010C; BSC 2010C; PCB 3043; PCB 3063; ZOO 2010C. Upper Division Restricted Electives (10 hours): At least 10 hours of course work taught within the Department of Biology (designated as being within the College of Arts & Sciences-AS) with at least three credits from Group A or C and either three credits from Group B or D, or PCB 3023. Groups A-D are listed under the restricted elective subsection of the Biology core curriculum.

To be eligible for a minor in Biology a student must have a GPA of at least 2.0 in all UCF biology courses subject to the following constraints: (A) No credit by exam (CLEP, TSD, Military credit) (B) NO "D" grades from other institutions will be accepted (C) At least 10 of the 28 hours must be earned in residence at UCF.

Bachelor of Science: Biology

Degree Requirements

 To be eligible for an undergraduate degree in Biology a student must have a GPA of at least 2.0 in all UCF biology courses subject to the following constraints: (A) No credit by exam (CLEP, TSD, Military credit) may be used; (B) No "D" grades from other institutions will be accepted; (C) No more than 4 hours of independent study, directed research or similar types of credit may be applied toward major requirements; (D) at least 15 hours of all Biological Sciences credits applied toward the major must be earned in residence at UCF within the Department of Biology; (E) 2 semesters proficiency of a foreign language OR 8 hours of 3000/4000 level courses outside the Biology Department.

Students seeking a double major must satisfy the requirements for both majors and must take no fewer than 40 semester hours of upper division restricted elective course-work appropriate to the combined areas of specialization of the two majors.

- See University undergraduate degree requirements for GEP courses required outside major. 27 hours
- 3. Core requirements:

47-52 hours

26 hours

Must be satisfied by all students seeking an undergraduate degree from the Department of Biology.

Biology Core Courses (21 hours)

BOT 2010C	General Botany	4 hours
BSC 2010C	General Biology	4 hours
ZOO 2010C	General Zoology	4 hours
The above courses are prereq	uisite or corequisite to all upper division	biology courses.
PCB 3023	Molecular Cell Biology	3 hours
PCB 3043	Ecology	3 hours
PCB 3063	Genetics	3 hours

Cognate Sciences Core Courses (26-31 hours)

The below requirements represent minimum physical science requirements of a Life Science student. Those expecting to enter professional or graduate school after receiving a B.S. degree at UCF *should* plan to take a full year of Physics with laboratory. Such students may wish to take Biochemistry (BCH 4053, 54) as well. Calculus is also considered desirable for many postgraduate and professional programs. Students are urged to consult their advisor.

CHM 2045, 2046, 2046L and one of the following 2 cou	Chem. Fund I and II with lab	8 hours
CHEM 3210, 3211, 3211L	Organic Chem. I & II with lab	8 hours
Or CHM 3120C and	Analytical Chemistry and	10 hours
CHM 2205	Intro Organic & Biochemistry	
	Minimum Chemistry	16-18 hours
PHY 3053C	College Physics I	4 hours
Or DUN 20540	or College Dhusies II	4 6 4 1 1 1 1
PHY 3054C or	College Physics II	4 hours
PHY 3048 & PHY 3048L	Physics for Eng. & Sci. I with Lab	4 hours
PHY 3049 & PHY 3049L	Physics for Eng. & Sci. II with Lab Minimum Physics	4 hours 4 hours
MAC 1104 and higher	College Algebra and higher	6 hours
Any Calculus course	Calculus 3-5 hours	
	Minimum Mathematics	
STA 3023	Statistical Methods	
	Minimum Statistics	3 hours

4. Upper Division Restricted Electives:

Must be selected from the below course groupings and each student must complete at *least one* BOT and *at least one* ZOO (or ENY) course. In addition, each student must complete at least three credit hours from each of groups A-D with additional required credits to meet the individual major requirements. Transferred courses must be at a 3000 level or higher, and be evaluated by an advisor, in order to count as an Upper Division Restricted Elective.

Group A

BOT 4713C	Plant Taxonomy	5 hours
ENY 4004C	General Entomology	4 hours
MCB 3013C	General Microbiology	5 hours
MCB 4114C	Microbial Systematics	4 hours
PCB 3301C	Aquatic Biology	4 hours
ZOO 3303C	Vertebrate Zoology	4 hours
ZOO 4203C	Invertebrate Zoology	4 hours

Group B

BOT 3800	Ethnobotany	3 hours
BOT 3820	Plants and Urban Envir	3 hours
BOT 4623C	Plant Geography & Ecology	4 hours
BOT 3680	Florida Wild Flowers	4 hours
PCB 4683	Population Biol & Evolution	4 hours
PCB 3043L	Ecology Laboratory	1 hour
PCB 4302C	Limnology I	4 hours
PCB 4303C	Limnology II	4 hours
ZOO 4880C	Fisheries Management	4 hours

Group C

BOT 4223C	Plant Anatomy	4 hours
BOT 4303C	Plant Kingdom	5 hours
BSC 4103	History of Biology	3 hours
PCB 3063L	Genetics Laboratory	1 hour
ZOO 3713C	Comp Vert. Anatomy	5 hours
ZOO 4603C	Embryology/Development	5 hours
ZOO 4753C	Vertebrate Histology	5 hours
	A PARTY AND A PART	

Group D

BCH 4053 and 4054	Biochemistry	6 hours
BOT 4503C	Plant Physiology	4 hours
MCB 4414	Microbial Metabolism	3 hours
PCB 3233	Immunology	3 hours
PCB 4723	Animal Physiology	4 hours

Supplemental*

*With the advisor's approval, seniors may take the following 5000 level courses to meet the restricted electives credit requirements:

BOT 5495	Bryology		3 hours
BOT 5686	Conservation of Native PI	lants	4 hours
BOT 5705	Plant Biosystematics		4 hours
PCB 5326	Ecosystems of Florida		5 hours
PCB 5045	Conservation Biology		4 hours
PCB 5046	Advanced Ecology		5 hours
PCB 5675	Evolutionary Biology		4 hours
ZOO 5456	Icthyology		4 hours
ZOO 5463	Herpetology		4 hours
ZOO 5475	Ornithology		4 hours
ZOO 5483	Mammalogy		4 hours
ZOO 5745	Neuroanatomy		4 hours
ZOO 5815	Zoogeography		4 hours
Independent Study	Contractor and a second second	Maximum of	4 hours

5. Unrestricted electives (may include 8 hours of additional biology courses) 12-20 hours

6. Total Minimum Hours Required for B.S. in Biology

105

120 hours

Bachelor of Science: Biology/Preprofessional

The University of Central Florida does not offer a preprofessional degree. However, most preprofessional students earn a B.S. degree in Biology while completing their admission requirements for professional school. The following suggested curriculum is *not* a degree program but simply a composite suggestion as to how one might complete a degree in Biology while completing entrance requirements for professional or graduate school. Note that the minimum cognate science requirements listed below are more rigorous than those listed earlier under Departmental requirements.

1.	See University undergraduate degree requirements for						
	GEP courses required outside	27 hours					
2.	Required Departmental Core	54 hours					
	A. Biology		21 hours				
	BOT 2010C	General Botany	4 hours				
	BSC 2010C	General Biology	4 hours				
	ZOO 2010C	General Zoology	4 hours				
	PCB 3023	Molecular Cell Biology	3 hours				
	PCB 3043	Ecology	3 hours				
	PCB 3063	Genetics	3 hours				
	B. Cognate Sciences	Augustalian a found	33-35 hours				
	CHM 2045, 2046, 2046L	Chem, Fund I and II with lab	8 hours				
	CHM 3210, 3211, 3211L	Organic Chem. I & II with lab	8 hours				
	PHY 3053C, 3054C	College Physics I & II	8 hours				
	or	or	Uniouis				
	PHY 3048, 3048L and	Physics for Eng. & Sci. I with lab and	4 hours				
	PHY 3049, 3049L	Physics for Eng. & Sci. II with lab	4 hours				
			3 hours				
	MAC 1104 or higher	College Algebra or higher	3 nours				
	and	and Concerned Coloulus	O haven				
	MAC 3233	Concepts of Calculus	3 hours				
	or	or contraction of					
	MAC 3311, 3312	Calc & Anal Geom I & II	8 hours				
-	STA 3023	Statistical Methods	3 hours				
3.		es: The below courses are suggested as	26 hours				
	being appropriate to various preprofessional students. Actual selections						

being appropriate to various preprofessional students. Actual selection should be carefully made in consultation with the student's advisor while paying attention to the specific admission requirements of the particular professional school to which the student expects to apply.

	MCB 3013C	General Microbiology	5 hours			
	BOT 3800	Group B	2 hours			
	BOT 3800	Ethnobotany	3 hours			
		Group C				
	PCB 3063L	Genetics Lab	1 hour			
	ZOO 3713C	Comp Vert. Anat.	5 hours			
	ZOO 4603C	Embryology/Development	5 hours			
	ZOO 4753C	Vertebrate Histology	5 hours			
		vpoloveloj bit				
		Group D				
	PCB 3233, PCB 3233L	Immunology	4 hours			
	PCB 4723	Animal Physiology	4 hours			
	BCH 4053 & 4054	Biochemistry	6 hours			
Ur	Unrestricted Electives may include electives appropriate to particular 11-13 hour					

 Unrestricted Electives may include electives appropriate to particular professional subspecialty. Students should carefully select unrestricted electives with the assistance of their preprofessional advisor.

CANADIAN STUDIES PROGRAM

Canadian Studies offers both a certificate and a minor but not a major. This program is interdisciplinary and includes courses from the departments of Criminal Justice and Legal Studies, English, Foreign Languages, History, Political Science, Sociology and Anthropology, and the College of Engineering. In addition, UCF is the site of the Florida-Canada Institute, a state program which offers other activities relating to Canada. For information consult Dr. M. Elliot Vittes, Director of Canadian Studies, at the Florida Canada Institute Center, FA 408D, (407) 823-2608.

DEPARTMENT OF CHEMISTRY

Chair: G. Cunningham, CH 117, Phone (407) 823-2246

Faculty: Beck, Clausen, Elsheimer, Gupton, Hampton, Hertel, Juge, Kujawa (Geology), Madsen, Mattson, McCann, McGee (Forensic Science), Miles, Richardson, Trefonas

The Department of Chemistry offers courses and programs which lead to a Bachelor of Science in Chemistry, a Bachelor of Science in Forensic Science, a minor in Chemistry and a Master of Science in Industrial Chemistry.

The undergraduate degree program in chemistry is accredited by the American Chemical Society Committee on Professional Training. It prepares the graduate for career opportunities in the chemical or related industries or in government laboratories. The program may also lead to further study at the graduate level in chemistry or in a related area such as pharmacology or toxicology. With an appropriate choice of electives it also constitutes excellent preparation for the professional schools of dentistry, medicine, and veterinary medicine.

MINOR

The Department of Chemistry offers a minor consisting of a minimum of 28 semester hours.

Required courses (20-22 semester hours): CHM 2045, 2046, 2046L, 3210, 3211, 3211L, and 3120C.

Restricted electives (6-8 semester hours minimum): At least one course must be selected from group I and the remaining from group I and/or II:

Group I: CHM 3212L, 4130C; BCH 4103L, CHS 3531, CHM 3411L, CHM 5451L

Group II: BCH 4053, 4054, CHM 3410, 3411, 4220, 4221, CHS 4110C, 4200, CHM 5235, 5450

To be eligible for a minor in Chemistry a student must have a GPA of at least 2.0 in all UCF Chemistry courses and an overall 2.0 GPA in all Chemistry courses used to satisfy this requirement. A minimum of 11 hours of Chemistry must be earned at UCF and no D grades from another institution will be accepted.

Bachelor of Science: Chemistry

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. To be eligible for an undergraduate degree in Chemistry a student must have an overall GPA of at least 2.0 in all UCF Chemistry courses and an overall 2.0 GPA in all Chemistry courses (including transfer courses) used to satisfy this requirement. Grades earned in CHM 4932 and CHM 4912 will not be applied to determination of the Chemistry GPA. At least 15 Chemistry credits must be earned at UCF.

4. Required Courses

CHM 204	5, 2046 C	chemistry Fundamentals I, II	7 hours
CHM 2046	GL C	chemistry Fundamentals Laboratory	1 hour
CHM 3210	0, 3211 C	Organic Chemistry I, II	6 hours
CHM 321	1L, 3212L C	Organic Laboratory Techniques I, II	4 hours
CHM 3120	DC A	nalytical Chemistry	5 hours
CHM 3410	0,3411 P	hysical Chemistry I, II	7 hours
CHM 341	IL P	hysical Chemistry Laboratory	2 hours
CHM 4610) Ir	norganic Chemistry	3 hours
CHM 4610	DL Ir	norganic Chemistry Laboratory	2 hours
CHM 4130	DC A	dvanced Analytical Laboratory Technique	4 hours
CHM 4912	2 U	Indergraduate Research	4 hours
CHM 4932	2 C	hemistry Seminar	1 hour

	ENC 3241 MAC 3311, 3312, 3313 PHY 3048, 3048L,	Technical Report Writing Calculus with Analytic Geometry I, II, III Physics for Engineers & Scientists	3 hours 12 hours 8 hours
	3049, 3049L STA 3023	Statistical Methods I	3 hours
5.	Restricted Electives a. Biological Sciences (minim	um of 7 hours)	
	BSC 2010C	General Biology	4 hours
		to those biology courses not listed as	
	designed for non-majors. b. Minimum of 3 hours		3 hours
	COP 2500	Computer Science I	3 hours
	COP 3200	Computer Programming	3 hours
	CGS 3422	Programming and Numerical Methods	3 hours
	c. Minimum of 3 hours		
	PHY 3752C	Physics of Scientific Instruments	4 hours
	CET 3123C	Microprocessor Electronics	3 hours
	EEL 3341C	Introduction to Digital Circuits	3 hours
	EEL 3342C	Intro to Digital Circuits and Systems	4 hours
	d. Minimum of 6 hours		
	BCH 4053	Biochemistry I	3 hours
	BCH 4054	Biochemistry II	3 hours
	CHM 4220	Advanced Organic Chemistry I	3 hours
	CHM 5235	Applied Molecular Spectroscopy	3 hours
	CHM 4221	Advanced Organic Chemistry II	3 hours
	CHM 5580	Advanced Physical Chemistry	3 hours
	CHM 5450	Polymer Chemistry	3 hours
	CHS 5451 CHS 4110C	Polymer Chemistry Laboratory Nuclear and Radio Chemistry	2 hours 3 hours
	CHS 4200	Concepts in Industrial Chemistry	3 hours
	0110 4200	Total Semester Hours Required	128
		rotar bemester riburs nequiled	120

Forensic Science Program

Director: W. W. McGee, CH 221, Phone (407) 823-2788

Forensic Science is the profession which serves the scientific needs of the justice system. The program at UCF has been designed to provide the student with an educational background in the professional specialty of criminalistics.

The principal job of the forensic scientist is to scientifically examine physical evidence gathered at the scene of a suspect criminal action. The criminalist may work on physical evidence such as blood, hairs, fibers, or pharmaceutical and clandestine drug preparations. Upon completion of an investigation the forensic scientist presents his findings in court. The goal of the Forensic Science program is to prepare students for this demanding profession.

Bachelor of Science: Forensic Science

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses

BSC 2010C	General Biology	4 hours
CHM 2045, 2046	Chemistry Fundamentals I, II	7 hours
CHM 2046L	Chemistry Fundamentals Laboratory	1 hour
CHM 3210, 3211	Organic Chemistry I, II	6 hours
CHM 3210L	Organic Laboratory Techniques I	2 hours
CHM 3120C	Analytical Chemistry	5 hours
CHS 3501	Introduction to Forensic Science	3 hours
CHS 3505	Forensic Microscopy	3 hours
CHS 3531	Forensic Analysis of Controlled Substances	3 hours
CHS 4591	Forensic Science Internship	6 hours
COP 3200	Computer Programming	3 hours

ENC 3241
CHM 3410
CHM 4130C
MAC 3253, 3254
PHY 3053C, 3054C
STA 3023

Technical Report Writing Physical Chemistry I Advanced Analytical Chemistry Applied Calculus I, II College Physics I, II Statistical Methods I 3 hours 4 hours 4 hours 6 hours 8 hours 3 hours

4. Restricted Electives

The intent of the restricted electives is to provide the major with an opportunity to select in consultation with his/her advisor, a minimum of 13 hours of coursework which will complement the student's specialized program of study in the major field. These courses will include BOT 2010C, General Botany or MCB 3010C. General Microbiology, with the remainder normally selected from upper division courses of science or forensic science. Exceptions to these stipulations must be approved by the student's advisor.

5. Electives

Total Semester Hours Required

5 hours 120

SCHOOL OF COMMUNICATION

Interim Director: M.D. Meeske, FA 534, Phone (407) 823-2681

Faculty: Arnold, Blum, J. Butler, Collins, Davis, Fedler, Fowles, Grasty, Hall, Harpole, Hoglin, Hooper, Johnson, F. Johnson, M. Jones, Long, Maunez-Cuadra, Meeske, O'Hara, O'Keefe, Pryor, R. Smith, Tanzi, Taylor, Weider-Hatfield, Welke, Wycoff

The School of Communication offers Bachelor Degree programs in five specific areas. Students have the option of selecting a specialized track for the Film or Journalism degree:

- 1. Bachelor of Arts: Interpersonal Communication
- Bachelor of Arts: Journalism A. News/Editorial Track B. Advertising/Public Relations Track
- 3. Bachelor of Arts: Organizational Communication
- 4. Bachelor of Arts: Radio-Television

 Bachelor of Arts: Motion Picture Technology A. Production-Screenwriting B. Animation Any student contemplating graduate study should be aware of special requirements in some graduate schools, such as foreign languages, statistics, and computer sciences.

Admission to the School of Communication

The Radio-Television, Motion Picture Technology and Journalism (both News Editorial and Advertising/Public Relations) degree programs are designated limited access. Limited access means there are additional requirements over and above those set for general admission to the University.

Interpersonal Communication and Organizational Communication are **not** limited access degree programs. The policies set for general admission to the University are sufficient to enter the Interpersonal or Organizational Communication majors.

Admission Deadlines

Students intending to major in Radio/Television, Journalism or Motion Picture Technology must apply for admission to the School of Communication through the School office.

Radio/TV and Journalism

Students planning to major in Radio/TV or Journalism (News Editorial or Advertising/ Public Relations) should apply only **after** completing all requirements for admission. Deadlines are:

October 7, 1994 for Spring, 1995. March 3, 1995 for Summer, 1995. July 7, 1994 for Fall, 1995.

Motion Picture Technology

Applications for the Motion Picture Technology major are accepted only ONCE PER YEAR. Applications will be accepted January 14, 1995 for admission to Fall term, 1995.

Interpersonal and Organizational Communication

Students NEED to apply to the School office to enter these majors. Only general University admission policies must be met, but students must submit an application to be

placed in the major. Students wishing to major in Interpersonal or Organizational Communication should see an advisor to obtain proper counseling.

Graduation Requirements

- A final 2.25/4.00 grade point average in all required courses for a major (not required of Interpersonal or Organizational Communication majors) must be completed in order to graduate with a major in the School. NOTE: This grade point average does not include Restricted Electives in the major or other electives.
- 2. Students electing both a major and minor in the School must take the minor courses in excess of the 12 hours required for graduation.
- The School requires that students initiate a request for a review of graduation requirements at the beginning of the anticipated term of graduation. Failure to file the request may delay graduation.
- 4. Two semesters/proficiency in Foreign Language is required of all majors.
- 5. Completion of a 24 hour residency requirement in the major after being admitted. Courses in the major taken prior to admission to the major may meet specific requirements and will count toward the total University hours, but a School residency requirement of 24 hours must be met.

Transfer Limitation

Generally, students may not substitute lower division courses taken at community colleges for upper division courses in the School of Communication (except Florida common numbered coursework). Students wishing to transfer courses from other colleges must apply for equivalency credit. College catalog, course syllabus, textbook used, or other supporting information must be provided by the student. The Divisions of the School of Communication will evaluate applications for equivalency. [See School Residency requirement above.]

MINORS

The School of Communication offers the following minors:

- Interpersonal Communication COM 3311 (3), SPC 3301(3), and 15 credit hours chosen from: COM 3011 (3), SPC 3425 (3), SPC 4330 (3), SPC 4350 (3), SPC 4540 (3), COM 4461 (3) or COM 4462 (3).
- Organizational Communication COM 3120 (3), COM 3311 (3), and 15 credit hours chosen from: COM 3011 (3), COM 3110 (3), SPC 3425 (3), SPC 3445 (3), COM 4461 (3) or COM 4462 (3).
- Mass Communication

 Redit hours chosen from: ADV 4000, FIL 3400, FIL 3410, JOU 3004, MMC 4200, PUR 4000, RTV 3000, or RTV 4403.

Bachelor of Arts: Interpersonal Communication

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college requirements.
- 3. Required Courses

COM 3011	Communication and Human Relations	3 hours
COM 3311	Communication as a Behavioral Science	3 hours
ENC 3210	Business Report Writing	3 hours
SPC 3301	Interpersonal Communication	3 hours
SPC 3425	Group Interaction and Decision Making	3 hours
SPC 3601	Advanced Public Speaking	3 hours
	or	
SPC 3511	Argumentation and Debate	3 hours
SPC 4330	Nonverbal Communication	3 hours
SPC 4350	Studies in Listening	3 hours
SPC 4540	Attitudes and Communication	3 hours
SPC 4440	Group Dynamics	3 hours

- 4. Restricted Electives
 - Six credit hours in the School of Communication
- 5. Electives A minimum of 9 upper division credit hours in one department outside the School of Communication.

Total Semester Hours Required

A maximum of 3 credit hours of internship may be earned in one semester. A total of 6 may be earned within the 120 credit hours required for graduation. Students should check with their advisor for prerequisites and other requirements.

Bachelor of Arts: Journalism

Admission Requirements

- An overall minimum 2.25/4.00 grade point average based on a minimum of 30 credit hours of college work. Note: meeting the **minimum** GPA does not guarantee admission since students are admitted on a space available basis. THE GPA CUT OFF FOR 1993-1994 WAS 2.75.
- Passage of a basic grammar examination involving basic proficiency in grammar, punctuation, and word usage. Testing is conducted prior to and throughout each semester and remedial options are provided.
- Passage of a Keyboard Proficiency Test (20 wpm). The test may be taken ONLY three times. Completion of a basic college keyboard or typing course with a grade of "C" will satisfy the requirement.
- 4. See Undergraduate Degree Requirements
- Required Courses. Students must select and complete one of the areas of specialization listed below.
- 6. Restricted Electives (See Area of Specialization)
- 7. Electives (See Area of Specialization)

AREAS OF SPECIALIZATION

1. Required Courses: News-Editorial Track

	JOU 3004	History of American Journalism	3 hours
	JOU 3100*	News Reporting	3 hours
•	JOU 3101*	Advanced News Reporting	3 hours
	JOU 3200	Editing I	3 hours
	JOU 3201*	Editing II	3 hours
	JOU 4104*	Public Affairs Reporting	3 hours
	JOU 4300*	Feature Writing	3 hours
	MMC 4200	Mass Communication Law	3 hours
	MMC 4602	Contemporary Media Issues	3 hours
	PGY 3610	Photojournalism I	3 hours
and.	visted Elections	and the second se	

Restricted Electives JOU/PGY

Elective

3 hours

*Prerequisite Grammar Proficiency Examination and Typing Proficiency Test required. Some courses may also require a minimum grade of "C" in prerequisite courses.

The Journalism faculty strongly recommends that News-Editorial majors work for the student newspaper, *The Central Florida Future*. In addition, News-Editorial majors may obtain an off-campus internship, with a commercial weekly or daily newspaper, or with a magazine. To enroll for credit, students must have a 2.5 GPA in their required major courses. Students with less than a 2.5 GPA will not be given academic internship credit. A maximum of 3 credit hours may be earned in one semester, with a total of 3 within the 120 required for graduation. Students should consult with their adviser for prerequisites and other requirements.

Required Minor:

News-Editorial majors must complete a minor in an academic area outside of the School of Communication or complete a 15-credit hour area of concentration approved by the Faculty.

2. Required Courses: Advertising/Public Relations Track

ADV 4000	Principles of Advertising	3 hours
ADV 4003	Advertising Layout and Copywriting	3 hours
ADV 4101*	Advertising Copy and Campaigns	3 hours
ADV 4103	Radio-TV Advertising	3 hours

COM 3110	Business and Professional Speaking	3 hours
COM 3311	Communication as a Behavioral Science	3 hours
MMC 4200	Mass Communication Law	3 hours
PGY 3610	Photojournalism I	3 hours
PUR 3100*	Writing for Public Relations	3 hours
PUR 4000	Public Relations	3 hours
PUR 4941	Internship	3 hours
	or methods which have been been been been been been been be	
ADV 4941	Internship	3 hours
	or Ousternool strains	
PUR 4800	Public Relations Campaigns	3 hours

*Prerequisite Grammar Proficiency Examination and Typing Test required.

A maximum of 6 credit hours of internship may be earned in one semester. A total of 9 credit hours of internship may be earned within the 120 credit hours required for graduation. Students should consult with their adviser for prerequisites and other requirements.

Bachelor of Arts: Organizational Communication

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or school requirements.
- 3. Required Courses (27 credit hours)

COM 3011	Communication and Human Relations	3 hours
COM 3110	Business and Professional Speaking	3 hours
COM 3120	Organizational Communication	3 hours
COM 3311	Communication as a Behavioral Science	3 hours
COM 4941	Internship	3-6 hours
ENC 3210	Business Report Writing	3 hours
PUR 4000	Principles of Public Relations	e neuro
	or	3 hours
ADV 4000	Principles of Advertising	e neuro
SPC 3425	Group Interaction and Decision Making	3 hours
	or	
SPC 3445	Leadership	3 hours
SPC 4440	Group Dynamics	3 hours
tricted Electives	croup bynamico	e neare

4. Restricted Electives

Six (6) to Nine (9) credit hours in the School of Communication 5. Electives

A minimum of 9 upper-division credit hours in one department outside the School of Communication.

Total Semester Hours Required

120

A maximum of three (3) credit hours of internship may be earned in one semester. A total of six (6) credit hours of internship may be earned within the 120 credit hours required for graduation. Students should consult with their adviser for prerequisites and other requirements.

Bachelor of Arts: Radio-Television

Admission Requirements

- An overall minimum 2.25/4.00 grade point average based on a minimum of 30 credit hours of college work. Note: meeting the minimum GPA does not guarantee admission since students are admitted on a space available basis. THE GPA CUT OFF FOR 1993-1994 WAS 2.75.
- Passage of a basic grammar examination involving basic proficiency in grammar, punctuation, and word usage. Testing is conducted prior to and throughout each semester and remedial options are provided.
- Passage of a Keyboard Proficiency Test (20 wpm). The test may be taken ONLY three times. Completion of a basic college keyboard or typing course with a grade of "C" will satisfy the requirement.

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See Special college and/or School requirements.
- 3. Required Courses

RTV 3000	Foundations of Broadcasting	3 hours
RTV 3200	Broadcast Techniques	4 hours
RTV 3210	Radio Production	
	or	4 hours
RTV 3260	Electronic Field Production	
RTV 3300*	Broadcast Newswriting	4 hours
RTV 3501*	Broadcast Copywriting	3 hours
RTV 4403	Radio/Television and Society	3 hours
RTV 4700	Broadcast Regulations	3 hours
RTV 4800	Broadcast Management	3 hours
Restricted Electives	A A A A A A A A A A A A A A A A A A A	

- Six credit hours in the School of Communication
- 5. Electives

4

Total Semester Hours Required

Students are encouraged to work with WUCF radio to gain practical experience. In addition, students should arrange for an internship off campus in a professional broadcast, production, or corporate operation. A maximum of 3 credit hours of internship may be earned in one semester. A total of 6 credit hours of internship may be earned within the 120 credit hours required for graduation. A maximum of 3 credit hours of internship may be counted as a Restricted Elective. Summer internships are available during "C" term only. Students should consult with their advisor for prerequisites and other requirements.

*Prerequisite Grammar Proficiency Examination and Typing Proficiency Test required.

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Bachelor of Arts: Motion Picture Technology

Limited Access

Access to this program is based on a selective set of requirements which differ from other School of Communication majors. Students meeting the minimum requirements for admission will be admitted on a space available basis. The basic requirements for admission consideration to the Motion Picture Technology program are:

- 1. An overall 3.0 grade point average based on a minimum of 45 credit hours of college work
- 2. Submission of a written essay
- 3. A portfolio or additional information should be submitted
- 4. A maximum of three courses in film completed prior to acceptance into the program may be counted toward the major.
- NOTE: Applications are accepted ONLY once per year. See paragraph on School Admission Application.

Graduation Requirements

Students will be required to continue to meet the following minimum standards after acceptance into the Motion Picture Technology program.

1. An overall 3.0 grade point average.

Degree Requirements

- 1. University graduation requirements
- 2. Special College and/or School requirements
- 3. Required Courses: Students must select and complete one of the areas of specialization listed below.
- 4. Restricted Electives (See Area of Specialization)
- 5. Electives

Areas of Specialization

Aleas	or specialization		
1. Rec	uired Courses: General F	Production/Screenwriting	25 hours
	FIL 3100	Introduction to Scriptwriting	3 hours
	FIL 3200	Introduction to Film Production	3 hours
	FIL 3300	Documentary Film	3 hours
	FIL 3400	History of the Motion Picture	3 hours
	FIL 3922	Film Colloquium	2 hours
	FIL 3503	Film Theory	3 hours
	FIL 4201	Intermediate Film Production	3 hours
	FIL 4208	Film Director	
	and the set of the set		3 hours
	FIL 4601	Production Management	3 hours
	Restricted Sequence Ele	ectives: Six (6) credit hours FIL courses.	
		Total Semester Hours Required	120 hours
2. Rec	uired Courses: Animation	Provide a second second second second second	28 hours
	FIL 3100	Introduction to Scriptwriting	3 hours
	FIL 3200	Introduction to Film Production	3 hours
	FIL 3242	Introduction to Cel Animation	3 hours
	FIL 3400	History of the Motion Picture	3 hours
	FIL 3410	History of Animated Film	3 hours
	FIL 3922	Film Colloquium	2 hours
	FIL 4201	Intermediate Film Production	3 hours
	FIL 4231	Intro to Computer Animation	3 hours
	FIL 4932	Intermediate Computer Animation	3 hours
	Hestricted Sequence Ele	ectives: Six (6) credit hours FIL courses.	
		Total Semester Hours Required	120 hours

A maximum of three (3) credit hours of internship may be earned in one semester. A total of six (6) may be earned within the 120 credit hours required for graduation. Check with your adviser for prerequisites and other requirements.

DEPARTMENT OF COMPUTER SCIENCE

Chair: T. Frederick, CCII 205, Phone (407) 823-2341

Faculty: Bassiouni, Brigham, Cottrell, Deo, Driscoll, Dutton, Frederick, Gerber, Gomez, Goudreau, Guha, Hua, Hughes, Lang, Leeson, Lindholm, Lobo, Moshell, Mukherjee, Orooji, Shah, Vemulapati, Workman.

The Department of Computer Science offers courses and programs leading to Bachelor of Science, Master of Science (see Graduate Catalog), and Doctor of Philosophy (see Graduate Catalog) degrees in Computer Science. In addition, the Department offers a general minor in Computer Science and a minor in Applied Computer Science.

Computer Science strives to meet the computer personnel needs of the scientific, business, and industrial community by producing graduates with a broad base of formal courses as well as a concentration in selected areas. In addition, the Department conducts research in programming systems/languages, information systems, computer architecture, computational methods, and other areas.

The Department requires that students initiate a request for a review of graduation requirements at the beginning of the anticipated term of graduation. Failure to file the request may delay graduation.

Computer Facilities

The Department of Computer Science provides computer laboratories for our faculty and students, for a variety of courses and research projects. Computing equipment consists of several large servers including a Sun SparcServer 690MP, several Sun-3, SPARC, and Silicon Graphics workstations, over thirty terminals (both traditional and X-terminals), four-teen dial-up modems, and a collection of Macintoshes and DOS/Windows platforms. Laboratory space now totals over 4500 square feet, 1200 of which were recently added to support the Center for Parallel Computation. All major systems are networked and run Unix, X-Windows, NFS, and a variety of programming languages such as FORTRAN, Pascal, Ada, C, C⁺⁺, Concurrent C, Lisp and Prolog. Graduate students and faculty are the primary users of departmental resources while the campus central computing facility provides computing resources for undergraduates.

Research Laboratories

Numerous Sun-3 and Sun-4 (SPARC) workstations, DECStation 5000's and 3100's, a NeXT computer, and Silicon Graphics Personal Iris and 4D70 workstations are available for research and graduate instruction in VLSI design, computer graphics and image processing. Viewlogic, Lager, and Berkeley VLSI CAD tools MAGIC and OCT run on our Sun workstations.

Our Center for Parallel Computation houses a DECmpp 12000(MasPar MP-1) with 8,192 processors and a BBN Butterfly GP1000+ parallel computer with 64 processors and a total of 256 Megabytes of memory. The new laboratory for undergraduates uses this state-of-the art equipment providing access through six DECstation 5000's and six terminals.

The Visual Systems Laboratory contains an Evans and Sutherland ESIG 500 real time image generator, three Silicon Graphics Iris workstations, several Sun SPARCstations, a Sun 386i, two NeXT computers, and many Macintoshes and PCs. The Intelligent Systems Laboratory has a Symbolics 3653 LISP machine. The Computer Vision Laboratory centers around a SparcServer 670MP connected to SparcStations and a collection of imaging equipment.

Many laboratory systems support Smalltalk and a variety of other object-oriented programming languages. The graphics workstations have state-of-the-art drawing, animation, rendering and scene management software, and constraint software used in physical modeling. Parallel processing software includes parallel C and FORTRAN compilers (for the DECmpp 12000, and the Butterfly) parallel computer simulation software (for Hypercube and GAPP architectures) and parallel environments C-Linda, PVM, PCN and the Cosmic Cube from Calltech.

Other Facilities

Other computing facilities available to students and faculty include an IBM 4381 with VM/CMS and several large clusters of IBM PCs and PS/2s scattered around the campus and interconnected via a Novell network. A workstation lab for UNIX access for undergraduates was established in Spring 1993.

Gateways

All the department's computers are interconnected by local and campus-wide Ethernets, and linked to the outside world via the Internet. The campus network includes connections to the Central Florida Research Park, near the main campus, and to the state network, which affords access to supercomputer cycles on the Cray Y-MP at the Supercomputer Research Institute in Tallahassee. In addition, the department is directly linked to the Internet, affording on-line access to other computer systems around the world.

MINORS

The Department of Computer Science offers the following minors, each consisting of a minimum of 18 semester hours of computer science coursework. A minimum grade of C is required in each course. At least nine hours must be completed from the courses taught by UCF Department of Computer Science.

1. Minor in Applied Computer Science

- a. Required courses (7 hours): CGS 1060, COP 2500, 3210
- b. Restricted Electives: at least 5 hours from CAP 3xxx, 3xxx, 3xxx, 3xxx, 3xxx, 3xxx, 3xxx, CAD 3xxx, 3xxx, CAD 3xxx, 3xxx, CAP 3xxx, 3xxx, CAP 3xxx, 3xxx,
- c. Electives: coursework approved by the CS department to complete the total of 18 semester hours.
- 2. General Computer Science Minor
 - a. Required courses (12 hours): COP 2500, 2501, 3400, 3530.
 - b. Restricted Electives: at least 6 hours from COP 3402, 4020, 4124, 4600, 4710, COT 3100, 4500.

Bachelor of Science: Computer Science

Degree Requirements

 A four-semester-hour Biology course with a laboratory is required, and this requirement is to be satisfied by BSC 1020C, BSC 1030C or BSC 2010C.

- Two semesters of credit normally selected from foreign languages. With prior department approval, cultural/multi-cultural or related courses may be used to satisfy this departmental requirement.
- 3. GPA Requirements
 - a. A minimum GPA of 2.0 in all course work;
 - A minimum grade of "C" in each required course (these courses are those in Section 5 below);
 - c. A minimum GPA of 2.5 in upper division required courses (these courses are listed in section 5.II below). Only the highest grade for a course is used in determining this GPA requirement.
- Departmental Residency Requirement: At least eighteen semester hours of regularly scheduled 4000- and 5000-level courses must be taken from the UCF Computer Science Department.
- 5. Required courses:
- I. COMPUTER SCIENCE CORE: 42 hours Computer Science Courses COP 2500 Computer Science I 3 hours COP 2501 Computer Science II 3 hours COP 3400 Assembly Language 3 hours COP 3402 Computer Systems Concepts/Programming 3 hours COT 3100 Introduction to Discrete Structures 3 hours COP 3530 3 hours Computer Science III Support Courses MAC 3311 Calculus with Analytic Geometry I 4 hours MAC 3312 Calculus with Analytic Geometry II 4 hours STA 3023 Statistical Methods I 3 hours 3 hours PHY 3048 Physics for Engineers & Scientists I PHY 3049 Physics for Engineers & Scientists II 3 hours PHY 3049L Physics for Engineers & Scientists Lab. II 1 hour EEL 3341C Introduction to Digital Circuits 3 hours ENC 3241 Technical Report Writing 3 hours II. UPPER DIVISION REQUIRED COURSES: 12 hours CDA 4150 Introduction to Computer Architecture 3 hours 3 hours COT 4210 Discrete Computational Structures COP 4020 Programming Languages I 3 hours COP 4600 **Programming Systems** 3 hours **III. RESTRICTED ELECTIVES** 16 hours

a. At least ten hours of 4000- and 5000-level computer science courses.

- b. At least four hours of mathematics and/or statistics, exclusive of independent study. Course work must be selected from 4000- and 5000-level Mathematics/ Statistics courses and the following courses: MAC 3313, MHF 3104, MAP 3302, MAS 3105, MAS 3106.
- c. The remaining two hours can be more courses from (a) or (b) or from the following courses: ACG 2023, MAN 3025, MAE 3023, FIN 3403, MAN 3301, EEL 4701C.
- d. At most four hours of independent study in computer science may be used.
- 6. Electives

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120

Bachelor of Arts: Economics

Contact Person: J. Boyte, FA 202, Phone (407) 823-2492

The Bachelor of Arts in Economics is designed to provide students with a liberal arts background to serve as a strong foundation for future graduate studies or as training for a career in politics, teaching, research, social services and a variety of other areas. Successful completion of this program leads to the Bachelor of Arts degree with a major in Economics.

Degree Requirements

1. See Undergraduate Degree Requirements

2. See special college and/or department requirements

3. He	equirea courses		
	ECO 2013	Principles of Economics I	3 hours
	ECO 2023	Principles of Economics II	3 hours
	ECO 3101	Intermediate Price Theory	3 hours
	ECO 3203	Aggregate Economic Conditions Analysis	3 hours
	ECO 3411	Quantitative Methods and Business	
		Decision Analysis	3 hours
4. Re	estricted Electives	memory GPR of 2.5 x months to month or and the	
a.	Select Six Courses:		
	ECO 3233	Money and Banking	3 hours
	ECO 3401	Mathematical Economics	3 hours
	ECO 3622	American Economic History	3 hours
	ECO 3703	International Economics	3 hours
	ECO 3723	International Commercial Policy	3 hours
	ECO 4303	History of Economic Thought	3 hours
	ECO 4412	Economic Statistics and Econometrics	3 hours
	ECO 4504	Economics of the Public Sector	3 hours
	ECP 3004	Seminar in Current Economic Topics	3 hours
	ECP 3203	Contemporary Labor Economics	3 hours
	ECP 3433	Transportation Economics	3 hours
	ECP 4403	Business, Government & Industrial	
		Organization	3 hours
	ECP 4603	Urban and Regional Economic Problems	3 hours
	ECP 4703	Managerial Economics	3 hours
	ECS 4003	Comparative Economic Systems	3 hours
	ECS 4013	Economic Development	3 hours
	ECS 4303	Economics of European Integration	3 hours
b.	Twenty-seven hours	of additional courses, including the completion of a	
	minor from one of the	e following areas: Computer Science, Mathematics,	

Statistics, or the Social and Behavioral Sciences.

5. Electives

Total Semester Hours Required

120

DEPARTMENT OF ENGLISH

Chair: J. Schell, FA 301, Phone (407) 823-2212

Faculty: Adicks, Astro, Barnes, Bartkevicius, Bell, Brain, Donnelly, Flammia, George, Greenberg, Hemschemeyer, Jaffe, Jones, Keller, Lilley, Murray, Omans, Rushin, Schiffhorst, Seidel, Smith, Sommer, Stap, Umphrey, Wyatt

The Department of English is responsible for the effective teaching of language and literature in English, including World Literature, and creative, expository, and technical writing. Students may concentrate in creative writing, technical writing, or literature. The Department serves the broad needs of the University with course offerings in writing and literature for students from other departments. The department has a Technical Documentation Writing Lab and also publishes *The Florida Review* and *The Cypress Dome*.

An Honors in English program provides an enriched course of study for exceptional students, leading to graduation with honors. Program description follows concentration degree plans.

Foreign Language proficiency equivalent to three semesters is required of all majors.

Only courses with a grade of "C" or better may be applied to the English Major and Minor. Transfer students are expected to complete at UCF a majority of their hours in an English major or minor.

MINOR

The Department of English offers the following minors:

Creative Writing Minor: 21 semester hours from the following: CRW 3003, CRW 3100 or CRW 3300 or CRW 3410, CRW 4122 or CRW 4320 or CRW 4420. 12 hours from CRW 3310, CRW 4114, CRW 5932, and any of the above courses not already used.



Literature Minor: 21 semester hours with no fewer than 12 completed at UCF. Requirements: 12 semester hours selected from ENL 3010, ENL 3021, ENL 4373, AML 3031, AML 3051, LIT 2110, LIT 2120. 9 additional semester hours of English courses chosen by the student and advisor.

Linguistics Minor: 18 semester hours. Required courses: LIN 3010, LIN 4100, LIN 4341, 9 remaining hours to be chosen from LIN 4202, LIN 4612, LIN 4801, LIN 4660, LIN 5137, ANT 3610, PHI 4220, or any course approved by the Linguistics Committee.

Technical Writing and Editing Minor: 22 semester hours, as follows: ENC 2290, 3211, 3311, 4215, 4218, 4293, 4294, 4295. Students completing the minor may intern with a Central Florida corporation.

Bachelor of Arts: English

- 1. See Undergraduate Degree Requirements
- See special College and/or department requirements
 Required courses
- Foundation (for all concentrations)

Choose two of the following three:

LIT 3000	Introduction to Literary Interpretation	3 hours
CRW 3003	Creative Writing for English Majors	3 hours
ENC 3211	Introduction to Technical Writing	3 hours
Choose three of the follo	owing four:	
ENL 3010	English Literature I	3 hours
ENL 3021	English Literature II	3 hours
AML 3031	American Literature I	3 hours
AML 3051	American Literature II	3 hours
Restricted Electives		

Restricted Electives

(See Literature, Creative Writing, and Technical Writing concentrations below.)

5. Electives

To be selected primarily from upper level courses with advisor's approval.

Total Semester Hours Required

120

CONCENTRATIONS

1. Literature

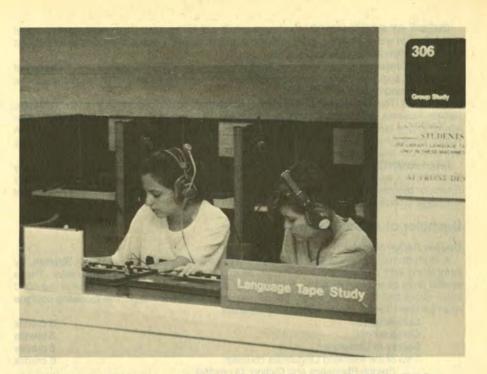
2. (

Literature	and the second of the second of the second second second	
Required (9 hours)		
AML 3031, AML 3051, E	ENL 3010, or ENL 3021 not completed in core	3 hours
ENL 4311	Chaucer	
or		
ENL 4341	Milton	3 hours
or		
ENL 4330	Shakespeare	
LIN 3010	Principles of Linguistics	3 hours
or		
LIN 4100	History of the English Language	
Choose 12 hours from	the 3000 or 4000 level courses offered under A	ML, ENL,
and LIT prefixes.		
Creative Writing		
Choose Two (6 hours)		
CRW 3100	Fiction Writing	
CRW 3300	Poetry Writing	
ENC 3310	Magazine Writing	
CRW 3410	Script Writing	
Choose Two (6 hours)		
CRW 4120	Fiction Writing Workshop	
CRW 4320	Poetry Writing Workshop	
CRW 4410	Script Writing Workshop	
Writing workshop may b	e repeated once for credit.	
Choose One (3 hours)		Y
CRW 3310	Structure of Verse	
CRW 4172	History of Prose Style	
CRW 3008	Literary Magazines	
Choose Two (6 hours)	How have a second of the second	
ENL 4311	Chaucer	
ENL 4330	Shakespeare	
ENL 4341	Milton and His Age	
LIN 3010	Principles of Linguistics	
LIN 4100	History of the English Language	
Technical Writing		
Required (Basic) (4 hours)		
ENC 2290	Careers in Writing	1 hour
ENC 3311	Advanced Expository Writing	3 hours
Required (Advanced) (24 hou	irs)	
ENC 4293	Technical Documentation I	3 hours
ENC 4294	Technical Documentation II	3 hours
ENC 4295	Technical Documentation III	3 hours
ENC 4215	Techniques of Technical Publication	3 hours
LIT 4433	Survey of Technical and Scientific Literature	3 hours
ENC 4218	Graphics Capabilities	3 hours
ENC 4280	Technical Vocabulary	3 hours
ENC 3283	Science and the Lay Reader	3 hours
Optional	and the second second second second second second	
ENC 4941	Technical Writing and Editing Internship	3 hours
	a support reaction	

Honors in English Requirements:

- 1) Application and admission through the English Honors Coordinator:
- 2) Fulfill University requirements for Honors in the Major;
- Grade of "B" or better in Honors Seminar (3 hours). Bibliography and Research Methods (1 hour), one 5000 level English elective (3 hours), and Director Readings (3 hours). (Honors Seminar and Directed Readings substitute for one restricted elective and one English core course);
- 4) Successful completion and oral defense of honors thesis.

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DEPARTMENT OF FOREIGN LANGUAGES AND LITERATURES

Chair: J. B. Fernández, FA 201, Phone (407) 823-2472

Faculty: Barsch, Cervone, Crant, Decker, Del-Rio, DiPierro, Fernández, Micarelli, Patrone, Payas, Redmon, Taylor

Language studies in the College of Arts and Sciences provide instruction in Chinese, French, German, Hebrew, Italian, Japanese, Latin, Russian, and Spanish, with majors in French, Spanish, and a combination of two languages. These programs are designed to meet the needs of students who desire competency in a language and expanded understanding of a foreign culture and literature. Students enrolled in the 1000-level language sequence are required to utilize the Language Media Center for at least one hour a week.

Students wishing to major in a foreign language must meet all the requirements for graduation as set forth by the University, the College of Arts and Sciences, and by the Department of Foreign Languages and Literatures. They must complete 36 semester hours in the single language major or 39 semester hours in the combination major, at the 3000 level or above.

ADVISEMENT: Because of the various options open to language majors, it is obligatory that they have an adviser. Students must contact the Department of Foreign Languages & Literatures to be assigned an adviser, since students must meet with their adviser before registering for courses in their major. Furthermore, class schedules must be approved by their adviser each semester. For continuing students, the meeting with an adviser must take place in the semester preceding the semester of registration. Failure to fulfill this obligation could result in delaying graduation.

PLACEMENT: Normal placement is as follows: Four years of one high school language would place the student, at the University level, in the first semester of the third year; three years, in the second semester of the second year; two years, in the first semester of the second year; one year, in the second semester of the first year.

A native or near-native-speaker language major must substitute alternate upper-division Spanish and French courses for the Spanish 3241 and French 3244 conversation courses. Also, a native or near-native French speaker must substitute an alternate upper-division French course for FRE 4780 (French Phonetics and Diction). In cases where native speakers have received advanced education abroad, they will not be permitted to take the composition course (3420) for the fulfillment of their major requirements but must substitute a literature course chosen in consultation with an adviser in the department. **CREDIT BY EXAMINATION:** Language credit will not be given in courses lower in level than those in which students are presently enrolled. Native speakers will be allowed Credit by Examination in literature courses only.

Foreign Language State Teacher Certification may be obtained through the Department of Foreign Languages. The Certificate qualifies students to teach foreign languages at the elementary and/or high school levels.

MINORS: The Department of Foreign Languages offers minors in French, German, Italian, Russian, or Spanish. Required courses: 18 semester hours at the 3000-level or above in one language, including the 3000-level conversation and composition courses. A native or near-native speaker must substitute an alternate upper division course for the conversation course.

PROFICIENCY: In colleges or departments where a Foreign Language Proficiency Requirement exists, it can be met by passing an appropriate portion of the Proficiency Exam, or by completing the appropriate coursework. See page 97 for a list of departmental language proficiency requirements.

Bachelor of Arts: French or Spanish

Degree Requirements:

A student may receive a Bachelor of Arts degree, with a major in French or Spanish, by completing with a grade of "C" or better, 36 credits in the foreign language major. These credits must be in courses at the 3000 level or above, with at least two courses at the 4000 level. Grades of "D" or below may not be counted toward the major. The following courses must be taken for the major in French or Spanish:

be latter for the major in forter of opartion.	
Conversation:	3 credits
Composition:	3 credits
Survey of Literature:*	6 credits
Two of the following Linguistics courses:	6 credits
French Phonetics and Diction: (3 credits)	
Romance Philology: (3 credits)	
Spanish Morphosyntax: (3 credits)	
Spanish American Syntax: (3 credits)	
Spanish Phonetics: (3 credits)	
Total:	18 credits
Foreign Language Electives (at least two courses	
in literature beyond the survey level):	18 credits
Grand Total:	36 credits**

- * Spanish majors must take both semesters of the Survey of Spanish Literature (SPW 3100 and 3101) OR both semesters of the Survey of Latin American Literature (SPW 3130 and 3131).
- ** Not more than six hours out of the 36 required may be taken in Foreign Language courses not taught in the foreign language.

Bachelor of Arts: Foreign Language Combination

Degree Requirements

A student may receive a Bachelor of Arts degree, with a major in a Foreign Language Combination, by completing with a grade of "C" or better, 24 credits in a first language and 15 credits in a second. These credits must be in courses at the 3000 level or above, with at least two courses at the 4000 level. Language combinations may consist of French, German or Spanish as a first language and any of those three as a second language, as well as Italian or Russian.

In the first language, the following courses must be taken as part of the required 24 credits:

Conversation:	3 credits
Composition:	3 credits
Survey of Literature:*	6 credits
One of the following Linguistics courses:	3 credits
French Phonetics and Diction: (3 credits)	
Romance Philology: (3 credits)	

German Phonetics and Diction: (3 credits)

Spanish Morphosyntax: (3 credits)	
Spanish American Syntax: (3 credits)	
Spanish Phonetics: (3 credits)	
Language Electives	9 credits
Total:	24 credits
In the second language, the following courses must be taken as part of the	15 required
credits:	
Conversation:	3 credits
Composition:	3 credits
Language Electives, chosen with adviser:	9 credits
Total:	15 credits
Grand Total:	39 credits

* If Spanish is the first language, two semesters of the Survey of Spanish Literature (SPW 3100 and 3101) OR two semesters of the Survey of Latin American Literature (SPW 3130 and 3131) must be taken.

SUMMER STUDY ABROAD PROGRAMS

The Department of Foreign Languages and Literatures has been offering a Summer Study program in Spain since 1972, in Italy since 1975, and one in Canada since 1989. These programs are approved by the Board of Regents and are expected to be offered annually. Credit courses are available in these programs in the language, (all levels), art, and civilization of France, Italy, or Spain. These programs are open to all students of the State University System of Florida and to others as well.

Jonquière, Quebec, Canada

Jonquière is a modern city of 60,000 in the picturesque Lac Saint-Jean region, about 150 miles north of Québec City. Students live with French-speaking families, receive 6 hours of classroom instruction in French each weekday, and pledge to use only French at all times during the program. Participants earn 8 credits. Educational weekend excursions and a number of sociocultural activities are included. The program takes place during Summer A.

Jena, Germany

Courses in German language and civilization are offered at all levels. Students are housed at the Jena University campus and have an opportunity to visit other cities in Germany.

Urbino, Italy

The city of Urbino, on the slopes of the Eastern Appennines, is one of the major centers for the study of Renaissance art and architecture. The modern university sponsors a number of conventions of learned societies and cultural events in the summer. Courses in Renaissance art and modern Italian letters are given in English; language courses are conducted in Italian.

St. Petersburg, Russia

This program is offered in cooperation with the Hertzen Pedagogical Institute of St. Petersburg. Courses in Russian art, language and civilization are offered at all levels. Visits to points of historical and cultural interest in St. Petersburg and Moscow will be made.

Madrid, Spain

This program is intended for students who wish to begin or continue their study of Spanish language and civilization. Language courses will be offered from the beginning level through the advanced. Business Spanish, the Art of Spain, and Contemporary Spanish History will also be offered. In addition, students will have an opportunity to visit major places of cultural and artistic interest in Spain.

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)

The Department of Foreign Languages and Literatures offers three (3) courses in ESOL and expects to receive State approval of an ESOL Endorsement Program soon.

DEPARTMENT OF HISTORY

Chair: Richard C. Crepeau, FA 544, Phone (407) 823-2224 Faculty: Colbourn, Evans, Fernandez, Fetscher, Greenhaw, Kallina, Leckie, Pauley, Shofner

Students majoring in history must complete a minimum of 36 hours in history courses. At least 6 hours must be selected from each of three different geographical areas, such as: United States, Europe, Asia, or Latin America. Grade of "D" or below may not be counted toward the major.

The Foreign Language Requirement for the B.A. in History is identical to that of the University, one year. However the History Department strongly encourages its majors who are even contemplating going on to graduate school to complete two years of a foreign language, preferably in a language that would be functional in their area of historical interest. The History Department will provide each of these students with the opportunity to take the language proficiency examination which is given to History graduate students, and will certify their proficiency.

History majors who are interested in a pre-law program should work closely with their advisors in selecting major courses and electives which will best prepare them for law school. These students should use their electives for additional courses in history as well as English, speech, and philosophy. Such a course of study will prepare them for success in law school and will concomitantly provide a broad liberal education.

The History Department encourages its majors, especially those in American History, to develop their statistical and computer skills by completion of appropriate course work in the Department of Statistics.

The Department participates in the programs in Women's Studies, American Studies, Afro-American Studies, Canadian Studies, and Latin American Area Studies.

MINOR

The Department of History offers a minor consisting of a minimum of 18 semester hours. Required courses: 18 semester hours of history, twelve of which must be at the 3000-4000 level. Grade of "D" or below may not be counted toward the minor.

Bachelor of Arts: History

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses AMH 2010 EUH 2000 AMH 2020 EUH 2001
- 4. Restricted Electives None
- Electives
 To be selected with approval of the student' advisor
 Total Semester Hours Required

AREA OF SPECIALIZATION

1. Russian Area Studies. The History Department participates in the Russian Area Program. For information consult with Dr. John Evans.

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2. Latin American Area Studies. The History Department participates in the Latin American Area Studies Program. For information consult with Dr. Jose B. Fernandez.

JUDAIC STUDIES PROGRAM

Director: Moshe Pelli; FA 521, Phone (407) 823-5039 or 823-2251

The Interdisciplinary Program in Judaic Studies offers both a Minor and a Certificate (but not a major). The Program cooperates with the departments of English, Foreign Languages, History, Philosophy, Political Sciences, and Sociology/Anthropology, and with the Liberal Studies Program.

The program offers instruction, conducts research, and disseminates knowledge in the civilization of the Jewish people from Biblical times to the present day in the major dimensions of its creativity: literature, language, religion, philosophy, law, and social, political and

economic organization. Because the roots of western culture and civilization and major world religions lie in ancient Jewish thought and practice as manifested in the Hebrew Bible and subsequent writings, Jewish Studies form an essential component of the university curricula.

The program is designed to serve students pursuing careers in general or Jewish education, in international and Middle-Eastern affairs, in languages or liberal arts, in the ministry or rabbinate, and in the community at large.

The Minor requires the completion of 18-upper-division credit hours in Jewish History (JST 3401, 3402, 3550), literature, such as HBR 3930 (Literature of the National Renaissance), HBT 3800 (Israeli Short Story), JST 3100 (Survey of Jewish Literature), JST 3751 (Literature of the Holocaust), LIT 4373 (Literature of the Bible), the Hebrew Bible (JST 3200 Introduction to Hebrew Scriptures), and culture, such as JST 3820 (Modern Hebrew Culture), JST 3810 (the Jewish National Movement), and JST 3550 (Introduction to Modern Judaism). In addition, students must complete the lower-division one year of Introductory Hebrew (HBR 1120, 1121). Hebrew language courses satisfy foreign language requirements. The program also offers a certificate in Judaic Studies for students completing 15 credits (five courses) in Judaic Studies.

See listings and courses under HBR, HBT, HMW, JST, and REL, and cross-listed courses in the Department of Foreign Languages.

LATIN AMERICAN AND IBERIAN AREA STUDIES PROGRAM

FOUNDATIONS ADEAS

The minor in Latin American Area Studies offers a broad interdisciplinary approach to the understanding of Latin America and its peoples. The minor requires the completion of 18 semester hours selected from courses listed in the Foundation Areas. In addition, students must complete the introductory language sequence (or its equivalent) in French or Spanish. For information contact Professor Jose B. Fernandez, FA 505, (407) 823-5389.

FOUNDATIONS AREAS		
Anthropology ANT 3328 ANT 3322 ANT 3163 ANT 4124 ANT 4180	Mayan Archaeology Peoples and Culture of Latin America Mesoamerican Archaeology Seminar in Laboratory Analysis Advanced Archaeological Fieldwork	3 hours 3 hours 3 hours 3 hours 9 hours
Art ARH 4655 ARH 4690	Meso American Art Mexican Art Fieldwork	3 hours 1 hour
Economics ECO 2013 ECO 3703	Principles of Economics I International Economics	3 hours 3 hours
Foreign Languages	a annual menti tarlare e tarlate energianos have a versario. Tarlate have been alternative transmissione and a second	
SPN 2230	Intermediate Spanish Language and Civilization I	3 hours
SPN 2231	Intermediate Spanish Language	
Any upper division Spanish Lang	and Civilization II guage, LIterature, Business or Civilization Course.	3 hours
History	in the property of the second of the second	
History EUH 4932 LAH 3230 LAH 3200 LAH 3470 LAH 3470	Modern Spain Latin American History I Latin American History II History of Mexico and Central America History of the Caribbean	3 hours 3 hours 3 hours 3 hours 3 hours
Political Science		
CPO 4303	Comparative Latin American Politics	3 hours
INR 4243 CPO 3034	International Politics of Latin America Politics of Developing Areas	3 hours 3 hours

NOTE: In addition to the courses listed in the Foundation Areas, Independent Study, Special Topics and Study Abroad courses offered through the College of Arts and Sciences can be applied to the Minor upon approval by the Program Director.

LIBERAL STUDIES PROGRAM

Program Coordinator: Dr. Terri Fine

Academic Advisors: Dennis R. Kamrad, Judy Monroe, Joanne Muratori, Judith Boyte, FA 202, Phone (407) 823-0144.

The Liberal Studies Program offers students the opportunity to pursue interdisciplinary studies through two different programs of study, the Liberal Arts Track and the General Studies Track.

The Liberal Arts Track

Purpose

The Liberal Arts Track is a Bachelor of Arts degree program available to students seeking an individualized, interdisciplinary, non-traditional major within the College of Arts and Sciences. The Liberal Arts Steering Committee, composed of faculty from the College of Arts & Sciences, coordinates and approves curricular decisions for this track.

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See Special College Requirements
- Foreign Language The B.A. requires 2 semesters of proficiency in foreign language; 3 or 4 semesters may be desirable in some programs, particularly Letters.
- 4. Required Courses

Students must complete areas A through D as identified below, for a minimum of 51 semester hours and maintain a grade point average of 2.5 in all Liberal Arts Track courses.

- A. Students will be required to take an approved course in
 - ethics and an approved course in critical thinking.
- B. Students must complete twelve hours of approved courses with each of two of the following areas:

Fine Arts Natural Sciences Social Sciences

Letters

Approved courses for each track, including a course in methodologies, are available from advisors. Alternatively, the Liberal Arts Committee may approve an individually designed curriculum developed by a student and his/her advisor. 24 hours

- C. Students must complete either a minor from those offered at UCF, or an approved individually designed minor program of study, for a minimum of 18 hours.
- D. Students may choose to complete two (2) minors from those offered at UCF, rather than a minor and two areas of twelve hours each (described in B above). Students must complete all other requirements.
- E. Students must conclude their program with an Undergraduate Thesis, or an undergraduate capstone seminar. Total Required

minimum 36 hours

18 hours

6 hours

3 hours 51 hours

The General Studies Track

Purpose

The General Studies Track is a university-wide program leading to either the Bachelor of Arts or the Bachelor of Science in Liberal Studies, depending on the majority of course areas selected.

The program is administered through the College of Arts and Sciences and is designed for general studies education and academic flexibility. It recognizes that there are many combinations of courses which meet the needs of individual students.

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See Special College Requirements
- 3. Required Courses

Students must complete three different subject area concentrations from those specified below. A minimum of 18 hours is required in each subject area concentration. Generally, courses used to meet General Education requirements can not be used in the subject areas and courses used in one of the subject areas must be satisfied by the completion of a minor from those offered at UCF. This includes minors from individual departments as well as interdisciplinary minors from individual departments as well as interdisciplinary minors such as American Studies, African American Studies, Women's Studies, and others. See "Academic Minors" in the Catalog for the complete list and the College or Department that awards each minor. Students are strongly encouraged to take upper level courses in each area; the minimum requirement for graduation is 48 hours of upper level courses. A minimum grade point average of 2.0 is required in each of the subject areas. 54 hours

Total Required (minimum)

- 4. The B.S. requires one course with a multicultural dimension, or one course in collegelevel foreign language, or one semester of proficiency.
- 5. The B.A. requires 2 semesters or proficiency of foreign language. A third or fourth semester may be desirable, depending on the student's program.

Course Subject Areas

Students must complete three different course subject areas, including at least one minor, from those listed below:

1. Arts

18 hours of approved courses in Art, Music, or Theatre, or a minor in Music (21 hours), Theatre (29 hours), Art History (24 hours), Studio Art (24 hours), or Community Arts (18 hours).

2. Behavioral and Social Sciences

18 hours of approved courses in Anthropology, Psychology, Sociology, Political Science, Economics, or Cultural Geography, Social Work or

a minor in Political Science (18 hours), Psychology (22-25 hours), Anthropology (21 hours), or Sociology (18 hours).

3. Biological Sciences

18 hours of approved courses, or

a minor in Biology (28 hours).

4. Business Administration

18 hours of approved courses in Business Administration, or

a minor in Business Administration (24 hours).

5. Communication

18 hours of approved courses in Communication, or

a minor in Interpersonal Communication (18 hours)

Organizational Communication (18 hours), or Mass Communication (18 hours).

- 6. Computer Science
 - 18 hours of approved courses, or

a minor in General Computer Science (18 hours).

7. Education

Students who were previously majors in the College of Education may utilize a maximum of 18 hours of approved courses.

8. Engineering

18 hours of approved courses in Engineering, or

18 hours of approved courses in Engineering Technology,

or a minor in Technology and Society (18 hours).

9. Health

18 hours of approved courses, or

a minor in Health Sciences (18 hours), Health Services Administration (18 hours), or a minor in Molecular Biology and Microbiology (30 hours).

10. Humanities

18 hours of approved courses in History, Philosophy, Humanities, or Judaic Studies, or

a minor in History (18 hours), Philosophy (21 hours), or Judaic Studies (18 hours).

11. Languages

18 hours of approved courses in Chinese, French, German, Hebrew, Italian, Japanese, Latin, Russian, or Spanish, or a minor in French (18 hours), German (18 hours), Italian (18 hours), Russian (18 hours), Spanish (18 hours), Asian Studies (21 hours), Judaic Studies (18 hours), Latin American Area Studies (18 hours), or Russian Area Studies (18 hours).

12. Letters

18 hours of approved courses in English, Foreign Literature, or Comparative Literature, or

a minor in Creative Writing (21 hours), Literature (21 hours), Linguistics (18 hours), or Technical Writing and Editing (22 hours).

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13. Mathematical Sciences

18 hours of approved courses in mathematics and statistics, or a minor in Mathematics (21 hours) or Statistics (18 hours)

14. Physical Sciences

18 hours of approved courses in Astronomy, Chemistry, Forensic Science, Physical Geography, Geology, Physics, or Meteorology, or a minor in Chemistry (28 hours) or Physics (20 hours)

15. Public Affairs

18 hours of approved courses, or

a minor in Criminal Justice (18 hours), Legal Studies (18 hours), or Public Administration (21 hours).

Omarchan Commerciation (18 Peore), or Mass Commission (18 bours)

16. Air Force or Army ROTC

18 hours of approved courses, or

18 hours of approved courses, or a minor in Aerospace Studies (16 hours), or a minor in Military Science (19 hours). to particul Science (16 hours), Peyonology (1

17. African American Studies minor (16 hours minimum). American Studies minor (16 nours minimum).
 Canadian Studies minor

- 20. Women's Studies minor (18 hours).

DEPARTMENT OF MATHEMATICS

Chair: L. Debnath, PH 403, Phone (407) 823-6284

Faculty: Andrews, Anthony, Armstrong, Brigham, Cannon, Caron, Choudhury, Clarke, Debnath, Fernandez, Heinzer, Hurst, Jones, Kassab, Li, Mikusinski, Mohapatra, Nicholson, Pettofrezzo, Phillips, Rautenstrauch, Richardson, Rodriguez, Rollins, Salzmann, Sherwood, Shivamoggi, Taylor, Vajravelu, Zayed

The Department of Mathematics offers courses and programs which lead to a Bachelor of Science in Mathematics, a minor in mathematics and a Master of Science in Mathematical Science. (See the Graduate Studies catalog for a description of the M.S. in Mathematical Science.)

The programs in mathematics are designed to serve (1) students who wish to pursue careers in mathematics after having completed a baccalaureate degree; (2) students who wish to continue their education in graduate and professional schools; and (3) students who need to use mathematics as a tool in their specialty areas.

In order to serve such a wide variety of students, the courses and programs in the Department of Mathematics have developed along several lines. There are the usual service courses in precalculus and calculus along with strong programs in the upper division in the traditional areas of algebra and analysis and applied mathematics.

A limited number of student assistantships are available for qualified graduate and undergraduate students.

HONORS COURSES

Currently, the Department of Mathematics offers special courses for students in the Honors Program. These are listed as MAC 3311H, MAC 3312H, MAC 3313H, MAC 3930H, and MAP 3302H.

MINOR

The Department of Mathematics offers the following minor consisting of a minimum of 21 hours. All courses used for a minor in mathematics must be completed with a grade of "C" or better.

Required Courses: MAC 3311, 3312, 3313, MAP 3302.

(MAC 3311 and 3312 may be waived by the Department Standards Committee for a student with adequate high school preparation in calculus.)

Restricted Electives: A minimum of two courses selected from MHF 2300, MAA courses, MAD courses, MAP courses, MAS courses, or MTG courses. (Either MAS 3105 or MAS 3106 may be used but not both. Courses may be selected from MAA 4226, 4227, or MAA 5211 but not both.) These two courses must be taken from the Department of Mathematics at UCF.

Bachelor of Science: Mathematics

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. A grade of "C" or better is required for all mathematics courses.
- 3. See special college and/or department requirements

All mathematics courses except for MAC 3311, 3312, 3313, and MAP 3302 must either be taken from the Department of Mathematics at UCF or must be approved by the Mathematics Department Standards Committee. The Department suggests that students consider taking MAS 3105 (Elementary Linear and Matrix Algebra) before taking MAS 3106 (Linear Algebra). MAS 3105 will then be used as an elective. Foreign Language proficiency equivalent to two semesters is required.

4. One course selected from

5

	ENC 3241	Technical Report Writing	3 hours
	ENC 3310	Magazine Writing	3 hours
	ENC 3311	Advanced Expository Writing	3 hours
5.	AREA OF SPECIALIZATION	strend dependent oppidate	
	a. Mathematics Option		

Required Courses		
1st Year Sequence	Coloutino L (E)	1 hours
MAC 3311	Calculus I (F)	4 hours
STA 3023	Statistical Methods I (F)	3 hours
MAC 3312 MHF 2300	Calculus II (Sp) Logic and Proof (Sp)	4 hours 3 hours
BSC 2010	General Biology (Sp)	4 hours
	General Biology (Sp)	4 nours
2nd Year Sequence MAC 3313	Coloulus III (E)	4 hours
MAS 3105	Calculus III (F) Elementary Linear and Matrix Algebra (F)	4 hours
PHY 3048	Physics for Engineers & Scientists I (F)	3 hours
PHY 3048L	Physics Lab I (F)	1 hour
MAP 3302	Differential Equations (Sp)	3 hours
MAS 3106	Linear Algebra (Sp)	4 hours
PHY 3049	Physics for Engineers & Scientists II (Sp)	3 hours
PHY 3049L	Physics Lab II (Sp)	1 hour
3rd Year Sequence	riysics Lab II (Op)	Thour
MAP 4363	Applied Boundary Value Problems I (F)	3 hours
STA 4321	Statistical Theory I (F)	3 hours
COP 2500	Programming I (F)	3 hours
MAS 4301	Algebraic Structures (F)	4 hours
SAT 4322	Statistical Theory II (Sp)	3 hours
COP 2501	Programming II (Sp)	3 hours
4th Year Sequence	r rogramming in (op)	onours
MAA 4226	Advanced Calculus I (F)	4 hours
MAA 4227	Advanced Calculus II (Sp)	3 hours
MAD 4203	Combinatorics and Graph Theory (F)	3 hours
MTG 4302	Introduction to Topology (Sp)	3 hours
MAP 4307	Applications of Complex Variables (F)	3 hours
	ed from upper-division or graduate mathematic	
A minimum of 4 nours select		
tics courses or from COT 450	0, COT 5510, COT 4210 or ENG 4634. (MAC 3	3233, 3253,
tics courses or from COT 450 3254, MAE 3817 and MAA 5	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in	3233, 3253, n either the
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro	3233, 3253, n either the
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee.	3233, 3253, n either the
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Optio	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee.	3233, 3253, n either the
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro hittee.	3233, 3253, n either the wed by the
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. on Calculus I (F)	3233, 3253, n either the ved by the 4 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. on Calculus I (F) Statistical Methods I (F)	4 hours 3 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp)	4 hours 3 hours 4 hours 4 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- littee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp)	4 hours 3 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp)	4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- littee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp)	4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F)	4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105 PHY 3048	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 3 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F) Physics Lab I (F)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 3 hours 1 hour
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105 PHY 3048 PHY 3048L MAP 3302	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- nittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F) Physics Lab I (F) Differential Equations (Sp)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 1 hour 3 hours
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tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Optio 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105 PHY 3048 PHY 3048L MAP 3302 MAS 3106 PHY 3049	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- littee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F) Physics Lab I (F) Differential Equations (Sp) Linear Algebra (Sp) Physics for Engineers & Scientists II (Sp)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 1 hour 3 hours 3 hours 3 hours 3 hours 3 hours 4 hours
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tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105 PHY 3048 PHY 3048L MAP 3302 MAS 3106 PHY 3049 PHY 3049L 3rd Year Sequence	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- intee. on Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F) Physics Lab I (F) Differential Equations (Sp) Linear Algebra (Sp) Physics for Engineers & Scientists II (Sp) Physics Lab II (Sp)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 1 hour 3 hours 3 hours 3 hours 3 hours 3 hours 4 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Optio 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105 PHY 3048 PHY 3048 PHY 3049 PHY 3049 PHY 3049 PHY 3049L 3rd Year Sequence MAD 4203	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- ittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F) Physics Lab I (F) Differential Equations (Sp) Linear Algebra (Sp) Physics for Engineers & Scientists II (Sp) Physics Lab II (Sp) Combinatorics & Graph Theory (F) or Vector and Tensor Analysis (F)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 1 hour 3 hours 3 hours 3 hours 3 hours 3 hours 4 hours
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tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Optio 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105 PHY 3048 PHY 3048L MAP 3302 MAS 3106 PHY 3049 PHY 3049L 3rd Year Sequence MAD 4203 or MAP 4153	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- ittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F) Physics Lab I (F) Differential Equations (Sp) Linear Algebra (Sp) Physics for Engineers & Scientists II (Sp) Physics Lab II (Sp) Combinatorics & Graph Theory (F) or Vector and Tensor Analysis (F)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 1 hour 3 hours 3 hours 1 hour 3 hours 3 hours 3 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105 PHY 3048 PHY 3048L MAP 3302 MAS 3106 PHY 3049 PHY 3049 P	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- littee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F) Physics Lab I (F) Differential Equations (Sp) Linear Algebra (Sp) Physics for Engineers & Scientists II (Sp) Physics Lab II (Sp) Combinatorics & Graph Theory (F) or Vector and Tensor Analysis (F) Applications of Complex Variables (F)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 1 hour 3 hours 4 hours 3 hours 1 hours 3 hours 3 hours 3 hours 3 hours
tics courses or from COT 450 3254, MAE 3817 and MAA 5 biological or physical science Department Standards Comm b. Applied Mathematics Option 1st Year Sequence MAC 3311 STA 3023 MAC 3312 MHF 2300 BSC 2010 2nd Year Sequence MAC 3313 MAS 3105 PHY 3048 PHY 3048L MAP 3302 MAS 3106 PHY 3049 PHY 3049L 3rd Year Sequence MAD 4203 or MAP 4153 MAP 4307 MAP 4363	0, COT 5510, COT 4210 or ENG 4634. (MAC 3 211 may not be used.) One additional course in as must be taken. This course must be appro- ittee. On Calculus I (F) Statistical Methods I (F) Calculus II (Sp) Logic and Proof (Sp) General Biology (Sp) Calculus III (F) Elementary Linear and Matrix Algebra (F) Physics for Engineers & Scientists I (F) Physics for Engineers & Scientists I (F) Physics Lab I (F) Differential Equations (Sp) Linear Algebra (Sp) Physics for Engineers & Scientists II (Sp) Physics Lab II (Sp) Combinatorics & Graph Theory (F) or Vector and Tensor Analysis (F) Applications of Complex Variables (F) Applied Boundary Value Problems I (F)	4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 3 hours 3 hours 3 hours 1 hour 3 hours 3 hours 3 hours 3 hours 3 hours 3 hours 3 hours 3 hours
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COP 2501 STA 4322 4th Year Sequence MAA 4226 COT 4500 MAP 4103 **Applied Electives *Math-Stat Elective Programming II (Sp) Statistical Theory II (Sp)

Advanced Calculus I (F) Numerical Calculus (F) Math Modeling (Sp) 3 hours 3 hours

4 hours 3 hours 3 hours

3 hours

*One course selected from upper division or graduate mathematics or statistics courses or from COT 5510 or COT 4210. (MAC 3233, 3253, 3254, MAE 3817 and MHF 4404 may not be used.) One additional course in either the biological or physical sciences must be taken. ** From an approved list

6. Electives

The number of hours depends on the courses chosen to satisfy university requirements and the area of specialization. The courses used as electives must be approved by the Department Standards Committee.

Total Semester Hours Required

120

DEPARTMENT OF MUSIC

Chair: L. Brodie, FA 105A, Phone (407) 823-2869 Assistant Chair: J. Gardner

Faculty: Brodie, Brunner, Eubank, Gardner, Greenwood, Hotaling, Koons, Pickering, Roney, Stephenson, Sung, Whisler, Whitney, Wolf, Wrancher, Yonetani.

Part-Time Faculty: Almeida, J. Beck, Cooke, Hardy, Ivey, Jaskulski, Lesko, Markstein, A. Mascaro, J. Mascaro, Radock, Schwab, Walker.

The Department of Music offers a Bachelor of Music degree with options in performance and piano pedagogy; a Bachelor of Arts Degree in performance; and a Bachelor of Music Education Degree with specializations in instrumental, choral and elementary school music.

The Music Education programs are approved by the Florida State Department of Education. Students who wish to be certified to teach in elementary and secondary schools should consider a major in Music Education. Courses leading to teacher certification are offered cooperatively with the College of Education. Master of Arts and a Master of Education degrees in Music Education are offered by the College of Education.

The Music Department is fully accredited by the National Association of Schools of Music.

Music organizations on campus include Pi Kappa Lambda, Phi Mu Alpha, Sigma Alpha lota, Tau Beta Sigma, Kappa Kappa Psi, University Vocal Society, Gospel Choir, MIDI User Group and a Student Chapter of Music Educators National Conference.

SPECIAL PERFORMANCE AND MUSIC EDUCATION ENTRANCE REQUIREMENTS

In order to be accepted as a music or music education major, the student must perform an audition. Each student must demonstrate an advanced level of proficiency by performing compositions representing a variety of musical periods. Memorization is required for pianists and vocalists. Accompanists will be furnished only upon request prior to the audition. Each candidate must bring music for the compositions he or she intends to perform. The department will provide large instruments such as the tuba, string bass, or tympani for these auditions. All smaller instruments must be brought to the University. The audition will serve as a placement examination for accepted candidates.

As a prerequisite to formal admission to the State Approved Program of Teacher Education students must:

- score at or above the 40th percentile of all college-bound persons tested on the American College Testing Program (ACT, score 20) or the Scholastic Aptitude Test (SAT, score 840) and have this score reported as part of their official academic record
- 2. have an overall G.P.A. of 2.5
- 3. have satisfactorily completed EDG 4321 (Teaching Strategies)
- 4. have passed the College Level Academic Skills Test (CLAST)
- submit a formal junior student teaching application to the College of Education Student Internships Office. Must meet the College of Education's requirements for admission to Junior and Senior Year Student Teaching.

Since July 1, 1980, all applicants for a teaching certificate in Florida must pass a written competency examination administered by the Florida State Department of Education.

Since July 1, 1982, all applicants for their First Regular Florida Teaching Certificate must satisfy requirements of the Florida Beginning Teacher Program.

COMPREHENSIVE EXAMINATIONS

Comprehensive examinations in music theory and music history should be taken by students during their junior year. Ear-training, sight-singing, part-writing, and visual analysis examinations will be offered during the fall and spring semester; the music history examination will be offered during the spring. [See policy regarding recitals and student teaching.]

POLICY REGARDING MAJOR ENSEMBLE PARTICIPATION

- In order to graduate, Bachelor of Music students must spread their required 8 semester hours of major ensemble credit over at least 8 separate semesters; Bachelor of Arts students must spread their required 6 semester hours of major and/or minor ensemble credit over at least 6 separate semesters.
- The following ensembles are defined as major ensembles: chorus, symphony orchestra, concert band, marching band, and wind ensemble.*
- Vocal music education majors may elect to substitute 1 hour of band or orchestra or 1 hour of the minor ensemble requirement, provided they have sufficient facility on an appropriate instrument.
- 4. Assignment to major ensembles will be made by the ensemble directors.
- Undergraduate students taking a course in Performance must take concurrently a major ensemble appropriate to their principal instrument.

*Jazz lab may be counted as one half the total number of required major ensembles.

POLICY REGARDING MINOR ENSEMBLE PARTICIPATION

- In order to graduate, B.M. students must spread their required 4 semester hours of minor ensemble credit over at least 3 separate semesters; B.A. students who have a total of 6 semester hours of major or minor ensembles in 6 semesters must spread their required 2 semester hours of minor ensemble credit over at least 2 separate semesters.
- The following ensembles are defined as *minor* ensembles: Brass Ensembles. Percussion Ensembles, Piano Ensembles, String Ensembles, Vocal Ensembles (except Opera Workshop), Woodwind Ensembles, Jazz Lab.*

*Jazz lab may be counted as one half the total number of required major ensembles.

Bachelor of Music students must complete all but one of their required comprehensive examinations before they will be permitted to audition for their senior recital. Bachelor of Arts and Bachelor of Music Education students must complete three of their comprehensive examinations prior to auditioning for their 30-minute public recital. B.M.E. students must complete all but one of their required comprehensive examinations before they will be permitted to do their senior student teaching. B.M.E. students must give their required recital during the semester of their senior student teaching. Their student teaching must be done in the area of their specialization.

MINOR

The Department of Music offers a Minor in Music. The requirements are as follows:

- 1. A successful audition on the student's principal instrument or voice.
- 2. A minimum of 21 semester hours credit to include the following or their equivalent: MUT 1111, MUT 1112 (4 hours); MUT 1241, MUT 1242 (2 hours); MUL 2010 (3 hours); major ensemble credit spread over at least 4 separate semesters (4 hours); 2 semesters of performance level I (4 hours) and 2 semesters of performance level II (4 hours) on the same performance medium.
- A minimum of 11 semester hours of these required courses, including two semesters of a major performing organization and two semesters of performance level II, must be completed at UCF.
- 4. Successful completion of 4 semesters of Music Forum (MUS 1010).
- 5. A GPA of 2.0 is required for all music courses attempted, whether used to fulfill these requirements or not.

Bachelor of Music: Performance

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses [both specialization]

ч	uneu oouises [boin speci	anzation	
	MUS 1010	Music Forum (8 semesters)	0 hours
	MUT 1111, 1112, 2116,	MAN Pantamana (6 semena	
	2117, 3561	Music Theory	10 hours
	MUT 1241, 1242, 2246,		
	2247, 3248	Ear Training and Sight Singing	5 hours
	MVK/MVS/MVW/MVB	on toxit VE Constitues(C	
	MVP/MVV	Performance (8 semesters including	
		2 semesters of Level IV)	16 hours
	MUH 4211, 4212	Music History**	6 hours
	MUN	Major Ensemble (8 semesters)*	8 hours
	MUN	Minor Ensemble (4 semesters)	4 hours
	MVK	Class Piano I-IV (Not required of	
		piano majors)	4 hours
	MUG 3101	Basic Conducting	2 hours
		Foreign Language	8 hours
		Music Electives	14 hours

Any secondary performance course not in area of major instrument or any MUC, MUE, MUG, MUH, MUL, MUN, MUS, MUT courses numbered 3000 or higher. Up to one additional year of foreign language. In partial fulfillment of their elective requirements, piano students must take Piano Literature (MUL 3400, 3401 — 2 hours each) for a combined total of 4 hours; voice students take Foreign Diction (FRE 1005, GER 1005, ITA 1005 — 1 hour each), Voice Pedagogy (MVV 4640, 4641 — 1 hour each), and Song Literature (MUL 3600, 3601 — 1 hour each) for a combined total of 7 hours; piano pedagogy students take Piano Literature (MUL 3400, 3401 — 2 hours each), Piano Pedagogy (MVK 4640, 4641 — 1 hour each), and Studio Teaching (MUS 4401) for 2 hours, for a combined total of 8 hours.

- * Not required of piano/guitar majors
- ** Three semester hours of coursework in the General Education are satisfied by MVH 4212.
- 4. Restricted Electives

see above paragraph

Special Non-Course Requirements

- 1. Students are required to take piano until they meet the Piano Proficiency requirement.
- Students must take music history, theory, ear training and sight singing comprehensive examinations.
- Two faculty-approved public recitals: a junior recital of 30 minutes length and a senior recital of 45 minutes length. Students who select the Piano Pedagogy option will perform two faculty-approved thirty-minute recitals.
- Residency requirements: 2 semesters of Performance Level IV; senior recital; history, theory, ear training, and sight singing comprehensive examinations.
- 5. At least 77 hours of credit must be earned in music courses.

Total Semester Hours Required

120 Hours

Bachelor of Arts: Music

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements

3. Required Courses [both specializations]

MUS 1010	Music Forum (6 semesters)	0 hours
MUT 1111, 1112, 2116,	and the second se	
2117, 3561	Music Theory	10 hours
MUT 1241, 1242, 2246,		
2247, 3248	Ear Training and Sight Singing	5 hours
MVK/MVS/MVW/MVB	ordennike II) mana-Thilanke Utor E	
MVP/MVV	Performance (6 semesters including	
	2 semesters of Level III)	8 hours
MUH 4211, 4212	*Music History	6 hours
MUN	Major and Minor Ensembles (6 semesters)	6 hours
MVK	Class Piano I-IV (Not required of	
	piano majors)	4 hours
	Music Electives/Special Requirements	5 hours
ANY MUC MUE MUG MUH	MUL MUS MUT courses numbered 3000	

Any MUC, MUE, MUG, MUH, MUL, MUS, MUT courses numbered 3000 or higher

In partial fulfillment of their elective requirements, piano students take Piano Literature (MUL 3400, 3401 - 2 hours each) for a combined total of 4 hours: voice students take Foreign Diction (FRE 1005, GER, 1005, ITA 1005 - 1 hour each) and Song Literature (MUL 3600, 3601 - 1 hour each) for a combined total of 5 hours.

4. Restricted Electives

see above paragraph

5. University Electives

35 hours

*Three semester hours of coursework in the General Education Program are satisfied by MUH 4212.

Special Non-Course Requirements

- 1. Students must take music history, theory, ear training, piano, and sight singing comprehensive examinations.
- 2. One faculty-approved thirty-minute recital.
- 3. Residency requirements: 2 semesters of Performance Level III; 2 ensembles, [each in a different semester]; MUT 3561; MUT 3248; 2 semesters of MUS 1010; history, theory, ear training, and sight singing comprehensive examinations; recital. 120 hours
 - Total Semester Hours Required

Bachelor of Music Education

Degree Requirements

 See Undergraduate Degre 	e Requirements	
2. UCF Residency Requirem	ients	33 hours
3. See special college and/o	r department requirements	
4. Required Courses	La la lating makes a classes summer providents	
MUS 1010	Music Forum (6 semesters)	0 hours
MUT 1111, 1112,		
2116, 2117, 3561	Music Theory	10 hours
MUT 1241, 1242,	makes where dependences or price a low procession	
2246, 2247, 3248	Ear Training and Sight Singing	5 hours
MVB/MVK/MVP	Performance (6 semesters including	
MVS/MVV/MVW	2 semesters of level III)	12 hours
MUN	Major Ensemble (6 semesters)	6 hours
MUN	Minor Ensemble	2 hours
MUH 4211, 4212	*Music History	6 hours
MUG 3101	Basic Conducting	2 hours
MUE 3460	Brass Techniques	1 hour
MUE 3470	Percussion Techniques	1 hour
MUE 3440	String Techniques	1 hour
MUE 3450	Woodwind Techniques	1 hour
EDF 3603	Analysis of Educational Foundations	3 hours
EDF 4214	Classroom Learning Principles	3 hours

EDG 4324	Teaching in the Schools	3 hours
EDG 4321	Teaching Strategies	4 hours
EDE 3943	Junior Year Student Teaching	6 hours
MUE 4311	Elementary School Music Instructional	
	Analysis	2 hours
MUE 4360	Secondary School Music Instructional	
	Analysis	2 hours
Program A — Instrumental	en detected Blockers of a conducted by and a	
MVV 1111	Class Voice	1 hour
MVK	Class Piano I-IV (Not required of	
	piano majors)	4 hours
MVB/MBK/MVP	Performance IV	2 hours
MVS/MVV/MVW		
MUE 3460	Brass Techniques (repeat)	1 hour
MUE 3450	Woodwind Techniques (repeat)	1 hour
MUG 3302	Instrumental Conducting	2 hours
MUT 4344	Seminar in Music Arranging	1 hour
MUE 4480	Marching Band Techniques	1 hour
ESE 4943	Senior Student Teaching-Secondary	12 hours
Program B — Choral		
MVK 1111-1141	Class Piano I-IV	4 hours
	(Not required of piano majors)	
MVV 1111	Class Voice	2 hours
	(Not required of voice majors)	
MUG 3202	Choral Conducting	2 hours
MVB/MVK/MVP/	Performance IV	2 hours
MVS/MVV/MVW		
ITA 1005, FRE 1005,	Diction	3 hours
GER 1005		
ESE 4943	Senior Student Teaching-Secondary	12 hours
Program C — Elementary S	School	
MVK 1111-1141	Class Piano I-IV	4 hours
	(Not required of piano majors)	
MVV 1111	Class Voice	3 hours
	(Not required of voice majors)	
MVS 1216	Secondary Guitar	1 hour
MVO 3124	Recorder II	1 hour
	Special Topics in Elementary School	
	Music (2 semesters)	4 hours
EDE 4943	Senior Student Teaching-Elementary	12 hours
Restricted Electives		
None.		

6. Electives

none.

5.

125-129

Special Non-course requirements

- 1. Students are required to take piano until they meet the Piano Proficiency requirements.
- A faculty-approved public recital of at least 30 minutes length. (A recital is optional for the Elementary School Music Specialization).
- 3. History, theory, ear training, and sight singing comprehensive examinations.
- 4. Students graduating from UCF with a major in music education must complete their last two semesters of required performance; their recital, if required; and, their senior year student teaching while attending UCF.
- 5. A GPA of 2.5 is required for all courses attempted.

*Three semester hours of course work in the General Education Program are satisfied by MUH 4212.

Minimum Total Semester Hours Required

DEPARTMENT OF PHILOSOPHY

Chair: J. Riser, FA 411, Phone (407) 823-2273 Faculty: Flick, Jones, Kassim, Levensohn, Park, Riser, White

The Department of Philosophy offers a philosophy major and an interdepartmental humanities major, as well as minors in philosophy, humanities, and Asian studies.

NOTE: By the beginning of the fall semester of 1998, it is probable that the B.A. in Humanities will be deleted. Students who cannot satisfy the current requirements for this major (and this degree) by that date are advised to major instead in the Liberal Arts Option of the Liberal Studies Program, an option which will provide content as substantive and interdisciplinary as that of the present humanities major.

MINORS

The Department of Philosophy offers the following minors:

1. Philosophy

Twenty-one semester hours.

Selection of courses from an approved list, in consultation with a departmental advisor, with the following distribution: one course in critical thinking/logic, two courses in the history of philosophy, two courses in values and society, and two courses in philosophical analysis. For information, consult Dr. Donald Jones.

2. Multicultural Humanities

Twenty-four to twenty-seven semester hours.

The minor requires either 12 hours in each of two cultural traditions or 9 hours in each of three. Relevant areas include Asia, Middle East, Africa, Europe, the Americas, or others to be specified under advisement. Courses will be selected with the help of an advisor and should deal with subject matter from an interdisciplinary viewpoint sensitive to cultural context, tradition, and identity. Students interested in the Liberal Arts major will find this minor particularly helpful. For information, consult Dr. Dan White.

- 3. Asian Studies
 - Twenty-one semester hours.

An interdisciplinary minor in which seven UCF departments — Anthropology, Art, Economics, Foreign Languages and Literatures, History, Philosophy, and Political Science participate in order to offer students a basic and well-rounded background in the field. For information, consult Dr. Husain Kassim.

Bachelor of Arts: Philosophy

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses (24 semester hours)
- A. Regular Major (33 hours required)

negular wajor (55 ho	urs required)	
PHI 3xxx	Critical Thinking	3 hours
PHI 3011	Philosophical Reasoning	3 hours
PHI 3130	Formal Logic I	3 hours
PHH 3100	Ancient Philosophy	3 hours
PHH 3400, or	Modern Continental Philosophy, or	3 hours
PHH 3402	Modern British Philosophy	
PHH 3601, or	Contemporary Continental Philosophy, or	3 hours
PHH 3620	Contemporary Analytic Philosophy	1 percent
PHI 3600	Ethics	3 hours
PHI 4360, or	Epistemology, or	3 hours
PHI 4500	Metaphysics	

Electives: Nine upper-division hours in philosophy or related areas, with approval of advisor.

- B. Honors in Philosophy Requirements
 - 1. Admission to and continuing acceptance in University Honors Program.
 - 2. Satisfaction of all University requirements for Honors in the major.
 - 3. Grade of "B" or better in Honors Directed Readings (3 hours).
 - 4. Successful completion and oral defense of Honors Thesis.

 Thirty-three hours of courses to be selected with guidance and approval of Honors Advisor and Department Chair.

Electives: Students are encouraged to select courses from other disciplines that supplement training in philosophy.

Foreign Language: two semesters proficiency is required.

Bachelor of Arts: Humanities

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses (24 semester hours)

. riequireu courses (24 seriles	ter nouis)	
HUM 3431	Ancient World: Greece	3 hours
HUM 3432	Ancient World: Rome	3 hours
HUM 3401	Asian Humanities or	
HUM 3250	Contemp. Humanities	3 hours
HUM 3025	Critical Evaluation/Arts or	
PHI 3800	Aesthetics	3 hours
CLA 3850	Classical Myth or	
CLA 3851	Comparative Myth	3 hours
HUM 4301	The Classical Ideal	3 hours
HUM 4302	The Romantic Ideal	3 hours
HUM 4303	The Spiritual Ideal	3 hours
. Restricted Electives (24 seme	ster hours, to be chosen with the help	
	t least one course each in art, literature,	
music, and philosophy.)		
	Ren. Art or ARH 3060 Hist. Arch.	3 hours
ARH 4350 or ARH 4430	or ARH 4450 History of Art	3 hours
	sh Lit. or LIT 2110 or 2120 Wrld.Lit.	3 hours
	or AML 3051 American Lit. II	3 hours
	& Civ. or EUH 3142 Ren. & Reform.	3 hours
MUL 2010 Enjoyment of		3 hours
	or PHH 3400 Mod. Continental Phil.	3 hours
	Marxism or PHP 3786 Existentialism	3 hours
HUM 3417 or HUM 3418		onouro
Thought and Culture	Laston riengious	3 hours
THE 3112 or 3113 Theat	re History	3 hours
	a or LIT 4094 Mod. Drama as Lit.	3 hours
Electives	a or err foot moa. Brand as en.	onouro

5. Electives

4

May be used to obtain a second major or to complete requirements for teacher certification in Humanities in the College of Education.

DEPARTMENT OF PHYSICS

Chair: W.T. Silfvast, HPB 310, Phone (407) 823-2325

Faculty: Beck, Bolemon, Bolte, Bose, Brennan, Caldwell, Chai, Chow, Elias, Guenther, Hagan, Heinonen, Johnson, Kim, Llewellyn, Luo, Miller, Neighbor, Peale, Renken, Richardson, Saha, Schulte, Silfvast, Soileau, Stegeman, Van Stryland

The Department of Physics offers B.S., M.S., and Ph.D. degrees. Students interested in being a physics major are encouraged to see, as soon as possible, a faculty advisor who will help the student to design a curriculum. An appointment to see the advisor is necessary prior to registration in each semester.

Physics is a basic science and coursework in physics helps to prepare a student for a variety of careers in industry and government, as well as teaching in schools, colleges and universities.

The undergraduate program emphasizes classroom as well as advanced laboratory experiences. The Departmental computer laboratory, including SUN workstations, is available to every physics major; many of the advanced courses require the use of FORTRAN and MATHEMATICA.

Advanced undergraduates are encouraged to be involved in special projects and research with faculty. Faculty research facilities are extensive in the areas of atomic, molecular, condensed matter, particle, and optical and laser physics.

Service courses required by other departments and colleges are offered regularly as well as courses for science education majors and a physical science course satisfying general education requirements.

MINOR

The Department of Physics offers a minor consisting of a minimum of 20 semester hours. Required courses: PHY 3048, 3048L, 3049, 3049L, 3101. The remaining 9 semester hours must be selected from appropriate upper-level lecture or laboratory courses.

HONORS

Honors sections of the introductory physics sequence are available to students with appropriate academic standing.

Degree Requirements

- 1. General Undergraduate Degree Requirements.*
- In addition to the degree requirements listed below for a B.S. in Physics, the following standards are required by the department for graduation. Approval as a special case by the department Undergraduate Affairs Committee must be requested for any waiver.
 - (a) A minimum GPA of 2.0 for all courses used for a major in physics.
 - (b) No credit toward graduation for a "D" grade in any physics or mathematics course required for a major in physics; a higher grade on repeating is acceptable.
- Required courses. The courses listed, or departmentally approved equivalents, are required in the physics curriculum.

Total Semester Hours Required 120

*Foreign Language Requirement in B.S. Program in Physics

Physics majors are required to take FL 1120 and FL 1121 or take and pass a proficiency examination at the level of FL 1121 administered by the Department of Foreign Languages and Literatures. A native speaker will substitute advanced level courses in the language. Admission requirement in FL 1121 will be a passing grade in FL 1120.

DEPARTMENT OF POLITICAL SCIENCE

Chair: R. L. Bledsoe, FA 415, Phone (407) 823-2608

Faculty: Benson, Bledsoe, Celso, Fine, Handberg, Kennedy, Kiel, Kurfirst, J. Lilie, S. Lilie, Morales, Pollock, Stern, Vittes

The Department of Political Science seeks to (1) provide a broad background for careers in foreign and domestic public service and in the private sector where a knowledge of government and politics is necessary; (2) provide a broad background for and facilitate admission to law school through the prelaw emphasis; (3) prepare students for teaching, research, and graduate study in Political Science; (4) provide a broad background for careers in politics; and (5) educate citizens and promote their active interest in public affairs. Students should plan their major or minor in consultation with their departmental advisor according to their interests and career objectives.

Political Science courses are divided into three areas of specialization: American Politics and Policy; International Relations and Comparative Politics; and Political Theory.

It is strongly recommended that majors planning to continue their education at the graduate level or to pursue a career in international fields acquire a working knowledge of a foreign language.

Canadian Studies: The Department of Political Science is the main contributor to the Canadian Studies Program. Interested students should contact Dr. M. Elliot Vittes.

Latin American Studies: The Political Science Department participates in the Latin American Studies Program. Contact Dr. Waltraud Q. Morales.

Russian Area Students: The Political Science Department participates in the Russian Area Studies program. Consult Dr. Henry Kennedy.

MINOR

The Department of Political Science offers minors consisting of a minimum of 18 semester hours in each minor.

1. Political Science

Required courses: POS 2041. In the event a student has taken the varying credit POS 4941, only 3 semester hours from this course can be used in the minor. Four courses (12 semester hours) must be taken at senior institutions. Except for these requirements, students may select any other Political Science courses with the aid of an advisor.

2. Political Science/Prelaw

Required courses: POS 2041, 4284; at least one from INR 4401, 4402, POS 4603, or POS 4604. In the event a student has taken the varying credit POS 4941, only 3 semester hours from this course can be used in the minor. Only two courses (6 semester hours) from a two-year institution will be accepted as part of the minor. Except for these requirements, students may select any other Political Science courses with the aid of an advisor.

 A minimum GPA of 2.0 in the minor is required for graduation as a political science minor.

Bachelor of Arts: Political Science

Degree Requirements

- 1. See Undergraduate Degree Requirements
- Ten courses (30 semester hours) must be taken at senior institutions.
- 2. See special college and/or department requirements.
- 3. A minimum GPA of 2.0 in the major is required for graduation as a political science major.
- Political Science majors must demonstrate proficiency in a foreign language equivalent to one year of college instruction.
- 5. Required Courses

 POS 2041
 American National Government
 3 hours

 *POS 3703
 Scope and Methods of Political Science
 3 hours

 *This course should be completed by the second semester of the junior year.
 3 hours

6. Restricted Electives Majors must choose from one of the following emphases for a minimum of 30 additional hours

nours.	Renew, Rivsland, Calab, Phys. Mandbald, 1994	
Emphasis 1: American Politics	and Policy	
Five courses from area A		15 hours
Two courses from area B		6 hours
Two courses from area C		6 hours
One additional course from	n any area	3 hours
Emphasis 2: International Relat	ions-Comparative Politics	
*Five courses from area B		15 hours
Two courses from area A		6 hours
Two courses from area C		6 hours
One additional course from	n any area	3 hours
*No more than two of the following	courses may be considered part of area	
B credit: INR 4401, INR 4402, INR		
Emphasis 3: Prelaw		
	Iudicial Process and Politics	3 hours
One of the following:	and the second	3 hours
	American Constitutional Law I	Notice Land
	American Constitutional Law II	
	nternational Law I	
	nternational Law II	
*POS 4603 should ordinarily be		
Five courses from either area A		15 hours
Two courses from area A if area		To nouro
Two courses from area B if area		6 hours
One course from area C		3 hours
	otal Hours in Major	36 hours
7. Electives		oonours
	otal Semester Hours Required	120
anances tool and the minor, if our economic	otal ocinester nouis nequired	120
AREAS OF SPECIALIZATION		
	ed into three areas of specialization.	
A. American Politics and Policy	מיוונט מוופט מופמט טו סטפטמווצמוטוו.	
	State Government	
	Political Parties and Processes	
	The American Presidency	
	Congress and the Legislative Process	
	Ainorities in American Politics	
	Aass Media and Politics	
FUS 3233 P	Public Opinion	

1000110	oourient fondos
POS 4246	Political Socialization
POS 4603	American Constitutional Law I
POS 4604	American Constitutional Law II
POS 4284	Judicial Process & Politics
POS 4412	Presidential Campaigning
PUP 4323	Women and Politics
POS 4142	Metropolitan Politics
PUP 3204	Environmental Politics
PUP 4003	American Public Policy
POS 4622	Politics and Civil Rights
PUP 4503	Government and Science
PUP 4602	Politics of Health
POS 4265	Power and Policy in the United States
PUP 4931	Topics in Public Policy

Voting and Elections

Political Socialization

Southern Politics

POS 3273 POS'3173

P. International Polations and	Comparative Government
B. International Relations and INR 3002	International Relations
GEO 3470	World Political Geography
INR 4035	International Political Economy
INR 4005	
	American Foreign Policy
INR 4114	American Defense Policy
INR 4115	Strategic Weapons and Arms Controls
INR 4224	Contemporary International Politics of Asia
INR 4243	International Politics of Latin America
INR 4225	Vietnam War
INR 4335	Coercion in International Politics
INR 4401	International Law I
INR 4402	International Law II
INR 4404	Space Law
INR 4502	International Organizations
CPO 3034	Politics of Developing Areas
CPO 3103	Comparative Politics
CPO 3132	Introduction to Canadian Studies
POS 3253	Contemporary Revolution and Political Violence
CPO 4123	Government and Politics of Great Britain
CPO 4284	Comparative Judicial Processes
CPO 4303	Comparative Latin American Politics
CPO 4643	Government and Politics of the Soviet Union
CPO 4024	Non-Western Politics
CPO 4133	Government and Politics of Canada
CPO 4445	Comparative Political Parties
PUP 4510	Space Policy
PUP 3508	Introduction to Space Studies
C. Political Theory	
POT 3302	Modern Political Ideologies
POT 3204	American Political Thought
POT 4003	Political Theory
POT 4314	Contemporary Democratic Theory
POT 4025	Ancient, Medieval and Early Modern Political Philosophy
POT 4054	Modern Political Philosophy
POT 4206	Political Psychology
POT 4414	Marxist Political Theory
POT 4066	Contemporary Political Theory

Prelaw: Political Science

While no specific major is prescribed for admission to law school, many prelaw students elect to major in political science. These individuals usually choose the prelaw emphasis within the political science major.

Prelaw students are encouraged to work closely with a prelaw advisor in planning their programs. By judicious use of electives, the student builds a firm foundation for law school entry and acquires a broad training which can result in career options upon graduation. For further information, consult one of the Department's prelaw advisors.

1. Some suggested electives Include:

100 0001	Deinstelan of Einstein Association
ACG 2001	Principles of Financial Accounting
ACG 2301	Principles of Managerial Accounting
BUL 3111	Legal Environment of Business
PLA 3105	Legal Research
PLA 3155	Legal Writing
PHI 3130	Formal Logic I
PHI 3131	Formal Logic II
MHF 2300	Logic and Proof in Mathematics
ENC 3311	Expository Writing
LIN 4100	History of the English Language
PHI 3100	Critical Thinking

Internship Program: Political Science

For students who excel, a limited number of internships may be available each semester for 3 to 6 hours of credit. Under the Internship Director, the student is typically placed in an office of local, state, or national government, a law office, or campaign headquarters.

DEPARTMENT OF PSYCHOLOGY

Interim Chair: M. Thomas, PH 302, Phone (407) 823-2216 Associate Chair: A. Wang, PH 342, Phone (407) 823-2216 Faculty: Abbott, Blau, Brophy, Burroughs, Dyck, Fisher, Gilson, Guest-Houston, Hitt, Jensen, Koonce, McGuire, Morgan, Rinalducci, Rollins, E. Sheridan, K. Sheridan, Shirkey, Smither, Tell, Tucker, Turnage, Walker, Wang, Wooten

The undergraduate program provides a general preparation in Psychology with the option to select an emphasis area from a variety of subfields. Suggested emphasis area course listings are available in the department. Successful completion of the specified program of at least 41 hours leads to the Bachelor of Arts degree with a major in Psychology. The Bachelor of Science option is also available. For more detailed information on the psychology curriculum, students should consult the *Psychology Advisement Handbook*. This handbook may be obtained in the campus bookstore under the Careers in Psychology class (PSY 2013).

MINOR

The Psychology Department offers minors in several emphasis areas, including Clinical Psychology, Human Factors Psychology, and Industrial/Organizational Psychology. The guiding principle in design of a minor is to select those Psychology courses which will strengthen the graduate school preparation and/or the marketability of the student's major program. Therefore, a minimum of 22-25 credit hours are required, 3 in Statistics, and 19-22 in Psychology, including PSY 2013 (3 hours) and PSY 3214 (4 hours). The additional 12 (or more) hours are to be taken with the approval of the Psychology Department's Undergraduate Program Coordinator. The additional hours will generally follow suggested course lists which are available in the Department.

Bachelor of Arts/Bachelor of Science: Psychology

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Foreign Language Requirements:

B.A. - 3 semesters/proficiency or 2 semesters/9 hours diversity track

B.S. - 2 semesters/proficiency plus 9 hours from the Science/Math option

4. Required Courses

-	rioquirou oourooo		
	PSY 2013	General Psychology	3 hours
	PSY 2023	Careers in Psychology	1 hour
	PSY 3214	Research Methods	4 hours
	PSY 3204	Statistical Methods in Psychology	4 hours
	EXP 3404	Basic Learning Processes	4 hours
	PSB 3002	Physiological Psychology	4 hours
5.	Restricted Electives	and the state was been as an or the	
	a. Psychology Department	(any two)	
	CLP 3143	Abnormal Psychology	3 hours
	DEP 3004	Developmental Psychology	3 hours
	PPE 3003	Personality Theory	3 hours
	SOP 3004	Social Psychology	3 hours
	STA 2014	Principles of Statistics	3 hours
	STA 3023	Statistical Methods I	3 hours
	c. B.S. Option (9 hours. fr	om the following courses):	
	COP 2500	Computer Science I	3 hours
	COP 2501	Computer Science II	3 hours
	CGS 3000C	Computer Fundamentals for Business Applications	

MAC 3233	Concepts of Calculus	3 hours
MAC 3253	Applied Calculus I	3 hours
PCB 3063, 3063L	Genetics with Lab	3 hours
PCB 3703C	Human Physiology with Lab	4 hours
STA 4102	Computer Programming of Statistical Data	3 hours
ZOO 3733C	Human Anatomy with Lab	4 hours

- d. For a list of approved diversity courses, consult the *Psychology Advisement* Handbook.
- 6. Minimum GPA requirements for graduation:
 - a. For the baccalaureate a minimum psychology GPA of 2.5 with no grade less than a C in a psychology course.
 - b. For the minor a minimum psychology GPA of 2.5 in all courses counting toward the minor.
- 7. Electives

A total of 12 semester hours in other courses offered by the Psychology Department taken in accordance with the student's interests and career goals and with the consent of the advisor.

Total Hours Required Outside Major	3
Total Hours Required in Major	38
Total Semester Hours Required	120

Honors in Psychology

The Honors in Psychology is available to those undergraduate psychology majors who have distinguished themselves academically. The opportunity to pursue this recognition is limited to those students who show outstanding scholarship and promise in the field of psychology. To qualify for Honors in Psychology, students must attain junior standing and meet or surpass GPA and course prerequisites (further information is found in the Undergraduate Psychology Handbook). The two-course honors sequence begins in the Fall semester with directed readings (PSY 4903H) and concludes with the successful defense of an honors thesis in the Spring (PSY 4970H). Interested students must contact the Psychology Chairperson or Director of Undergraduate Program in Psychology and present a written commitment from a faculty sponsor who will direct the student through the honors sequence.

RUSSIAN AREA STUDIES

Five UCF departments, Foreign Languages, History, Political Sciences, Sociology, and Philosophy, have pooled their resources to offer a minor to students interested in Russian Area Studies a basic and well-rounded background in the field. The philosophy of the program is to offer students a multidisciplinary approach to the subject, so as to allow them to grasp the subject in its complexity and to understand linguistic, cultural, historical, political, and socio-economic interrelationships.

Interested students should register for the minor with Dr. Richard Crepeau, Department of History, FA 551 (407) 823-2224. For further information consult any of the above mentioned departments.

Bachelor of Science: Social Sciences

Contact Person: J. Boyte, FA 208, Phone (407) 823-2492

The Social Sciences program offers students an opportunity to become acquainted with the various fields of the Social Sciences and to better understand the relationships between those fields. Satisfactory completion of the program leads to the degree Bachelor of Science with a major in Social Sciences.

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses None

4.	Restricted Electives		
	a. Choose one	and the second	
	POS 3703	Scope and Methods of Political Science	3 hours
	PSY 3214	Research Methods (Psychology)	3 hours
	SYA 3300	Research Methods (Sociology)	3 hours
		r hours in each of four Social Science	
		are the required courses for each discipline	
	selected.		
	Communication		
	RTV 4403	Radio, Television and Society	3 hours
		or	
	JOU 3003	History of American Journalism	3 hours
	COM 3311	Communication as a Behavioral Science	3 hours
	Economics		
	ECO 2013	Principles of Economics I	3 hours
	ECO 2023	Principles of Economics II	3 hours
	Political Science		
	POS 2041	American National Government	3 hours
	Psychology		
	PSY 2013	General Psychology	3 hours
	PPE 3003	Personality Theory	3 hours
	Public Service Administration		
	PAD 3003	Introduction to Public Administration	4 hours
	CCJ 3020	Criminal Justice System	4 hours
	or		
	PLA 3013	Law and the Legal System	4 hours
	Sociology		
	SYG 2000	General Sociology	3 hours
	ANT 2003	General Anthropology	3 hours
5.	Electives		
	the house and build in the	Total Semester Hours Required	120

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

Chair: D. Fabianic, FA 405, Phone (407) 823-2227

Faculty: Carey, A. Chase, D. Chase, Cook, Dees, Ehrhardt, Gay, D. Jones, Lynxwiler, Morris, Stearman, Wallace

The Department of Sociology and Anthropology offers a Bachelor of Arts in Sociology and Anthropology. Students should consult with their advisor early in their academic careers to select an area of specialization within the Department or if they plan to pursue graduate work.

MINORS

The Department offers the following minors:

1. Anthropology

Required Courses: ANT 3211, ANT 3410, ANT 3422, ANT 3511; and a minimum of 9 semester hours of Anthropology. No more than 6 semester hours of transfer credit in anthropology will be accepted toward the minor, and no more than 6 semester hours of 1000/2000 credit can be applied. The minimum number of semester hours required is 21.

2. Sociology

Required Courses: SYG 2000, SYO 3000; and a minimum of 12 semester hours of Sociology courses. No more than 6 semester hours of transfer credit will be accepted toward the minor, and no more than 6 semester hours of 1000/2000 credit can be applied. The minimum number of semester hours required is 18.

Bachelor of Arts: Sociology

Degree Requirements

The Sociology curriculum is designed to provide students a basic curriculum which emphasizes critical examination of various components of society. The purpose of the curriculum is to increase students' social awareness and ability to employ a sociological perspective to interpret social institutions and behavior. A minimum of 45 semester hours is required for a major.

- 1. See Undergraduate Degree Requirements
- 2. A minimum GPA of 2.0 for all courses used for a major or minor in Sociology.
- 3.

. Required Courses (21 semester hours)			
	SYG 2000	General Sociology	3 hours
	SYA 3110	Development of Social Thought	3 hours
	or	with Plante American Indiana, Uniopeneoran O	
	SYA 3120	Modern Sociological Thought	3 hours
	SYA 3300	Research Methods	4 hours
	SYA 3400	Research Methods and Statistics	4 hours
	SYO 3360	Social Organization & Human Relations	3 hours
	or	to a resulting attraction from the second soft differences of	
	SYP 4000	Sociological Social Psychology	3 hours
	SYA 4450	Data Analysis (PR: SYA 3300 and SYA 3400	4 hours
R	estricted Electives	chramaninger	
M	ajors must choose a minimu	um of 24 semester hours from the courses listed be	elow:
	SYG 3010	Social Problems	3 hours
	SYA 4650	Applied Sociology	3 hours
	SYD 3410	Urban Sociology	3 hours
	SYD 3700	Race and Ethnic Minorities in the United States	3 hours
	SYD 3800	Sex Roles in Modern Society	3 hours
	SYD 4020	Population	3 hours
	SYO 3000	Modern Sociology	3 hours
	SYO 3410	Sociology of Mental Illness	3 hours
	SYO 3530	Social Stratification	3 hours
	SYO 4100	Family Trends	3 hours
	SYO 4250	Sociology of Education	3 hours
	SYO 4300	Political Sociology	3 hours
	SYO 4370	Sociology of Occupations and Professions	3 hours
	SYO 4400	Medical Sociology	3 hours
	SYP 3300	Collective Behavior	3 hours
	SYP 3400	Social Change	3 hours
	SYP 3540	Sociology of Law	3 hours
	SYP 3510	Sociology of Deviant Behavior	3 hours
	SYP 3520	Criminology	3 hours
	SYP 3530	Juvenile Delinquency	3 hours
	SYP 3551	Sociology of Alcoholism	3 hours
	SYP 3602	Sociology of Popular Music	3 hours
	SYP 3650	Sociology and Sport	3 hours
	SYP 4550	Sociology of Drug Abuse	3 hours
	SYP 4730	Sociology of Aging	3 hours
EI	igible students may enroll for	or 3 to 16 semester hours of Internship.	

Eligible students may enroll for 3 to 16 semester hours of Internship. Arrangements for Internship are coordinated by the Department.

5. Foreign Language

Two semesters/proficiency required and either a third semester in the course OR one approved enhancement course.

6. Electives

4.

Total Semester Hours Required

120

Bachelor of Arts: Anthropology

Degree Requirements

Anthropology offers the Bachelor of Arts degree. In keeping with the holistic nature of the discipline, students are required to pursue a course of study which leads to a comprehension of all subfields of Anthropology. The recognized subfields of Anthropology are Cultural Anthropology, Archaeology, Physical Anthropology, and Linguistics. Area studies concerned with North American Indians, Mesoamerican Civilization, and Latin American Culture are available. Students majoring or minoring in Anthropology with sufficient course background may be provided an opportunity to participate in ongoing archaeological excavations associated with the Maya culture in the Central American country of Belize.

A minimum of 45 semester hours is required for a degree. All Anthropology courses are 3 semester hours with the exception of ANT 4124, which is 9 semester hours.

Two semesters of foreign language are required, or proficiency.

Degree Requirements

1.	See	Underg	raduate	Degree	Rec	uirements

- 2. Special college and/or department requirements
- 3. Required Courses (21 hours)

ANT 3211	Archaeology and the Rise of Human Culture	
	(Anthropology I)	3 hours
ANT 3410	Cultural Anthropology (Anthropology II)	3 hours
ANT 3511	The Human Species (Anthropology III)	3 hours
ANT 3145	Archaeology of Complex Societies	3 hours
ANT 3422	Peoples of the World	3 hours
ANT 3610	Language and Culture	3 hours
ANT 4084	Anthropological Method and Theory	3 hours
. Restricted Electives (24 hours		
Area Studies (Select 3)		
ANT 3153	Archaeology of North America	3 hours
ANT 3163	Mesoamerican Archaeology	3 hours
ANT 3311	Indians of the Southeastern United States	3 hours
ANT 3312	Ethnology of North American Indians	3 hours
ANT 3313	Indians of the North American High Plains	3 hours
ANT 3328	Maya Archaeology	3 hours
ANT 3332	Peoples and Cultures of Latin America	3 hours
ANT 3360	Peoples of the Far East	3 hours
ANT 3363	Anthropology of Japan	3 hours
Specialized Studies (Select 5)		
Cultural		
ANT 3302	Sex, Gender, and Culture	3 hours
ANT 3241	Magic, Ritual, and Belief	3 hours
ANT 3432	Culture and the Individual	3 hours
ANT 3262	Rural Society	3 hours
ANT 3271	Law and Culture	3 hours
Archaeology		
ANT 3122	Archaeological Method and Theory	3 hours
ANT 3141	The Emergence of Civilizations	3 hours
ANT 3142	Old World Prehistory	3 hours
ANT 3144	Prehistory of the American Indians	3 hours
ANT 4124	Advanced Archaeological Fieldwork	9 hours
ANT 4180	Seminar in Laboratory Analysis	3 hours
Physical		
ANT 4462	Medical Anthropology	3 hours
ANT 3541	Biobehavioral Anthropology	3 hours
Electives		
ANT 2003	General Anthropology (recommended for	
	non-majors)	3 hours
	Total Semester Hours Required	120

5

DEPARTMENT OF STATISTICS

Chair: M.E. Johnson, CCII 221, Phone (407) 823-2289 Faculty: Cutchins, Hoffman, Malone, Nickerson, Richardson, J. Schott, S. Schott, Somerville, M. Wang, Wildman-Pepe

The Department of Statistics offers courses and programs which lead to a Bachelor of Science in Statistics, a minor in statistics, and a Master of Science in Statistical Computing. (See the Graduate Studies catalog for a description of the M.S. in Statistical Computing.)

The undergraduate programs in statistics are designed to serve (1) students who wish to pursue careers in statistics after having completed a baccalaureate degree; (2) students who wish to continue their education in graduate or professional schools; and (3) students who need to use statistics as tools in their specialty areas.

In order to serve such a wide variety of students, the courses and programs in the Department of Statistics have developed along several lines. There are the usual service courses in elementary statistics along with strong programs in the upper division in statistical methods, statistical theory, and statistical computing.

A limited number of assistantships are available for qualified graduate and undergraduate students.

MINOR

The Department of Statistics offers a minor (with a minimum of 18 hours). Required Courses: STA 3023 or STA 3032 or equivalent; STA 4163, STA 4164, and one of the following: STA 4222 or STA 4502. A grade of C or higher is required in each course counting toward a minor.

Restricted Electives: Six or more hours from STA courses numbered 3000 or higher. (Credit from STA 3023 or STA 3032 or the equivalent may not be used as a restricted elective.) All courses except STA 3023 or STA 3032 must be taken from the Department of Statistics at UCF unless substitutes are approved by the Department Standards Committee.

Bachelor of Science: Statistics

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
 - (a) All statistics courses except STA 3023, STA 3032, and those protected by the Florida Common Course Numbering system must be taken from the Department of Statistics at UCF. Substitution of other transfer work must be approved by the Department Standards Committee.
- (b) To meet the College of Arts and Sciences requirement for Natural Science majors, a Statistics major must take one course from one group (A or B) and two courses from the other group, with at least one laboratory in each group. Any additional science course in the College of Arts and Sciences of any level or any course in the College of Health numbered 3000 or higher will count as the fourth required course.

Group A	Group B
BOT 2010C	CHM 2045
BSC 2010C	CHM 2046 and CHM 2046L
ZOO 2010C	PHY 3053C
	PHY 3054C

(NOTE: If both CHM 2046 and CHM 2046L are taken, they will only count as one course in satisfying the above requirement. CHM 2046L by itself will not count as a course.)

- (c) A grade of "C" or higher is required in all STA courses counting towards a statistics major.
- (d) A 2.0 average or higher is required in all computer science and mathematics courses that count toward a statistics major.
- 3. Required Courses

STA 3023	Statistical Methods I	3 hours
STA 4102	Computer Processing of Statistical Data	3 hours
STA 4163	Statistical Methods II	3 hours
STA 4164	Statistical Methods III	3 hours
STA 4321	Statistical Theory I	3 hours
STA 4322	Statistical Theory II	3 hours
OTTATOLL	orationour moory in	Uniour

COT 4500	Numerical Calculus	3 hours
COP 2500	Programming I	3 hours
COP 2501	Programming II	3 hours
MAC 3311	Calculus with Analytic Geometry I	4 hours
MAC 3312	Calculus with Analytic Geometry II	4 hours
MAC 3313	Calculus with Analytic Geometry III	4 hours
MAS 3106	Linear Algebra	4 hours
or	State of the end or content of the publication and the later	
MAS 3105	Elementary Linear and Matrix Algebra	4 hours
COT 3100	Introduction to Discrete Structure	3 hours
or		onouro
MHF 2300	Logic and Proof in Mathematics	3 hours
ENC 3241	Technical Report Writing	3 hours
hree from among the fo		onours
STA 3096	Statistical Graphics	3 hours
STA 4202	Design of Experiments	3 hours
STA 4222	Sample Survey Methods	3 hours
STA 4502	Nonparametric Statistical Methods	3 hours
STA 4664		
STA 4004	Statistical Quality Control	3 hours

4. Restricted Electives

A minimum of 6 hours selected from upper-division or graduate statistics, mathematics, or computer science courses. (MAC 3233, 3253, 3254; all MAE courses; and MHF 4404 may not be used.)

Selected courses in engineering may be used but must first be approved by the Statistics Department Standards Committee.

5. Electives

Th

The number of hours depends on the courses chosen to satisfy university requirements. Total Semester Hours Required 120

DEPARTMENT OF THEATRE

Chair: D.W. Seay, THE 120, Phone (407) 823-2861.

Faculty: Cali, Rusnock, Smith, Begley, Elliott, Kopf, Lee, O'Keefe, Rothan, Siegfried

The Department of Theatre seeks to develop theatre artists of the highest quality by providing a select number of undergraduate students with the training, education, and experiences necessary for the successful pursuit of professional careers in theatre arts. In support of this mission and the liberal arts goals of the College of Arts and Sciences, the department seeks to provide its students with the knowledge and skills necessary to live full, rewarding and productive lives. Offering both the Bachelor of Arts and the Bachelor of Fine Arts degrees, the Department of Theatre undertakes to develop and graduate theatre artists who are sensitive, aware, and total human beings. Through its public performance programs, the department endeavors to serve as a cultural resource for the University, the community and the central Florida region. Striving to provide its students with a competitive edge, the department employs a faculty and staff of artists/teachers who work intensely with students in the classroom and in production. To supplement this education and training, professional guest artists are brought to the campus to work in production and in the classroom. Before graduation, B.F.A. students are required to complete a professional theatre internship thus providing them with a unique and invaluable introduction to the real world of professional theatre. In all its endeavors, the Department of Theatre strives to create and maintain a professional environment necessary for the continued growth and development of its students, faculty, and staff.

SPECIAL ENTRANCE REQUIREMENTS

Entrance into the majority of UCF theatre classes for both B.A. and B.F.A. theatre majors is made by the departmental faculty on the basis of departmental interview, audition and portfolio review. Only those students who have successfully undergone this process are admitted into restricted theatre classes. Students wishing to pursue a performance major, in addition to an interview, are required to prepare and perform two monologues of contrasting styles not to exceed a total of three (3) minutes. Students of performance interested in musical theatre should prepare a ballad in addition to their monologues. Students

wishing to pursue a technical theatre/design major, in addition to an interview, must undergo a portfolio review. The portfolio should contain no more than fifteen (15) examples of the student's best work representing a variety of mediums and presented in a professional manner. Three dimensional pieces can be submitted in slide format. For more complete information concerning entrance auditions and portfolios, please contact the Department of Theatre prior to enrollment at UCF.

Course Restrictions

With the exception of THE 1020, 1020H, 1925, 2300, 2925, 2926, 3110, 3111, 3305, TPP 3190, 3191, 3197, 4192, 4193, TPA 3197, 3290, 3291, and 4293 theatre courses are restricted to theatre majors. Other courses are further restricted to B.F.A. theatre majors. Waiver of restrictions must be approved by the Department Chair.

THEATRE PARTICIPATION

Because participation in productions is the best way to experience maximum artistic development, the department strongly recommends that all theatre students participate, in some capacity, on all main-stage productions. Though participation on all departmental productions is not required, B.A. and B.F.A theatre majors are required to participate on a minimum of two (2) departmental productions during both the Fall and Spring terms. Participation in some capacity on the opening production of the Fall term of each academic year is mandatory for all majors. Successful completion of the theatre degree is contingent upon the student's continuing participation requirement, will be placed on probation for one (1) semester. Continued failure to successfully participate may result in the student being dropped as a Theatre major. For further information concerning Theatre Participation, consult the Student Handbook.

FRESHMAN AND SOPHOMORE B.F.A. EVALUATIONS

Evaluations are available to all theatre students but are required of B.F.A. students who wish to continue in the B.F.A. degree program. The performance theatre faculty and staff and the technical theatre/design faculty and staff will meet privately with each student in their respective areas to review and provide objective evaluations of each student's strengths and weaknesses. Following each evaluation, a recommendation will be made to each student regarding their continuation in the B.F.A. degree program. For further information concerning B.F.A. evaluations, consult the departmental Student Handbook.

MINOR

The Department of Theatre offers a minor in General Theatre. The requirements are as follows:

- 1. A successful interview and audition or portfolio review.
- A minimum of 28 semester hours of credit to include the following or their equivalent: THE 1020, 1925, 2300, 2925, 2926, 3110, 3111, 3305, TPP 2100, TPA 2200, and 2204.
- 3. A minimum of 18 of these required credits, including TPA 2200, 2204, THE 2925, and 2926, must be completed at UCF.
- 4. Participation on a minimum of two (2) departmental productions during both the Fall and Spring terms for four (4) semesters.
- A minimum grade of "C" (2.00) in all theatre courses. No "D" grades in theatre courses from other institutions are transferable.

THEATRE CORE CURRICULUM

The theatre core curriculum is required of all B.A. and B.F.A. theatre majors.

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THE 3305 TPP 3310 Survey of Dramatic Literature Directing I 3 hours 3 hours Total: 30 hours

BACHELOR OF ARTS DEGREE

The Bachelor of Arts Degree is offered to meet the needs of those students who do not plan to pursue the theatre as a profession upon graduation. Such students may be interested in pursuing graduate studies in theatre or they may be interested in the theatre solely as a means of obtaining an excellent liberal arts education. The B.A. degree is a 46-hour major offered in general theatre only. Students need to work closely with their advisors in selecting courses.

B.A. Degree Requirements

- 1. See Undergraduate Degree Requirements.
- 2. Most theatre courses have prerequisites and are sequential. Waiver of prerequisites or sequence must be approved by the Department Chair.
- 3. See special college and/or department requirements. Students in theatre courses must achieve a grade of "C" (2.00) or higher to continue in a course sequence or to advance to the next higher level of study. Students receiving a grade of "D" in a required theatre course must repeat the course. Departmental residency requirements require that a minimum thirty (30) semester hours of regularly scheduled courses be completed with the UCF Department of Theatre.
- 4. Students must maintain a minimum "C" (2.00) overall Theatre GPA to continue in the major.
- 5. Required courses.
- 6. Restricted electives.
- 7. Foreign Languages Requirement for B.A. is two (2) semesters.
- 8. Electives, selected in consultation with a theatre advisor, are to be primarily from upper division courses.
- 9. Total semester hours required for graduation is 120.

AREAS OF SPECIALIZATION - NONE

I. GENERAL THEATRE

A. Required Theatre Courses Theatre Core Curriculum

Theatre Production/Performance

- B. Theatre Electives selected from courses open to B.A. majors
- C. Suggested Courses in Dramatic Literature ENL 4330, 5176, and 5335

Total: 46 hours

30 hours

4 hours

12 hours

BACHELOR OF FINE ARTS DEGREE

The Bachelor of Fine Arts Degree is offered to meet the needs of those students who, upon graduation, plan to pursue a specialized career in professional theatre. The B.F.A. degree is an 80 hour major which provides the student with a very structured and intensive career preparation in either performance or technical theatre/design. The B.F.A. is also an excellent degree for students who are interested in pursuing graduate studies in theatre. Work in the B.F.A. degree program requires tireless energy and dedication. As B.F.A. theatre students work 35-55 hours per week, part-time study or outside work is generally impossible. B.F.A. standards are high, both for admission and for continuation in the program. Casting, crew and design assignments are regulated to serve the artistic growth of students coordinating production experience with classroom exploration.

B.F.A. Degree Requirements

- 1. See Undergraduate Degree Requirements.
- 2. Waiver of course prerequisites and sequencing must be approved by the Department Chair.
- See special college and/or department requirements. B.F.A. students in theatre courses must achieve a grade of "C" (2.00) or higher to continue in a course sequence or to

advance to the next higher level of study. Students receiving a grade of "D" in a required theatre course must repeat the course. Departmental residency requirements require a minimum of sixty (60) semester hours of regularly scheduled courses be successfully completed with the UCF Department of Theatre.

- 4. B.F.A. theatre majors must maintain a minimum "B" (3.00) overall Theatre GPA to continue in the B.F.A. degree program. In addition to maintaining a minimum 3.00 Theatre GPA, continuation in the B.F.A. requires a positive annual evaluation by the faculty and their recommendation for continuation in the program. Failure to meet the above criteria will, under normal circumstances, require the student to change to a B.A. degree program.
- 5. Required courses vary with concentration.
- 6. Restricted electives.

- 7. No Foreign Language required for B.F.A. majors.
- 8. Electives, selected in consultation with a theatre advisor are to be primarily from upper division courses.
- 9. Total semester hours required for graduation is 120.

AREAS OF SPECIALIZATION

1.	PE	ERFORMANCE	
	Α.	Required Theatre Courses	30 hours
		Theatre Core Curriculum	
	Β.	Performance Specialization	43 hours
		TPP 2170, 3172, 3190, 3191, 3510, 3511, 3712, 3730,	
		4140, 4142, 4192, 4193, 4260, 4511, 4531,	
		4940, TPA 2248, and THE 2926	
	C.	Restricted Electives	5 hours
		TPP 3197, 4311, TPA 3601, 3249, and 4400	
	D.	Music	2 hours
		MVV 1111 and 1211	
	E.	Suggested Courses in Dramatic Literature	
		ENL 4330, 5176, 5335	
			Total: 80 hours
2.		CHNICAL THEATRE/DESIGN	and the second
	Α.	Required Theatre Courses	30 hours
	_	Theatre Core Curriculum	
	Β.	Technical Theatre/Design Specialization	39 hours
		TPA 3043, 3060, 3061, 3077, 3220, 3221, 3230,	
		3250, 3251, 3290, 3291, 3601, 4049, 4293,	
	~	4940, and THE 2926	E house
	C.	Restricted Electives	5 hours
	-	TPA 2248, 3197, 3249, 4061, and 4400	Chours
	D.	Art 2000 20010 20010 20000 at 20000	6 hours
	-	Art 2300, 2301C, 2201C, 2202C, or 3330C	
	E.	Suggested Courses in Dramatic Literature ENL 4330, 5176, 5335	
		ENL 4550, 5176, 5555	Total: 80 hours
3	ST	AGE MANAGEMENT	Total. ou nouis
0.		Required Theatre Courses	30 hours
	^ .	Theatre Core Curriculum	00 110013
	B	Stage Management Specialization	
	0.	TPA 2248, 3221, 3060, 3220, 3230, 3290, 3291, 3601, 4293	
		THE 2926, TPP 2170, 2510, 2511, 2710, 2711, and 3172	40 hours
	C	Restricted Electives	ie neare
		TPA 3197, 3249, 4061, 4400, TPP 3197, 4311	7 hours
	D.	Art	
		Art 2300, 2301C, 2201C, 2202C or 3330C	3 hours
	E.	Suggested Courses in Dramatic Literature	
		ENL 4330, 5176, and 5335	
			Total: 80 hours

WOMEN'S STUDIES PROGRAM

The Women's Studies program offers an interdisciplinary minor, but not a major. Several departments cooperate in offering the minor, which emphasizes the history and cultural contributions of women and their role in society today. For further information contact Dr. Kathryn Seidel, FA 511, (407) 823-2251.

Required Courses — 15 hours chosen from:			
AMH 3560	Women in American History		
ANT 3302	Sex, Gender and Culture		
ARH 4458	Women and Art in 20th Century America		
ART 4892	Women in Art		
CCJ 4670	Women and Crime		
HSC 3930	Women and Health		
LIT 3383	Women in Literature		
PHM 4123	Feminist Theory		
PUP 4323	Women and Politics		
SOP 3742	Psychology of Women		
Elective Courses (choose one) - 3 hours:			
LIT 4354	Ethnic Literature in the U.S.		
MUL 393	Women Composers		
SYD 3800	Sex Roles in Modern Society		
SYD 4100	The Family		
Other courses as approv	ved by the Women's Studies advisor.		

COLLEGE OF BUSINESS ADMINISTRATION

UNDERGRADUATE PROGRAMS

Accounting (BSBA) Economics (BSBA) Finance (BSBA) General Business Administration (BSBA) Hospitality Management (BSBA) Management (BSBA) Marketing (BSBA)

GRADUATE PROGRAMS*

Accounting (MSA) Applied Economics (MAE) Business Administration (MBA, Ph.D.) Concentrations in Accounting and Finance (Ph.D.) Taxation (MST) *See the Graduate catalog for information.

Admission to the University of Central Florida doep not imply admission to the

COLLEGE OF BUSINESS ADMINISTRATION

Dean: Richard C. Huseman, BA 230, Phone (407) 823-2181 Interim Associate Dean: W. McHone, BA 230L, Phone (407) 823-5094 Interim Assistant Dean: R. Pennington, BA 240, Phone (407) 823-2184 Director, Student Support: H. Hill, BA 240, Phone (407) 823-2184

The mission of the College of Business Administration at the University of Central Florida is to provide quality business education programs, at the undergraduate, graduate, and executive levels, to the citizens of the state of Florida and to selected clientele nationally and internationally. In delivering these programs, the College places primary emphasis on excellent teaching and research with a strong commitment to developing mutually supportive relationships with the business community of Central Florida.

In pursuit of its mission, the College of Business Administration affirms its commitment to the University's focus on excellence and accent on the individual. Furthermore, the College pledges to deliver innovative and progressive programs to its clientele, and a commitment to service in the community, not only from its faculty but also its students. As the College approaches the twenty-first century, it has adopted "Driven by Excellence" as a motto and guiding force in achieving its goals and objectives. All undergraduate and graduate programs are accredited by the American Assembly of Collegiate Schools of Business (MCSB).

Admission to the University of Central Florida does not imply admission to the College of Business Administration. Students will only be allowed to enroll in the 3000/4000 level courses taught by the College of Business Administration after they have been admitted to the College.

Admission to the College will be granted when the following are complete:

- a. Completion of the University General Education program.
- b. 1. Completion of ENC 1101, ENC 1102 and MAC 1104 with a minimum grade of "C".
 - 2. Completion of ACG 2021 and ACG 2071 (or ACG 2023) with a minimum grade of "C".
 - 3. Completion of ECO 2013 and ECO 2023 with a minimum grade of "C".
 - 4. Students must demonstrate competency in micro-computer applications during their first semester in College of Business Administration courses. Students who fail to demonstrate competency will not be permitted to continue enrollment in the business program.
- c. Achieved a minimum grade point average of 2.5 overall at the completion of at least sixty hours of course work.

Students who otherwise meet the University admission requirements, such as entering freshmen and transfer students, will be placed in a Business Administration pending category until they meet the requirements set forth above. Grades of "D" will not transfer into the program. Each student should attend orientation for academic advising and should meet with an academic advisor in the College to outline a program of study.

Attendance at the first meeting of any College of Business course is mandatory. Students not in attendance at the first meeting may be dropped from the course. It is the responsibility of the student to take whatever steps are necessary to determine if they have been officially dropped from a course. This does not remove the student's responsibility for dropping courses they do not intend to complete.

The degree Bachelor of Science in Business Administration with the following majors is offered by the College of Business Administration:

Accounting Economics Finance Marketing General Business Administration Hospitality Management Management

Common Body of Knowledge

BUL 3130	Legal Environments of Business	GEB 4361	Business in the International Environments
ECO 3401	Mathematical Economics I	MAN 3025	Management of Organizations
ECO 3411	Quantitative Methods and	MAN 3504	Quality and Productivity
	Business Decision Analysis		Management
FIN 3403	Business Finance	MAN 4720	Strategic Management
GEB 3031	Cornerstone	MAR 3023	Marketing

Grade Point Average Requirements

For graduation the student must have maintained a minimum 2.0 GPA in course work taken in the College of Business Administration and a minimum 2.0 GPA in the course work required in the major, except in Accounting, Finance and Marketing where a "C" or better is required in *each* course and a minimum 2.0 is required overall.

Student Load

A student who is enrolled in 16 semester hours of course work is considered to be carrying a normal academic load. Students in the College of Business Administration desiring to take more than 16 hours of course work must obtain permission from the college.

Community/Junior College Transfers

- Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in UCF's Business program.
- 2. Florida Public Community College students are advised to complete the Associate of Arts Degree including:
 - A. the general education requirements;
 - B. the one year Accounting and Economics sequence; and
 - C. College Algebra.
- 3. Professional courses should not be taken at a community/junior college in the areas of Management, Marketing, Real Estate, or Finance. These professional areas are third and fourth year course areas in the College of Business Administration and cannot be satisfied with community/junior college courses.
- 4. A minimum of 12 semester hours must be completed at UCF within each individual major.

Minor — International Business (Restricted to Business Majors)

The College of Business Administration offers a minor in International Business consisting of 18 semester hours.

Required Courses: GEB 4361, ECO 3703, FIN 4604, MAR 4156 or MAN 4600; Electives: 6 hours of the following courses — ANT 3410, ECS 4003, ECS 4013, GEO 3470, INR 4035, INR 4401, INR 4224, INR 4243: Special Topics Seminars in International Business; 3000/4000 level foreign language course.

Minor (Restricted to Non-Business Majors)

The College of Business Administration offers a minor consisting of 24 semester hours. (Nine semester hours of upper division business courses must be completed at UCF.) Students are required to earn a "C" or better in each course.

Required courses: ACG 2021, 2071, or ACG 2023; ECO 2023, 2013; FIN 3403; MAN 3025; MAR 3023; one 3000/4000 level business course elective. A GPA of 2.0 is required for each course and overall. GEB 3004 may not be used as the business course elective.

See also: Florida Tilburg Program (for Business Majors) listed under International Studies and Programs

SCHOOL OF ACCOUNTING

Director: D. Bandy, BA 437, Phone (407) 823-2871

Assistant to the Director: L. Mahoney, BA 438, Phone (407) 823-5809

Faculty: Anderson, Bailey, Bandy, Evans, Goldwater, Hunt, Johnson, Judd, Kaminsky, Kelliher, Klintworth, Phillips, Potts, Robertson, Roush, J. Salter, M. Salter, Savage, Taylor, Veit, J. Welch, Welch, Villaire

OBJECTIVES OF ACCOUNTING PROGRAMS

The objective of the baccalaureate program with a concentration in accounting is to provide basic conceptual accounting and business knowledge as a foundation for accounting career development.

Bachelor of Science in Business Administration: Accounting

Degree Requirements

- Completion of all University Undergraduate Degree requirements and all Common Body of Knowledge requirements in the College of Business (except BUL 3130 which is satisfied by taking BUL I and II).
- 2. Special qualifications for satisfying this program's requirements are:
 - a. Students wanting to major in Accounting must apply for admission to the major.
 - b. Within the College of Business Administration the first day of class is mandatory. Final exams will be given during Exam Week.
 - c. A minimum grade of "C" must be earned in each accounting, business law, and tax course completed. Principles of Accounting and Principles of Managerial Accounting are included under this rule.
- d. Students are allowed a maximum of three course repetitions during their program of study leading to the bachelors degree, including repetitions of courses from which they have withdrawn. This requirement applies to upper division accounting, tax, and business law courses only.
 - e. A transfer student to this program must:
 - take a minimum of twelve (12) semester hours in accounting at UCF as approved by the director of the School of Accounting.
 - (2) have credit for a course in each of the following areas:
 - a. English communication arts including written composition
 - b. Oral expression
 - c. Behavioral science such as psychology, anthropology, and sociology
 - d. Humanities
 - e. Political environment of business and society such as political science, public administration, and ethics.
 - f. Students must demonstrate computer proficiency. All College of Business Administration students must demonstrate computer proficiency by completion of the CBA Computer Proficiency Examination. Accounting majors must also complete CGS 3xxx [Course number to be determined by Computer Science]

3. Required Courses

ACC 0101	Intermediate Einspeiel Association I	0 hours
ACG 3101	Intermediate Financial Accounting I	3 hours
ACG 3111	Intermediate Financial Accounting II	3 hours
ACG 3361	Cost Accounting I	3 hours
ACG 3501	Financial Accounting for Governmental	
	and Nonprofit Organizations	3 hours
ACG 4401	Accounting Systems I*	3 hours
TAX 4001	Federal Income Tax I	3 hours
ACG 4203	Advanced Accounting	3 hours
ACG 4651	Auditing	3 hours
BUL 3320	Business Law I	3 hours
BUL 3321	Business Law II**	3 hours
4. Electives: As necessary to	result in 120 total credit hours.	
adjustic unifier compared to a	Total Semester Hours Required	120

* CGS 3xxx, which meet requirement of the General Education Program, is a prerequisite for Accounting Systems.

** Transferable only from senior academic institutions.

CPA EXAMINATION REQUIREMENTS

Effective August 31, 1983, Florida Law states that to qualify to sit for the CPA exam, one must possess thirty (30) additional semester hours of credit beyond the minimum requirements for the baccalaureate degree. In addition to this overall educational requirement, the following specific criteria also apply:

36 hours in accounting beyond elementary, including at least:

- 12 hours in financial and cost accounting
- 6 hours in auditing and internal auditing
 - 6 hours in tax

AND

39 hours in general business, including at least six hours of business law. Because of these increased educational requirements, no experience or additional course work is needed for certification.

To satisfy the necessary coursework required by the law, the School of Accounting offers the Master of Science in Accounting (MSA) and the Master of Science in Taxation (MST) degree programs. Please see the graduate catalog for program requirements.

DEPARTMENT OF ECONOMICS

Interim Chair: R. A. Hofler, BA 325, Phone (407) 823-3266 Faculty: Braun, Day, Gibbs, Hofler, D. Hosni, Kilbride, T. Martin, McHone, Otsuka, Pennington, Raffa, Rungeling, Soskin, White, Xander

The Department of Economics participates in two undergraduate degree programs: a B.S.B.A. degree in the College of Business Administration and a B.A. degree in the College of Arts and Sciences. The purpose of the College of Business Administration economics major is to provide students with a professional business background that prepares them for careers in private business and government. The purpose of the economics major in the College of Arts and Sciences is to provide a broad-based liberal arts background that can serve as a strong foundation for further graduate studies in law, social sciences, and other areas. The goal of both programs is to enable students to better understand the economic and non-economic issues that are confronted in their jobs and their private lives and to provide the analytical skills that will allow them to resolve these issues. Students interested in a B.A. in Economics should refer to the Economics Major in the College of Arts and Sciences.

MINOR (In Economics for Non-Business Administration majors)

Required Courses: ECO 3101, 3203, 3411. These requirements are in addition to the prerequisites ECO 2013 and 2023.

Elective Courses: Three courses from the following: ECO 3233, 3703, 3622, 3723, 4303, 4412, 4504; ECP 3004, 3203, 3424, 3433, 4403, 4603, 4703; ECS 4003, 4013, 4303.

Bachelor of Science in Business Administration: Economics

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. Special college and/or department requirements:
 - a. Students wanting to major in Economics must apply for admission to the major.
 - b. Within the College of Business Administration the first day of class is mandatory. Final exams will be given during Exam Week.
 - c. A transfer student to this program must take a minimum of twelve (12) semester hours in economics at UCF.
- 3. Required Courses

	ECO 3101	Intermediate Price Theory	3 hours
	ECO 3203	Aggregate Economic Conditions Analysis	3 hours
4.	Restricted Electives	and the set of the set	

All economics majors will be required to take five (5) electives from the following for a total of twenty-one (21) hours beyond the Common Body of Knowledge.

ECO 3233	Money and Banking	3 hours
ECO 3622	American Economic History	3 hours
ECO 3703	International Economics	3 hours
ECO 3723	International Commercial Policy	3 hours
ECO 4303	History of Economic Thought	3 hours
ECO 4412	Economic Statistics and Econometrics	3 hours
ECO 4504	Economics of the Public Sector	3 hours
ECP 3004	Seminar in Current Economic Topics	3 hours
ECP 3203	Contemporary Labor Economics	3 hours
ECP 3433	Transportation Economics	3 hours
ECP 4403	Business, Government & Industrial	
	Organization	3 hours
ECP 4603	Urban and Regional Economic Problems	3 hours
ECP 4703	Managerial Economics	3 hours
ECS 4003	Comparative Economic Systems	3 hours
ECS 4013	Economic Development	3 hours
ECS 4303	Economics of European Integration	3 hours
5. Electives	ADMIT OF ECONOMICS	
	Total Semester Hours Required	120

DEPARTMENT OF FINANCE

Interim Chair: J. M. Cheney, BA 420, Phone (407) 823-3575

Faculty: Atkinson, Borde, Byrd, Cheney, Clayton, Gilkeson, Millican, Modani, Park, Phelps, Porter, Reiff, Scott, Weaver

The program in finance is designed to provide the student with broad knowledge in finance, including business finance, investments, financial institutions, International finance, risk management and insurance, and real estate. The program provides the student with the theoretical background and tools of analysis required for making effective financial decisions.

The study of finance prepares the student for careers in business financial management. Students that major in finance are sought by both financial and non-financial firms.

Bachelor of Science in Business Administration: Finance

- 1. See Undergraduate Degree Requirements.
- 2. Special college and/or department requirements:
 - a. The Finance Major Curriculum consists of a total of 27 semester hours in addition to FIN 3403. Students are required to earn a grade of "C" or better in FIN 3403 and all other classes taken toward the major and to have a 2.0 overall average.
 - b. FIN 3403 Business Finance, is prerequisite to all finance courses except FIN 3100, REE 3043, & REE 4433.
 - c. FIN 3100 (Personal Finance and Investments) and REE 3043 (Fundamentals of Real Estate) are not usable for credit by Finance Majors.
 - d. Students wanting to major in Finance must apply for admission to the major.
 - e. Within the College of Business Administration the first day of class is mandatory. Final exams will be given during Exam Week.
 - f. A transfer student to this program must take a minimum of twelve (12) semester hours in finance at UCF.
- 3. Required Courses.

FIN 3303	Financial Markets	3 hours
FIN 3404	Intermediate Corporate Finance	3 hours
FIN 3453	Financial Models	3 hours
FIN 3504	Investment Analysis	3 hours
Select two of the following:*	indiana and an	
FIN 4324	Management of Financial Institutions	3 hours
FIN 4514	Portfolio Analysis and Management	3 hours
FIN 4503	Speculative Financial Markets	3 hours
FIN 4604	International Financial Management	3 hours

FIN 4424	Advance Topics in Financial Management	3 hours
REE 4303	Real Estate Investment Analysis	3 hours
4. Restricted Electives		
a. Select three of the followin	g:* edite the second	
ACG 3101	Intermediate Financial Accounting I	3 hours
ACG 3111	Intermediate Financial Accounting II	3 hours
ACG 3361	Cost Accounting	3 hours
ACG 4401	Accounting Systems I	3 hours
COP 3120	Programming in COBOL	3 hours
ECO 4412	Economic Statistics and Econometrics	3 hours
ECP 4403	Business, Government, and Industrial	
	Organizations	3 hours
ECP 4603	Urban and Regional Economic Problems	3 hours
ECP 4703	Managerial Economics	3 hours
FIN 4127	Employee Benefits and Retirement Planning	3 hours
FIN 4324	Management of Financial Institutions	3 hours
FIN 4503	Speculative Financial Markets	3 hours
FIN 4514	Portfolio Analysis and Management	3 hours
FIN 4604	International Financial Management	3 hours
FIN 4424	Advance Topics in Financial Management	3 hours
FIN 4906	Independent Study	3 hours
FIN 4941	Internship	3 hours
MAC 3311	Calculus with Analytic Geometry I	3 hours
MAC 3312	Calculus with Analytic Geometry II	3 hours
MAC 3313	Calculus with Analytic Geometry III	3 hours
REE 4303	Real Estate Investment Analysis	3 hours
REE 4103	Real Estate Appraisal	3 hours
REE 4204	Real Estate Finance	3 hours
REE 4433	Real Estate Law	3 hours
RMI 3011	Principles of Risk and Insurance	3 hours
STA 4102	Computer Processing of Statistical Data	3 hours
STA 4163	Statistical Methods II	3 hours
STA 4164	Statistical Methods III	3 hours
STA 4502	Nonparametric Statistical Methods	3 hours
STA 4502 STA 4664	Statistical Quality Control	3 hours
TAX 4001	Federal Income Tax I	3 hours
	Total Hours	120
*No class may be used more than		120

*No class may be used more than once.

GENERAL BUSINESS ADMINISTRATION

This option allows students to develop a general program of study which will satisfy career objectives not provided for by the specialized areas of concentration. To pursue this option, students should seek advisement in the Department of Economics. An academic advisor will be assigned to assist each student in developing a meaningful program of study.

Bachelor of Science in Business Administration: General Business Administration

- 1. Undergraduate Degree Requirements
- 2. Special college and/or department requirements:
 - Students wanting to major in General Business Administration must apply for admission to the major.
 - b. Within the College of Business Administration the first day of class is mandatory. Final exams will be given during Exam Week.
 - c. A transfer student to this program must take a minimum of twelve (12) semester hours in the major at UCF.
- One (1) additional course beyond the Common Body of Knowledge in Finance (FIN prefix) and Marketing (MAR prefix) (one course from each discipline).

4. Restricted Electives

A minimum of six (6) additional courses from at least three (3) different departments (Accounting, Economics, Finance, Hospitality Management, Management, Marketing) taught in the College of Business Administration.

- Students wishing to complete the General Business major as a second major within the College of Business Administration must complete 24 hours beyond the courses required for the first major.
- 6. Electives

Total Semester Hours Required

120

DEPARTMENT OF HOSPITALITY MANAGEMENT

Chair: R. Ford, BA 409, Phone (407) 823-2188

Faculty: Ashley, Bach, Chesser, Ellis, LeBruto, Milman, Pizam, Quain

The hospitality industry currently represents the second largest employer in the United States and is the major part of the rapidly growing services sector of the economy. Because of its unique location in the premier tourist destination in the world, the Department of Hospitality Management is ideally situated to prepare students for managerial careers in the hospitality industry. Whether the student is interested in entering lodging, food service, travel and tourism, or conventions and destination services management, the Orlando and Central Florida area offers extraordinary opportunities. It is the destination for over 13 million tourists each year, has over 400 hotels with 80,000 rooms, 1400 restaurants, and 50 theme parks and attractions. The industry employs a half million people in the State of Florida and many are in the Central Florida area.

The leaders of this industry have helped design a program of study for the major that prepares both experienced employees and newly entering students to successfully compete for employment in the industry at the local and national levels. The educational mission of the department is to provide our students with the knowledge, skills, and ability to identify opportunities and challenges in the hospitality industry, to apply creative decision techniques in responding to those opportunities, and to lead the industry into the next century.

The major is designed to prepare students for a broad range of managerial roles across the hospitality industry. It provides both academic preparation and "hands on" experiences that students will need to enter and succeed in a hospitality management career. Students also have the opportunity to experience the work world in hospitality through the 800 hour cooperative education requirement and through extensive contact with leading hospitality managers in the Central Florida area.

MINOR In Hospitality Management

The Department offers an eighteen hour minor in Hospitality Management.

Required courses for the minor are:

HFT 3020, HFT 4752, FSS 3223, HFT 4210, HFT 4250c, HFT 4717. A GPA of 2.0 is required for these courses. Twelve (12) semester hours must be taken at UCF.

Bachelor of Science in Business Administration: Hospitality Management

- 1. See Undergraduate Degree Requirements:
- 2. UCF Residency Requirements: 31 hours
- 3. Special college and/or department requirements:
 - a. Students seeking to major in Hospitality Management must apply for admission to the major.
 - b. Within the College of Business Administration attendance on the first day of class is mandatory. Final exams will be given during Exam Week only.
 - c. A transfer student to this program must take a minimum of twelve (12) hours in hospitality management at UCF.
 - d. A cooperative work experience of 800 hours is a graduation requirement.
 - e. Students should substitute HFT 3600 Legal Environment of Hospitality/Tourism for BUL 3130 Legal Environment of Business to satisfy the College of Business's Common Body of Knowledge.

4. Required Courses:

HFT 3020	Guest Services Management	3 hours
HFT 4752	Conference and Convention Promotion	3 hours
FSS 3223	Quantity Food Management	3 hours
HFT 4210	Hospitality Human Resources Development	3 hours
HFT 4250C	Hotel/Motel Management & Operations	3 hours
HFT 4717	Tourism Planning and Development	3 hours
	TOTAL	18 Hours

5. Restricted Electives:

Hospitality major should select any three (3) courses taught in the Hospitality Management Department and includes the following: AVM 4510, FSS 3120, FSS 3301, FSS 3232C, FSS 3241, FSS 4284C, HFT 3754, HFT 4343, HFT 4473, HFT 4722, HFT 4735, HFT 4753, HFT 4754, HFT 4860, HFT 4932.

- 6. Hospitality Management Cooperative Education 0 hours The co-operative education requirement provides students the opportunity to see how classroom theory is applied to the world of work. Hospitality students must complete a minimum of 800 clock hours (equivalent to 20 full time weeks) of paid study-related work experience in a hospitality or tourism enterprise. All work related experiences must be approved in advance by the departmental co-op advisor.
- 7. Electives

Total Semester Hours Required

120 hours

DEPARTMENT OF MANAGEMENT

Chair: P. Lewis, BA 335, Phone (407) 823-2679

Faculty: Abramowitz, Bogumil, Burnette, Callarman, Eubanks, Fandt, Femald, Goodman, Harrison, Hatfield, Huseman, F. Jones, H. Jones, Leigh, R. Martin, Pullin, Ragusa, Rosenkrantz

The study of management involves an investigation of the processes and techniques of leadership, planning, staffing, and controlling of both small and large organizations.

Course offerings are designed to show the impact of technological factors, the framework for decision-making, and human contributions on productivity, satisfaction of job-related needs, and organizational effectiveness.

A student majoring in management may find a wide variety of career opportunities in business, industry, or government.

Bachelor of Science in Business Administration: Management

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. Special college and/or department requirements:
 - a. Students wanting to major in Management must apply for admission to the major.
 - b. Within the College of Business Administration the first day of class is mandatory. Final exams will be given during Exam Week.
 - c. A transfer student to this program must take a minimum of twelve (12) semester hours in management at UCF.
- 3. Required Courses (Students are required to take the three required Management courses and five other courses from the designated Management options.)

ISM 3011	Management Information Systems	3 hours
MAN 4701	Business Ethics and Society	3 hours
MAN 4240	Organization Theory and Behavior	3 hours
astricted Electives (Sole	at a minimum of five courses)	

 Restricted Electives (Select a minimum of five courses) (The major may select any one of the following areas of concentration.)

a. Human Resource Management

MAN 3301	Personnel Management	3 hours
MAN 4129	Managerial Skills in Organizations	3 hours
MAN 4310	Personnel Management Issues	3 hours
MAN 4350	Training and Development	3 hours
MAN 4401	Labor Relations Management	3 hours

b. Management Information Systems

Management information		
ISM 3xxx	Management Information Systems Techniques	3 hours
ISM 4212	Data Base Management Systems	3 hours
ISM 4113	Information Systems Analysis and Design	3 hours
ISM 4130	Implementing Information Systems	3 hours
ISM 4220	Distributed Information Systems	3 hours
Production/Operations M	Aanagement	
MAN 4029	Management of Service Organizations	3 hours
MAN 4521	Production Planning and Control	3 hours
MAN 4572	Procurement Management	3 hours
MAN 4854	Management Science	3 hours
MAN 4595	Automated Materials Planning	3 hours
General Management	AND FOR AND THE ADD THE ADD.	
MAN 4129	Managerial Skills in Organizations	3 hours
MAN 4600	International Management	3 hours
Three additional courses	s to be selected from any two of the other	
		9 hours
ectives		
	Total Semester Hours Required	120
	ISM 3xxx ISM 4212 ISM 4113 ISM 4130 ISM 4220 Production/Operations M MAN 4029 MAN 4521 MAN 4572 MAN 4575 General Management MAN 4129 MAN 4600 Three additional courses MAN concentration area	ISM 4212Data Base Management SystemsISM 4113Information Systems Analysis and DesignISM 4130Implementing Information SystemsISM 4220Distributed Information SystemsProduction/Operations ManagementMAN 4029Management of Service OrganizationsMAN 4521Production Planning and ControlMAN 4572Procurement ManagementMAN 4555Automated Materials PlanningGeneral ManagementManagerial Skills in OrganizationsMAN 4500International ManagementThree additional courses to be selected from any two of the otherMAN concentration areasPerceives

MINOR (For Business and Non-Business Majors)

5.

The College of Business Administration and the Department of Management offer a minor in Management Information Systems consisting of 27 semester hours. Required courses: ACG 2001, ACG 2301, CGS 3000, MAN 3025, PHI 3130, ISM 3011,

Required courses: ACG 2001, ACG 2301, CGS 3000, MAN 3025, PHI 3130, ISM 3011, ISM 4212, ISM 4113, ISM 4130.



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DEPARTMENT OF MARKETING

Chair: R. Michaels, BA 317, Phone (407) 823-2108 Faculty: Allen, Bojack, Davis, Fisk, Fuller, Gillett, Jarvis, Morris, Paul, Rubin, Teeple

Marketing encompasses the total system of interacting business activities designed to plan, price, promote, and distribute products and services to customers.

The marketing curriculum concentrates on developing the student's ability to understand, interpret, and measure market demand and to understand the blending of product, pricing strategies, promotional strategies, and distribution.

Bachelor of Science in Business Administration: Marketing

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. Special college and/or department requirements:
 - a. Students wanting to major in Marketing must apply for admission to the major.
 - b. Within the College of Business Administration the first day of class is mandatory. Final exams will be given during Exam Week.
 - c. A transfer student to this program must take a minimum of twelve (12) semester hours in marketing at UCF.
 - d. Students majoring in Marketing must earn a grade of "C" or better in each course applied toward the major, and a 2.0 overall average in the major. MAR 3023 is included in this requirement.
- 3. Required Courses

5

	MAR 3503	Consumer Market Behavior	3 hours
	MAR 3613	Marketing Research and Information Systems	3 hours
	MAR 3823	Marketing Management	3 hours
	MAR 4803	Marketing Strategy	3 hours
4.	Restricted Electives	where it advantation (that M Ent)	and the second
	Minimum of 3 courses		
	MAR 3323	Advertising and Promotion Management	3 hours
	MAR 3403	Sales Management	3 hours
	MAR 4831	Product Management	3 hours
	MAR 4231	Retail Management	3 hours
	MAR 4203	Marketing Channel Systems	3 hours
	MAR 4156	International Marketing	3 hours
	MAR 4453	Industrial Marketing	3 hours
	MAR 4071	Contemporary Marketing Issues	3 hours
	MAR 4841	Services Marketing	3 hours
5.	Electives	BURGES SET COMPANY AND	
		Total Semester Hours Required	120

Majors who meet departmental criteria are also eligible to apply for a marketing internship (MAR 3940) or the small business consulting class (MAR 5941), each of which is assigned three hours of elective credit. However, neither of these two courses can be counted as one of the restricted electives required of marketing majors.

COLLEGE OF EDUCATION

UNDERGRADUATE PROGRAMS

Art Education (BS) Early Childhood Education (BS) Elementary Education (BS) English Language Arts Education (BS) Exceptional Child (BS) Foreign Language Education (BS) Mathematics Education (BS) Physical Education (BS) Science Education (BS) Social Science Education (BS) Vocational Education and Industry Training (BS)

GRADUATE PROGRAMS*

Master Programs

Business Education (M.Ed.) Counselor Education (MA, M.Ed) Counselor Education (MA, M.Ed) Educational Leadership (MA, M.Ed) Educational Media (MA, M.Ed) Elementary Education (MA, M.Ed) English Language Arts Education (MA, M.Ed) Exceptional Child (MA, M.Ed) Instructional Systems (MA) Instructional Technology/Media (MA, M.Ed) Mathematics Education (MA, M.Ed) Music Education (MA, M.Ed) Physical Education (MA, M.Ed) Reading Specialist (M.Ed) School Psychology (Ed.S.) Science Education (MA, M.Ed) Social Science Education (MA, M.Ed) Vocational Education and Industry Training (MA, M.Ed)

Doctoral and Specialist Programs

Curriculum and Instruction (Ed.S, Ed.D) Educational Leadership (Ed.S, Ed.D) School Psychology (Ed.S) *See the Graduate catalog for information.

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COLLEGE OF EDUCATION

Dean: Mary Palmer, ED 328, Phone (407) 823-2885 Associate Dean: TBA Assistant Dean: Margaret C. Miller, ED 115, Phone (407) 823-2436

The role of the College of Education at the undergraduate level is to prepare students for careers as elementary, secondary, exceptional, physical, and vocational education teachers. The program of studies includes three components: general education, a subject matter specialization(s), and a teacher education component that addresses the professional knowledge and practical experience future teachers need in order to successfully teach children and youth in public school or private school settings.

The College of Education offers Bachelor of Science degrees with the following majors:

Art Education Early Childhood Education Elementary Education English Language Arts Education Exceptional Child Education Foreign Language Education Mathematics Education Physical Education Social Education Social Science Education Vocational Education and Industry Training

Admission to the University of Central Florida does not imply admission to the College of Education. Students will only be allowed to enroll in the 3000/4000 level courses taught by the College of Education after they have been admitted to the College. Students admitted to the College of Education will need to meet additional requirements in order to be fully admitted to Teacher Education.

Admission to the College of Education

Admission to the College will be granted when students meet the following requirements: • complete 60 hours including the University General Education program or its equivalent,

- i.e. an A.A. degree from an approved Florida community college or state university
- have on file in the University admissions office a score at or above the 40th percentile on the SAT (840) or ACT (20 enhanced) and a 2.5 overall GPA.
- complete 3 parts of the CLAST examination

Admission to Teacher Education

Admission to Teacher Education will be granted when students who have been admitted to the College of Education meet the following requirements:

- have on file in the University admissions office passing scores on all parts of the College Level Academic Skills Test (CLAST)
- present an overall GPA of 2.5
- achieve a "C" or better grade in EDG 4321, Teaching Strategies, including successful completion of the tutorial component or equivalent
- complete a formal application for admission to a particular teacher education program
- · be recommended by the faculty of the department of the student's major
- meet any special departmental requirements

Non-Degree Program (Initial Certification Only)

All students who have earned a Baccalaureate degree from an accredited institution and who wish to be certified in elementary education must complete an undergraduate or master's degree in elementary education. For other certification areas for which the College has programs, students may elect to complete 1) an undergraduate degree 2) a graduate degree or 3) an alternative program as a post-baccalaureate student. Students must meet regular admission requirements for the College of Education and Teacher Education.

Teacher Education Curriculum

The professional teacher education curriculum is designed to provide students the opportunity to develop the professional knowledge, understandings, and competencies required for entry into the profession of teaching. Particular attention is given in the curriculum to the following:

- knowledge and understanding of the growth and development of children and youth
- · knowledge and understanding of how children and youth learn
- knowledge and skills for accurately assessing and evaluating student performance
- knowledge and understanding of the role and function of schools and teachers in a free society to design educational teaching objectives
- ability to plan and implement effective teaching strategies
- ability to utilize computers and other forms of technology in teaching
- · ability to work with culturally diverse populations

Common Body of Professional Knowledge

Department of Educational Foundations, ED 243, Phone (407) 823-2427

The following course work provides the foundation of professional knowledge and understanding and is required of all majors:

EDG 4321	Teaching Strategies I	4 hours
EDG 4324	Teaching Strategies II	3 hours
EDF 3603	Analysis of Educational Foundations	3 hours
EDF 4214	Classroom Learning Principles	3 hours

Student Internships

Interim Assistant Dean: M. Miller, ED 115, Phone (407) 823-2436 Directors: R. Martin, H. Hall

The internship components of the professional program include early and continuous field experiences which provide students opportunities to develop skills and instructional competence. The internship program provides students a broad range of instructional experiences in various school settings which are developed through cooperative planning with local school administrators and teachers.

Field experience is an integral part of every degree program and consists of two major components. Placement of students is the responsibility of the College of Education. Students are placed in public schools that have been approved as Student Internship Centers.

Internship I is a six semester hour credit experience. Students are assigned to work with certified supervising teachers under the direction of a College faculty coordinator. The program provides the student experiences at different grade levels and classroom settings for the purpose of developing specific instructional skills and knowledge and understanding of schooling. Students are enrolled in a limited number of related professional courses during the experience with the consent of their department chair. Application is made through the Office of Student Internships.

Admission to Internship I is restricted to those students who have been admitted to the Teacher Education program. A 2.5 overall GPA is required when application is submitted.

Deadlines are as follows:	
Fall Semester	February 15 (preceding semester)
Spring Semester	September 15 (preceding semester)

Internship II is a twelve-hour experience normally completed during the student's last semester. The student is placed in an approved school internship center under a supervising teacher and College coordinator. Students are expected to develop and execute instructional plans and to demonstrate the competencies required for temporary certification. The internship is considered a full-time experience, and students are permitted to enroll in other classes only with the consent of their department chair.

Admission to Internship II requires that the student has successfully completed requirements of Internship I and possesses at the time of application, a 2.5 G.P.A. in the area of content specialization, a 2.5 G.P.A. in the professional education sequence, and a 2.5 G.P.A. overall. Students must also be approved for admission by the faculty in the department of the student's major. Application is made through the office of Student Internships. Application deadlines are as follows:

Fall Semester Spring Semester February 15 (preceding semester) September 15 (preceding semester)

Graduation Requirements for a Two-Year Temporary Certificate

To qualify for graduation, a student must have a 2.5 G.P.A. in all course work, a 2.5 G.P.A. in the area of content specialization, and a 2.5 G.P.A. in the professional course sequence. All College of Education undergraduate curricula fulfill State of Florida academic requirements for temporary certification. College of Education graduates who desire to teach outside Florida must meet certification requirements of the state in which they intend to seek a teaching position and should contact the appropriate Director of Teacher Education, State Department of Education for specific requirements.

All applicants for the Professional Teaching Certificate must demonstrate satisfactory completion of the Professional Orientation Program requirements and pass the College Level Academic Skills Test (CLAST), the Professional Education Test, and a Subject AREA Examination in the certification area.

DEPARTMENT OF EDUCATIONAL FOUNDATIONS

Interim Chair: Larry C. Holt., ED 243, Phone (407) 823-2426 Faculty: Professors: Cowgill, Dziuban, Kysilka, Lange, Manning Associate Professors: Beadle, Biramiah, Blume, Hiett, Miller, Sciortino, Sullivan, Wood Assistant Professors: Allen, Banks, Chang, Hutchinson. Instructors: Ericson.

The Department of Educational Foundations teaches the core of professional courses that address the competencies and skills needed by all teachers. Foundation courses are also available for students pursuing graduate degrees in teacher education.

DEPARTMENT OF EDUCATIONAL SERVICES

Chair: Robert M. Bollett, ED 318, Phone (407) 823-2596 Faculty: Professors: Baumbach, Bozeman, Hernandez, Johnson, Lynn, Rothberg Associate Professors: Cornell, Driscoll, Orwig, Tubbs Assistant Professors: Balado, Creamer, Lee, B. Murray, K. Murray, Pawlas, Shephard

The focus of the Department of Educational Services is to provide training for specialists in school and non-school environments. Certification programs and masters level (M.A. or M.Ed.) graduate programs are available in Counselor Education, Educational Leadership, and Instructional Technology. The Educational Specialist (Ed.S.) is offered in Educational Leadership and School Psychology. The Doctor of Education (Ed.D) degree is offered in Educational Leadership.

DEPARTMENT OF EXCEPTIONAL AND PHYSICAL EDUCATION

Interim Chair: John W. Powell, ED 214 Phone (407) 823-2598

Faculty: Professors: Midgett, Olson, Platt, Rohter.

Associate Professors: Bell, Coutinhno, A. Cross, L. Cross, Gergley, Higginbotham, Miller, Patton, Powell.

Assistant Professors: Clark, Martin, Mitchell, Renner.

Undergraduate academic major programs leading to bachelor's degrees and certification are offered in Exceptional Education and Physical Education. The Exceptional Education program includes specialties in; (a) emotionally handicapped; (b) mentally handicapped and (c) specific learning disabilities at the K-12 levels. The Physical Education program is a K-8 specialization. In addition, secondary certification programs are available. Students are responsible for completion of program requirements and are encouraged to review their programs with an assigned advisor.

Bachelor of Science: Exceptional Student Education

- 1. See Undergraduate Degree Requirements
- See special college and/or department requirements
 UCF Residency Requirement: 32 hours

•	Our nesidency nequirement		
	Preprofessional Requirement	S	
	SPC 1600	Fundamentals of Oral Communication	3 hours
	PSY 2013	General Psychology OR	3 hours
	SYG 2000	General Sociology	
	MAC 1104	College Algebra OR	
	MGF 1203	Finite Math	3 hours
	CGS 1060	Intro to Computer Science	3 hours
	Prerequisites to Internship I		onours
	EDG 4321	Teaching Strategies I	4 hours
	RED 3012	Basic Foundations of Reading	3 hours
	EEX 3010	Intro to Special Education	3 hours
	EEX 3241		Shours
	EEA 3241	Methods for Academic Skills for	4 hours
		Exceptional Students	4 hours
	TRECOM	MENDED DRIOD TO INTERNEHID I	
		MENDED PRIOR TO INTERNSHIP I	
	Internship I	1-1	0.1
	EDE 3943	Internship I (K-12)	6 hours
	Additional Professional Requ		
	EDF 3603	Analysis of Educational Foundations	3 hours
	EDG 4324	Teaching Strategies II	3 hours
	*EDF 4214	Classroom Learning Principles	3 hours
	Specialization Requirements	al its vehicles and all a second produced by an its	
	*EEX 3102	Language Development and	
	and the state of t	Communication Disorders*	3 hours
	EEX 3221	Assessment of Exceptional Students	3 hours
	EEX 4601	Intro to Behavior Management	3 hours
	EEX 3243	Techniques for Exceptional Adolescents-Adults	3 hours
	EEX 4753	Parent/Professional Collaboration	3 hours
	MAE 2801	Elementary School Mathematics	4 hours
	Specialization Core	a their section of the section of th	
	Emotionally Handicapped Spe	ecialization	
	EED 3250	Behavioral Issues of the	
		Emotionally Handicapped	3 hours
	EED 4243	Teaching Emotionally Handicapped	3 hours
	EED 4210	Curriculum & Program Adaption E.H.	3 hours
	Learning Disabilities Specializ		The second second
	ELD 4011	Introduction to Specific Learning Disabilities	3 hours
	LAE 4312	Language Arts in Elementary Schools	3 hours
	ELD 4242	Program Planning for Specific	e neuro
		Learning Disabilities	3 hours
	Mentally Handicapped Specia		C
	EMR 4011	Intro to Mental Retardation	3 hours
	LAE 4314	Language Arts in Elementary Schools	3 hours
	EMR 4372	Curriculum Method & Materials for	onours
		Retarded Persons	3 hours
	Internship II		onours
	ESE 4943	Internship II (K-12)	12 hours
			127 hours
	a pression and an or and an or		
	a addition to the College of F	duration requirements on eventional advantia	in abundant

In addition to the College of Education requirements, an exceptional education student enrolling in Internship II must have a grade of "C" or better in each exceptional education course.

Students are expected to take courses in a sequence depending on fall or spring semester entrance. See an advisor.

Bachelor of Science: Physical Education K-8 Physical Education 6-12

1. See Undergraduate Degree Requirements

2. See special college and/or department requirements

Preprofessional Requirements (12)*

SPC 1600	Fundamentals of Oral Communication	3	hours
PSY 2013 or SYG 2000	General Psychology OR General Sociology	3	hours
MAC 1104 or MGF 1203	College Algebra OR Finite Math	3	hours
ZOO 3733C	Human Anatomy	3	hours
Prerequisites to Internship I	and the second se		
EDG 4321	Teaching Strategies I	4	hours
EDF 4214	Classroom Learning Principles	3	hours
Internship I			
EDE 3942	Internship I Elementary*	6	hours
PET 3720C	Teaching Physical Education (K-8)	2	hours
PET 3740C	Teaching Physical Education (6-12)	2	hours
Additional Professional Requi	rements		
EDF 3603	Analysis of Educational Foundation	3	hours
EDG 4324	Teaching Strategies II	3	hours
Additional Specialization Requ	uirements		
PET 3041	Games Elementary Physical Education Program	3	hours
DAE 3370	Dance & Rhythmics		hours
PEP 3204	Gymnastics	3	hours
PET 4035	Motor Development Learning	3	hours
PET 4312	Biomechanics	3	hours
PET 4351	Applied Exercise and Human Physiology	3	hours
PEO 3011	Team Sports	3	hours
PEO 3031	Individual Sports and Leisure Activities	3	hours
PET 4401	Administration and Evaluation in		
	Physical Education	3	hours
PET 4640	Adapted Physical Education	3	hours
PET 4724	Physical Education Curriculum		
	Development and History	3	hours
PET 4622	Human Injuries	3	hours
Internship II	where we have a state in the state of the main of		
EDE 4943	Internship II Elementary* OR	12	hours
ESE 4943	Internship II Secondary*		

*Students who select K-8 and 6-12 program must have at least one internship at middle grades or high school level.

Additional Courses for	6-12 Certification	
PET 4382	Fitness Assessment	3 hours
PET 3760	Coaching Theory and Officiating	3 hours
	Minimum Total Semester Hours Needed	120
Additional Courses for	Coaching Endorsement	
PET 3760	Coaching Theory and Officiating	3 hours
PET	Coaching Specific (sports will vary by semester)	3 hours

*These courses may be taken prior to UCF enrollment

DEPARTMENT OF INSTRUCTIONAL PROGRAMS

Interim Chair: J. Armstrong, ED 346, Phone (407) 823-2939 Faculty: Professors: Anderson, Blair, Brumbaugh, Clarke, Hall, Hynes, Joels, Martin, Palmer, Thompson

Associate Professors: Armstrong, Bailey, Camp, Cornett, Gurney, Hopkins, Hudson, Paugh, Siebert, Sorg, West, Williams

Assistant Professors: Everett, Gruber, Holmes, Johnson, McGhee, Ortiz, Romjve Instructors: Buchoff, Gard, Kiger, Musser

Elementary Education

The career Elementary Education program is planned for students interested in the education of children, six through twelve years of age. Students who major in elementary education are qualified to teach grades one through six upon graduation and receipt of a Florida teaching certificate.

An elementary education major must have the following preparation: (1) a broad general education; (2) a specialized knowledge of content, techniques, and materials needed to teach different elementary school subjects such as art, language arts, reading, mathematics, music, physical education, science and social studies; and (3) professional study which includes planned laboratory activities with children in schools identified as Teacher Education Centers.

Early Childhood Education (kindergarten). In combination with preparation to teach grades one through six, requirements may be met for preparation/certification to teach Kindergarten.

Secondary Education

Career programs are available for prospective teachers who have an interest in working with adolescent students in a specific academic area at the middle, junior, or high school levels. Specializations are available in Biology, Business, Chemistry, English, Foreign Language, Mathematics, Physics, and Social Science.

Art/Music/Foreign Language

Three programs are designed to prepare specialists to teach at both the elementary and secondary levels (K-12). Majors in Art and Foreign Language Education are available. The Bachelor's degree program in Music Education is located in the Department of Music with the Department of Instructional Programs responsible for professional requirements.

Vocational Education and Training Development

The vocational education degree is for individuals in Business/Office Occupations, Industrial/Technical areas or selected Health Occupations who wish to teach their specialization in secondary or post-secondary schools. To be eligible for the degree, students must have worked full time in the occupation for at least two years and must demonstrate competence through an examination or licensure in the area in which they wish to teach. A maximum of 30 semester hours of credit by examination or credit granted through licensing may count toward the degree.

The Training Development Track is designed for individuals who are or who plan to be trainers in business, industry, or health care facilities. This option will not prepare individuals to meet Florida Teacher Certification requirements.

Bachelor of Science: Art Education

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements

Preprofessional Requirements

r reprotessional rieguin	Cilicitis	
SPC 1600	Fundamentals of Oral Communication	3 hours
PSY 2013	General Psychology OR	3 hours
SYG 2000	General Sociology	
MAC 1104	College Algebra OR	3 hours
MGF 1203	Finite Mathematics	
ART 2201	Design Fundamentals I	3 hours
Prerequisites to Interns	hip I	
EDG 4321	Teaching Strategies I	4 hours
	RECOMMENDED:	
EDF 4214	Classroom Learning Principles	3 hours
Internship I	Classicon Leaning Finciples	Shours
EDE 3943	Internship I K-12	6 hours
Additional Professional		onours
		0.1
ARE 4351	Methodology for Teaching Art Education I	3 hours
ARE 4352	Methodology for Teaching Art Education II	3 hours

EDF 3603	Analysis of Educational Foundations	3 hours
EDG 4324	Teaching Strategies II	3 hours
Specialization Requirements	gritemos a company	
ART 2201C	Design Fundamentals I	3 hours
ART 2202C	Design Fundamentals II	3 hours
ART 2300C	Drawing Fundamentals I	3 hours
ART 2301	Drawing Fundamentals I	3 hours
ART 3110C	Ceramics	3 hours
ART 3510C	Painting I	3 hours
ART 3400C	Printmaking	3 hours
ART 3230C	Design in Advertising	3 hours
ARH 2050	History of Art I	3 hours
ARH 2051	History of Art II	3 hours
ARE 4356	Teaching Art Appreciation	3 hours
PGY 3401C	Photography	3 hours
Restricted Electives - Selec		121
ARE 3662	Community Arts I	3 hours
ARE 3663	Community Arts II	3 hours
ART 5109C	Crafts Design	3 hours
ART 3701	Sculpture	3 hours
PHI 3800	Aesthetics	3 hours
PHI 3803	Philosophy and Creativity	3 hours
	(PR: PHI 3800)	
ART 4530	Advanced Painting	3 hours
ART 4166	Metals, Woods	3 hours
ART 4130	Fibers, Fabrics	3 hours
ARE 3550	Introduction to Art Therapy	3 hours
Internship II	of Relevant River and the Education	
EDE 4943	Elementary OR	12 hours
ESE 4943	Secondary	
	Minimum Total Semester Hours Needed	120

Bachelor of Science: Early Childhood Education

The career Early Childhood Education program is planned for students interested in the education of young children, 0 through 8 years of age. Depending on the program option, students majoring in early childhood education are qualified to teach children from age three to grade three or birth to age 4 upon graduation and the receipt of a Florida teaching certificate.

An early childhood education major must have the following preparation: (1) a broad general education; (2) a specialized knowledge of content, including techniques needed to work with young children and families, and (3) professional study which includes planned laboratory activities with young children in schools identified as Teacher Education Centers.

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements

Preprotessional Requirement	Its	
SPC 1600	Fundamentals of Oral Communication	3 hours
PSY 2013	General Psychology I	3 hours
MAC 1104	College Algebra OR	3 hours
MGF 1203	Finite Mathematics	
SYG 2000	General Sociology	3 hours
3. Successful completion of fol	lowing courses prior to the Junior Year.	
*ARE 2202	Art & Creativity	3 hours
*EEC 2001	Introduction to Early Childhood Education	3 hours
*MUE 2210	Music & Movement	3 hours
4. Program Sequence		
Junior: (Fall — 16 SH)		
EEC 4402	Cultural Family Systems	3 hours
EEC 3268	Play Development	3 hours
EDF 3603	Analysis of Educational Foundation	3 hours

EDF 4214	Learning Dringiplas	3 hours
	Learning Principles	
LAE 3504	Language Acquisition	3 hours
EEC 3940	Integration-Internship	1 hour
Junior: (Spring 17 SH)		
EEX 3455	Special Needs	3 hours
EDG 4321	Teaching Strategies	4 hours
EEX 3610	Social & Emotional	3 hours
RED 3xxx	Emerging Literacy	3 hours
EEC 3940	Integration-Internship	1 hour
EEX 4751	Parent Involvement	3 hours
Senior: (Fall - 17 SH)		onouro
EEC 4603	Guiding Young Children	3 hours
EEC 3940	Integration-Internship	2 hours
EDG 4324	Teaching in the Schools	3 hours
*EEC 4510	Infant/Toddler Care	3 hours
*EEC 4xxx	Organization & Management	3 hours
*EEC 4271	Early Intervention	3 hours
•SCE 4023	Science & Technology	3 hours
•RED 4xxx	Development of Literacy	3 hours
•MAE 4300	Exploring Mathematics	3 hours
Senior: (Spring - 14 SH)	Exploring manomator	e neuro
EEC 4943	Student Teaching	12 hours
	•	
EEC 4271	Seminar	2 hours
	Minimum Total Semester Hours Needed	

*0-4 certification

•3 years to 3rd grade certification

Bachelor of Science: Elementary Education

- See Undergraduate Degree Requirements
 See special college and/or department requirements
- 3. UCF Residency Requirement: 31 hours

Preprofessional Requirements

SPC 1600 PSY 2013	Fundamentals of Oral Communication General Psychology I	3 hours 3 hours
MAC 1104	College Algebra OR	onours
MGF 1203	Finite Math	3 hours
SYG 2000	General Sociology	3 hours
OR		
ANT 3410	Cultural Anthropology	3 hours
OR	researching the brain and have been provided by	Ily man
GEO 3470	World Political Geography	3 hours
Prerequisites to Internship I		
EDG 4321	Teaching Strategies I	4 hours
RED 3012	Foundations of Reading	3 hours
MAE 2801	Instruction of Mathematics in the	
	Elementary School	4 hours
	RECOMMENDED:	
EDF 4214	Classroom Learning Principles	3 hours
Internship I		
MAE 4326	How Children Learn Math	4 hours
RED 4519	Diagnostic and Corrective Reading Strategies	3 hours
SSE 3312	Teaching Social Science in the Elementary	
	Schools	4 hours
EDE 3942	Internship I Elementary	6 hours
Additional Professional Requi	rements	
EDF 3603	Analysis of Educational Foundations	3 hours
EDG 4324	Teaching in Strategies II	3 hours

Additional Specialization Req	uirements	
ARE 4313	Art/Elementary Schools	3 hours
HLP 4722	Teaching Elementary School Health	
	Physical Education	3 hours
LAE 3414	Literature for Children	3 hours
LAE 4314	Language Arts/Elementary	3 hours
MUE 3210	Music Elementary School	3 hours
SCE 3310	Teaching Science in Elementary School	4 hours
Internship II		
EDE 4943	Elementary	12 hours
	Minimum Total Semester Hours Needed	121
Bachelor of Science: En	glish Language Arts Education	
and the second sec		
1. See Undergraduate Degree F	lequirements	
2. See special college and/or de	partment requirements	
Preprofessional Requirements	S Contraction of the Contraction	
SPC 1600	Fundamentals of Oral Communication	3 hours
CRW 2000	Introduction to Creative Writing	3 hours
MAC 1104	College Algebra OR	
MGF 1203	Finite Math	3 hours
PSY 2013	General Psychology	3 hours
Prerequisite to Internship I		
EDG 4321	Teaching Strategies	4 hours
	RECOMMENDED:	
EDF 4214	Classroom Learning Principles	3 hours
LAE 4464	Literature for Adolescents	3 hours
Internship I		
ESE 3940	Internship I Secondary	6 hours
LAE 4360	English Instructional Analysis	4 hours
LAE 4324	Teaching Language/Composition	3 hours
Additional Professional Requi		
EDF 3603	Analysis of Educational Foundations	3 hours
EDG 4324	Teaching Strategies II	3 hours
Specialization Requirements	At of Solemon, Evening Landon Rd.	
LIT 2110	World Literature I OR	
LIT 2120	World Literature II	3 hours
ENL 3010	English Literature I to 1798	3 hours
ENL 3021	English Literature II to 1950	3 hours
AML 3031	American Literature I	3 hours
AML 3051	American Literature II	3 hours
LIT 3000	Literary Analysis	3 hours
ENC 3311	Advanced Expository Writing	3 hours
LIN 4680 LIN 2670	Modern English Grammar OR	3 hours
CRW 3003	Grammar and Composition Introduction to Creative Writing	3 hours 3 hours
Restricted Electives (6 SH)	introduction to creative writing	Shours
Hestilicieu Electives (0 3H)	Two English courses approved by advisor	6 hours
Internship II	The English courses approved by advisor	Unouis
ESE 49443	Internship II Secondary	12 hours
	Minimum Total Semester Hours Needed	120
		120
Bachelor of Science: For	eign Language Education — French	

cience. Foreign inguag

- See Undergraduate Degree Requirements
 See special college and/or department requirements
 UCF Residency Requirement: 33 hours

Preprofessional Requirements

SPC 1600	Fundamentals of Oral Communication	3 hours
PSY 2013	General Psychology OR	
SYG 2000	General Sociology	3 hours

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	and the second		
	MAC 1104	College Algebra OR	
	MGF 1203	Finite Math	3 hours
	FRE 2201	Intermediate French Language and	
		Civilization	3 Hours
Prere	equisites to Internship I	Trachica Obstacion I	
	EDG 4321	Teaching Strategies I	4 hours
		RECOMMENDED:	
	EDF 4214	Classroom Learning Principles	3 hours
Inter	nship I	And	
	EDE 3940	K-12	6 hours
Addi	tional Professional Requi	rements	
	FLR 4063	Foreign Language Instructional Analysis	4 hours
	FLE 4xxx	Foreign Language Methods K-6	2 hours
	EDG 3603	Analysis of Educational Foundations	3 hours
	EDG 4324	Teaching Strategies II	3 hours
Spec	cialization Requirements		10019
	FLE 3063	Foreign Language as Human Behavior	2 hours
	FRE 3244	French Conversation	3 hours
	FRE 3240	French Composition	3 hours
	FRW 3100	Survey French Lit I	3 hours
and the second second	FRW 3101	Survey French Lit II	3 hours
Rest	ricted Electives	CONTRACTOR OF STREET	
		5 upper division courses in French	
0	ante Desirieren ente	(with advisor approval)	
Cogr	hate Requirements	Drinsiples of Linguistics OD	
	LIN 3010 LIN 4440	Principles of Linguistics OR	
	LIN 4801	Sounds and Forms of Language OR Language and Meaning	3 hours
	ANT 3410	Cultural Anthropology (Anthropology II)	3 hours
Inter	nship II	Contara Anthopology (Anthopology II)	onours
interi	EDE 4943	Internship II Elementary OR	
		interneting in monitoritienty err	
	ESE 4943	Internship II Secondary	12 hours
	ESE 4943	Internship II Secondary Minimum Total Semester Hours Needed	12 hours 125
	ESE 4943		
Bache	CHOICE CONTRACTOR		125
	lor of Science: For	Minimum Total Semester Hours Needed reign Language Education — Spanish	125
1. See	lor of Science: For Undergraduate Degree R	Minimum Total Semester Hours Needed eign Language Education — Spanish lequirements	125
1. See 2. See	lor of Science: For	Minimum Total Semester Hours Needed eign Language Education — Spanish lequirements partment requirements	125
1. See 2. See 3. UCF	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours	125
1. See 2. See 3. UCF	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements	Minimum Total Semester Hours Needed reign Language Education — Spanish lequirements partment requirements s: 33 hours s	125
1. See 2. See 3. UCF	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements SPC 1600	Minimum Total Semester Hours Needed reign Language Education — Spanish lequirements partment requirements s: 33 hours Fundamentals of Oral Communication	125
1. See 2. See 3. UCF	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements SPC 1600 PSY 2013	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR	125 3 hours
1. See 2. See 3. UCF	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements SPC 1600 PSY 2013 SYG 2000	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology	125
1. See 2. See 3. UCF	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements SPC 1600 PSY 2013	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR	125 3 hours
1. See 2. See 3. UCF	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104	Minimum Total Semester Hours Needed reign Language Education — Spanish tequirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math	125 3 hours 3 hours
1. See 2. See 3. UCF	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203	Minimum Total Semester Hours Needed reign Language Education — Spanish tequirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR	125 3 hours 3 hours 3 hours 3 hours
1. See 2. See 3. UCF Prep	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and	125 3 hours 3 hours 3 hours 3 hours 3 hours
1. See 2. See 3. UCF Prep Prep	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and	125 3 hours 3 hours 3 hours 3 hours
1. See 2. See 3. UCF Prep Prep	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I	125 3 hours 3 hours 3 hours 3 hours 3 hours
1. See 2. See 3. UCF Prep Prep	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED:	125 3 hours 3 hours 3 hours 3 hours 4 hours
1. See 2. See 3. UCF Prep Prep	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I	125 3 hours 3 hours 3 hours 3 hours 3 hours
1. See 2. See 3. UCF Prep Prep	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED:	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours
1. See 2. See 3. UCF Prep Prere	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321 EDF 4214 nship I EDE 3940	Minimum Total Semester Hours Needed reign Language Education — Spanish tequirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED: Classroom Learning Principles K-12	125 3 hours 3 hours 3 hours 3 hours 4 hours
1. See 2. See 3. UCF Prep Prep	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321 EDF 4214 nship I	Minimum Total Semester Hours Needed reign Language Education — Spanish tequirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED: Classroom Learning Principles K-12 rements	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours
1. See 1 2. See 3 3. UCF Prep Prep	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321 EDF 4214 nship I EDE 3940 tional Professional Require	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED: Classroom Learning Principles K-12 rements Foreign Language Instructional Analysis	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours
1. See 1 2. See 3 3. UCF Prep Prere	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321 EDF 4214 nship I EDE 3940 tional Professional Requir FLE 4360	Minimum Total Semester Hours Needed reign Language Education — Spanish tequirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED: Classroom Learning Principles K-12 rements	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours
1. See 1 2. See 3 3. UCF Prep Prere	elor of Science: For Undergraduate Degree R special college and/or de Residency Requirements rofessional Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321 EDF 4214 nship I EDE 3940 tional Professional Requir FLE 4360 FLE 4xxx	Minimum Total Semester Hours Needed reign Language Education — Spanish lequirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED: Classroom Learning Principles K-12 rements Foreign Language Instructional Analysis Foreign Language Methods K-6	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours 2 hours
1. See 1 2. See 3 3. UCF Prep Prere	elor of Science: For Undergraduate Degree R special college and/or deg Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321 EDF 4214 nship I EDE 3940 tional Professional Requir FLE 4360 FLE 4xxx EDF 3603	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED: Classroom Learning Principles K-12 rements Foreign Language Instructional Analysis Foreign Language Methods K-6 Analysis of Educational Foundations	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours 2 hours 3 hours
1. See 1 2. See 3 3. UCF Prep Prere	elor of Science: For Undergraduate Degree R special college and/or deg Residency Requirements SPC 1600 PSY 2013 SYG 2000 MAC 1104 MGF 1203 SPN 2231 equisites to Internship I EDG 4321 EDF 4214 nship I EDE 3940 tional Professional Requir FLE 4360 FLE 4xxx EDF 3603	Minimum Total Semester Hours Needed reign Language Education — Spanish requirements partment requirements s: 33 hours Fundamentals of Oral Communication General Psychology OR General Sociology College Algebra OR Finite Math Intermediate Spanish Language and Civilization Teaching Strategies I RECOMMENDED: Classroom Learning Principles K-12 rements Foreign Language Instructional Analysis Foreign Language Methods K-6 Analysis of Educational Foundations	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours 2 hours 3 hours

Specialization Requirements		
FLE 3063	Foreign Language as Human Behavior	2 hours
SPN 3241	Spanish Conversation	3 hours
SPN 3420	Spanish Composition	3 hours
SPW 3100	Survey Spanish Lit I	3 hours
SPW 3101	Survey Spanish Lit II	3 hours
Restricted Electives	Canadiana and an and an	
	4 upper division courses in Spanish	
Connets Descionments	(with advisor approval)	
Cognate Requirements	Drinsiples of Linguistics OD	
LIN 3010	Principles of Linguistics OR	
LIN 4440 LIN 4801	Sounds and Forms of Language OR Language and Meaning	3 hours
ANT 3410	Cultural Anthropology (Anthropology II)	3 hours
Internship II	Cultural Anthropology (Anthropology II)	Shours
EDE 4943	Internship II Elementary OR	
ESE 4943	Internship II Secondary	12 hours
	Minimum Total Semester Hours Needed	125
		in the second
Bachelor of Science: Mat	thematics Education	
1. See Undergraduate Degree R		
2. See special college and/or de		
3. UCF Residency Requirements		
In test A		
Preprofessional Requirements SPC 1600	Fundamentals of Oral Communication	3 hours
PSY 2013	General Psychology	Shours
MAC 1104	College Algebra OR	
MGF 1203	Finite Math	3 hours
CGS 1060	Introduction to Computer Science	3 hours
Prerequisite to Internship I		onouro
EDG 4321	Teaching Strategies I	4 hours
	The second se	The second
	RECOMMENDED:	0.6.0.00
EDF 4214 Internship I	Classroom Learning Principles	3 hours
EDE 3940	Internship I Secondary	6 hours
Additional Professional Requi		onours
MAE 4360	Mathematics Instructional Analysis	4 hours
EDF 3603	Analysis of Educational Foundations	3 hours
EDG 4324	Teaching Strategies II	3 hours
Specialization Requirements	rouoning on alogico n	e neuro
MAC 3311	Calculus with Analytic Geometry I	4 hours
MAC 3312	Calculus with Analytic Geometry II	4 hours
MAS 3105	Elementary Linear and Matrix Algebra	3 hours
MAS 3203	Number Theory	3 hours
MHF 2300	Logic and Proof in Mathematics	3 hours
MTG 4212	Modern Geometry	4 hours
STA 3023	Statistical Methods I	3 hours
MAE 4634	Programs in Teaching of Mathematics	3 hours
MHF 4404	History of Mathematics	3 hours
CGS 1060	Introduction to Computer Science	3 hours
	ed One (with advisor approval)	0.6
MAC 1114	College Trigonometry	3 hours
MAC 3313	Calculus with Analytic Geometry III	3 hours
MAD 4203	Combinatorics and Graph Theory	3 hours
MAC 4301 MAS 3103	Algebra Structure	3 hours 3 hours
Internship II Internship	Linear Algebra	Shours
ESE 4943	Internship II Secondary	12 hours
1 LOL 4040	Minimum Total Semester Hours Needed	12110015
	Minimum Total Semester Hours Needed	125

Bachelor of Science: Science Education — Biology

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. UCF Residency Requirements: 33 hours

Preprofessional Requirements

Fiepiolessional Requirement		
SPC 1600	Fundamentals of Oral Communication	3 hours
STA 2014	Principles of Statistics OR	
STA 3023	Statistical Methods	3 hours
MAC 1104	College Algebra	3 hours
PSY 2013	General Psychology OR	
SYG 2000	General Sociology	3 hours
Prerequisites to Internship I		
EDG 4321	Teaching Strategies I	4 hours
	RECOMMENDED:	
EDF 4214	Classroom Learning Principles	3 hours
Internship I	Classicon Learning Finciples	5110013
ESE 3940	Internship I Secondary	6 hours
Additional Professional Regu		onouis
SCE 4360		4 hours
EDF 3603	Science Instructional Analysis	3 hours
EDG 4324	Analysis of Educational Foundations	
	Teaching Strategies II	3 hours
Specialization Requirements BSC 2010C		4 4 4 4 4 4 4
	General Biology	4 hours
ZOO 2010C	General Zoology	4 hours
BOT 2010C	General Botany	4 hours
PCB 3023	Molecular Cell Biology	3 hours
PCB 3063	Genetics	3 hours
PCB 3063L	Genetics Lab	1 hour
PCB 3043	Ecology	3 hours
PCB 3043L	Ecology Lab	1 hour
MCB 3013C	Microbiology	5 hours
CHM 2205	Introduction to Organic and Biochemistry	5 hours
PCB 4xxx	Biology and Evolution OR	3 hours
PCB 4683	Population Biology and Evolution	4 hours
Support Science Requirement		
CHM 2045	Chemistry Fundamentals I	4 hours
CHM 2046	Chemistry Fundamentals II	3 hours
CHM 2046L	Chemistry Fundamentals Lab	1 hour
PHY 3053C	College Physics I	4 hours
GLY 1030	Geology and its Applications	3 hours
Internship II		
ESE 4943	Internship II Secondary	12 hours
	Minimum Total Semester Hours Needed	125

Bachelor of Science: Science Education — Chemistry

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. UCF Residency Requirements: 33 hours

Preprotessional Requirement	ITS	
SPC 1600	Fundamentals of Oral Communication	3 hours
STA 2014	Principles of Statistics OR	3 hours
STA 3023	Statistical Methods	
MAC 1104	College Algebra	3 hours
PSY 2013	General Psychology OR	3 hours
SYG 2000	Géneral Sociology	
Prerequisite to Internship I		
EDG 4321	Teaching Strategies I	4 hours

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	DECOMMENDED.	
	RECOMMENDED:	0.6
EDF 4214	Classroom Learning Principles	3 hours
Internship I	Internation I Concentration	Chauna
ESE 3940	Internship I — Secondary	6 hours
Additional Professional Requ		4 hours
SCE 4360 EDF 3603	Science Instructional Analysis Analysis of Educational Foundations	4 hours 3 hours
EDG 4324	Teaching Strategies II	3 hours
Mathematics Requirements	reaching Strategies in	onours
MAC 1114	College Trigonometry	3 hours
MAC 3311	Calculus with Analytic Geometry I	4 hours
Specialization Requirements		Thouro
Core Requirements		
CHM 2045	Chemistry Fundamentals I	4 hours
CHM 2046	Chemistry Fundamentals II	3 hours
CHM 2046L	Chemistry Fundamentals Laboratory	1 hour
CHM 3120C	Analytical Chemistry	5 hours
CHM 3210	Organic Chemistry I	3 hours
CHM 3211	Organic Chemistry II	3 hours
CHM 3211L	Organic Laboratory Techniques I	2 hours
BCH 4053	Biochemistry I	3 hours
CHM 4XXXC	Basic Physical Chemistry	4 hours
CHS 3501	Introduction to Forensic Science	3 hours
Support Science Requirement		
PHY 3053C	College Physics I	4 hours
PHY 3054C	College Physics II	4 hours
BSC 2010C	General Biology	4 hours
GLY 1030	Geology and its Applications	3 hours
Internship II	statute	101
	Internship II — Secondary	12 hours
Internship II	Internship II — Secondary Minimum Total Semester Hours Needed	12 hours 125
ESE 4943	Minimum Total Semester Hours Needed	
Internship II ESE 4943 Bachelor of Science: Sci	Minimum Total Semester Hours Needed	
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F	Minimum Total Semester Hours Needed ience Education — Physics Requirements	
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements	
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement	Minimum Total Semester Hours Needed ence Education — Physics Requirements partment requirements is: 33 hours	
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours s	125
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours s Fundamentals of Oral Communication	125 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours s Fundamentals of Oral Communication Principles of Statistics OR	125
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours s Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods	125 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours s Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra	125 3 hours 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR	125 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours s Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra	125 3 hours 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology	125 3 hours 3 hours 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR	125 3 hours 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDG 4321	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED:	125 3 hours 3 hours 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDG 4321 EDF 4214	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I	125 3 hours 3 hours 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDF 4214 Internship I	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles	125 3 hours 3 hours 3 hours 4 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDG 4321 EDF 4214 Internship I ESE 3940	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours S Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary	125 3 hours 3 hours 3 hours 3 hours 4 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDG 4321 EDF 4214 Internship I ESE 3940 Additional Professional Requirement	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours S Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements	125 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDG 4321 EDF 4214 Internship I ESE 3940 Additional Professional Requi SCE 4360	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours S Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements Science Instructional Analysis	125 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDG 4321 EDF 4214 Internship I ESE 3940 Additional Professional Requir SCE 4360 EDF 3603	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours S Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements Science Instructional Analysis Analysis of Educational Foundations	125 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDF 4214 Internship I ESE 3940 Additional Professional Requi SCE 4360 EDF 3603 EDG 4324	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours S Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements Science Instructional Analysis	125 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDF 4214 Internship I ESE 3940 Additional Professional Requi SCE 4360 EDF 3603 EDG 4324 Mathematics Requirements	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements Science Instructional Analysis Analysis of Educational Foundations Teaching Strategies II	 125 3 hours 3 hours 3 hours 4 hours 4 hours 3 hours 6 hours 4 hours 3 hours 3 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDF 4214 Internship I ESE 3940 Additional Professional Requi SCE 4360 EDF 3603 EDG 4324 Mathematics Requirements MAC 3311	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements Science Instructional Analysis Analysis of Educational Foundations Teaching Strategies II Calculus with Analytic Geometry I	125 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours 3 hours 4 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDF 4214 Internship I ESE 3940 Additional Professional Requi SCE 4360 EDF 3603 EDG 4324 Mathematics Requirements MAC 3311 MAC 3312	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements Science Instructional Analysis Analysis of Educational Foundations Teaching Strategies II Calculus with Analytic Geometry I Calculus with Analytic Geometry I	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours 3 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDF 4214 Internship I ESE 3940 Additional Professional Requi SCE 4360 EDF 3603 EDG 4324 Mathematics Requirements MAC 3311 MAC 3312 MAC 3313	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements s: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements Science Instructional Analysis Analysis of Educational Foundations Teaching Strategies II Calculus with Analytic Geometry I Calculus with Analytic Geometry II Calculus with Analytic Geometry III	125 3 hours 3 hours 3 hours 3 hours 4 hours 4 hours 6 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours
Internship II ESE 4943 Bachelor of Science: Sci 1. See Undergraduate Degree F 2. See special college and/or de 3. UCF Residency Requirement Preprofessional Requirement SPC 1600 STA 2014 STA 3023 MAC 1104 PSY 2013 SYG 2000 Prerequisites to Internship I EDF 4214 Internship I ESE 3940 Additional Professional Requi SCE 4360 EDF 3603 EDG 4324 Mathematics Requirements MAC 3311 MAC 3312	Minimum Total Semester Hours Needed ience Education — Physics Requirements partment requirements is: 33 hours Fundamentals of Oral Communication Principles of Statistics OR Statistical Methods College Algebra General Psychology OR General Sociology Teaching Strategies I RECOMMENDED: Classroom Learning Principles Internship I — Secondary rements Science Instructional Analysis Analysis of Educational Foundations Teaching Strategies II Calculus with Analytic Geometry I Calculus with Analytic Geometry I	125 3 hours 3 hours 3 hours 3 hours 4 hours 3 hours 6 hours 4 hours 3 hours 4 hours 3 hours 4 hours 4 hours 4 hours 4 hours 4 hours 4 hours

Additional Specialization Requirements				
P	HY 3053C	College Physics I	4 hours	
P	HY 3054C	College Physics II	4 hours	
P	HY 3048	Physics for Engineers and Scientists I	3 hours	
P	HY 3048L	Physics Laboratory for Engineers and		
		Scientists I	1 hour	
P	HY 3049	Physics for Engineers and Scientists II	3 hours	
P	HY 3049L	Physics Laboratory for Engineers and		
		Scientists II	1 hour	
P	HY 3101	Modern Physics	3 hours	
	HY 3752C	Physics of Scientific Instruments	4 hours	
S	elect 3 SH from the Fe			
	HY 3221	Mechanics I	3 hours	
P	HY 3323	Electricity and Magnetism		
P	HY 4604	Wave Mechanics		
S	elect 3 SH from the Fo	ollowing:		
	HY 3503	Thermodynamics	3 hours	
P	HY 4424	Optics		
S	elect 3 SH from the Fo	ollowing:		
P	HZ 3151	Computer Methods in Physics	4 hours	
P	HY 3802L	Intermediate Physics Laboratory	3 hours	
Suppo	rt Science Requiremen	ts		
C	HM 2045	Chemistry Fundamentals I	4 hours	
C	HM 2046	Chemistry Fundamentals II	3 hours	
C	HM 2046L	Chemistry Fundamentals Laboratory	1 hour	
В	SC 2010C	General Biology OR	4 hours	
G	LY 1030	Geology and its Applications	3 hours	
Interns	Internship II			
E	SE 4943	Internship II — Secondary	12 hours	
		Minimum Total Semester Hours Needed	125	

Bachelor of Science: Social Science Education

 See Undergraduate Degree Requirements
 See special college and/or department requirements Dransafasaianal Daguira

Preprotessional Requirements	5	
SPC 1600	Fundamentals of Oral Communication	3 hours
SYG 2000	General Sociology	3 hours
MAC 1104	College Algebra OR	3 hours
MGF 1203	Finite Mathematics	
PSY 2013	General Psychology	3 hours
Prerequisite to Internship I		
EDG 4321	Teaching Strategies I	4 hours
	RECOMMENDED:	
EDF 4214	Classroom Learning Principles	3 hours
Internship I	Tradition & Stockeyers	
ESE 3940	Internship I - Secondary	6 hours
Additional Professional Requi	rements	
SSE 4361	Social Science Instructional Analysis	4 hours
EDF 3603	Analysis of Educational Foundations	3 hours
EDG 4324	Teaching Strategies II	3 hours
Specialization Requirements	ANA DESCRIPTION OF A DE	
Lower Division Requirements:	COF DUID A Maryan & Educational C	
ECO 2013	Principles of Economics I	3 hours
ECO 2023	Principles of Economics II	3 hours
EUH 2000	Western Civilization I	3 hours
EUH 2001	Western Civilization II	3 hours
AMH 2010	U.S. History: 1492-1877	3 hours
AMH 2020	U.S. History: 1877-Present	3 hours
POS 2041	American National Government	3 hours

PSY 2013	General Psychology OR	3 hours
SYG 2000	General Sociology	
Upper Division Requirements:		
CPO 3103	Comparative Politics	3 hours
GEO 3370	Resources Geography	3 hours
GEO 3470	World Political Geography	3 hours
AMH 4231	U.S. History: 1914-1945	3 hours
AMH 4270	U.S. History: 1945-Present	3 hours
Restricted Electives (9 hrs.)	Indentified a station matching of the second	
American History (Select	one)	
AMH 3370	American Economic History	3 hours
AMH 4130	American Revolution	3 hours
AMH 4170	Civil War and Reconstruction	3 hours
European History (Select	t one with approval of advisor.)	3 hours
Political Science (Select		
POS 3122	State Government and Public Policy	3 hours
POS 3273	Voting and Elections	3 hours
INR 3002	International Relations — Theory and Practice	3 hours
Internship II	NUMBER OF TRANSPORT	
ESE 4943	Internship II — Secondary	12 hours
Builder Agenow pue	Minimum Total Semester Hours Needed	120

Bachelor of Science: Vocational Education and Industry Training Business Education

See Undergraduate Degree Requirements
 See special college and/or department requirements

Preprofessional Requirements			
SPC 1600	Fundamentals of Oral Communication	3 hours	
MAC 1104	College Algebra OR	3 hours	
MGF 1203	Finite Mathematics		
PSY 2013	General Psychology OR	3 hours	
SYG 2000	General Sociology		
Prerequisites to Internship I	Lendulated to stateme.		
Track A: EDG 4321	Teaching Strategies I	4 hours	
Track B: EVT 3365	General Methods/Testing Evaluation in		
	Vocational Education		
Internship I			
ESE 3940	Internship I — Secondary	6 hours	
Professional Preparation (Sel	ect A or B)		
A. Area of Emphasis - Publi	c School Teaching		
EDF 3603	Analysis of Educational Foundations	3 hours	
EDF 4214	Classroom Learning Principles	3 hours	
Tech elective approved b	by advisor	3 hours	
B. Area of Emphasis - Indus	stry Training		
EVT 4169	Curriculum Development Techniques for		
	Industry Training	3 hours	
ADE 4382	Teaching Adult Learners	3 hours	
EME 5054	Instructional Systems: A Survey of Applications	3 hours	
Instructional Core (Select A or			
A. Area of Emphasis - Publi	c School Teaching		
EVT 3502	Special Needs of Vocational Students	4 hours	
EVT 4065	Principles and Practices of Vocational		
	Education	4 hours	
EDG 4324	Teaching Strategies II	3 hours	
B. Area of Emphasis - Indus	stry Training		
EVT 3502	Special Needs of Vocational Students	4 hours	
EVT 4065	Principles and Practices of Vocational		
	Education	4 hours	

EVT 4368	Advanced Teaching Techniques for Vocation Education	3 hours
Special Methods of Teaching		
BTE 4410	Course Construction in Business Education	4 hours
Directed Field Experience		
ESE 4943	Internship II — Secondary	12 hours
Occupational Specialization	CAST + NO WINNELS C U MOLENN	
OST 1335	Business Communication	3 hours
OST 1110	Intermediate Typewriting	3 hours
OST 2120	Advanced Typewriting	3 hours
OST 2766	Word Perfect	3 hours
ACG 2001	Principles of Accounting I	3 hours
ACG 2011	Principles of Accounting II	3 hours
ECO 2013	Principles of Economics I	3 hours
ECO 2023	Principles of Economics II	3 hours
BUL 2111	Business Law I	3 hours
Nine (9) semester hours	of upper division coursework from the	
College of Business Adn	ninistration	
	Minimum Total Semester Hours	120
acholor of Salanaa, Va	estional Education and Inductor Trai	ning

Bachelor of Science: Vocational Education and Industry Training Health Occupations

1. See Undergraduate Degree Requirements

2.	See special college and/or de	epartment requirements	
	Preprofessional Requiremen	ts	
	SPC 1600	Fundamentals of Oral Communication	3 hours
	MAC 1104	College Algebra OR	3 hours
	MGF 1203	Finite Mathematics	
	PSY 2013	General Psychology OR	3 hours
	SYG 2000	General Sociology	
	Professional Preparation (Se	lect A or B)	
	A. Area of Emphasis -	- Public School Teaching	
	EDF 3603	Analysis of Educational Foundations	3 hours
	EDF 4214	Classroom Learning Principles	3 hours
	Tech elective with advis		3 hours
	B. Area of Emphasis —		
	EVT 4169	Curriculum Development Techniques for	
		Industry Training	3 hours
	ADE 4382	Teaching Adult Learners	3 hours
	Tech elective with advis	or approval	3 hours
	Instructional Core		
	EVT 3365	General Methods/Testing Evaluation	171
1	10 M 10 10 10 10 10 10 10 10 10 10 10 10 10	in Vocational Education	4 hours
	EVT 3502	Special Needs of Vocational Students	4 hours
	EVT 4065	Principles and Practices of Vocational	10
		Education	4 hours
	EVT 4368	Advanced Teaching Techniques for	
	and a second second second second second	Vocational Education	3 hours
	Special Methods of Teaching		
	EVT 3312	Course Construction in Health	
	Discond Field F	Occupations Education	4 hours
	Directed Field Experience	Directed Field Freedomen	10.6
	EDG 4941	Directed Field Experience	12 hours
	Specialization (30)	plete an area of specialization through (1)	
	L Students must comp	plete an area of specialization infolign (1)	

1. Students must complete an area of *specialization* through (1) occupationally specific coursework and/or (2) credit by examination. Occupationally specific coursework may be lower or upper division and may be transferred from accredited educational institutions offering college credit. Credit by examination may be completed by

meeting the state or national licensure or registration requirements for the student's area of specialization. A copy of current licensure/ registration is required. Specialization credit must be completed before student is eligible for EDG 4941, Directed Field Experience. 2. Students must provide documentation of at least two years of

occupationally related work experience prior to graduation.

Electives (10)

Must be upper division courses.

Minimum Total Semester Hours

120

Bachelor of Science: Vocational Education and Industry Training Industrial/Technical

1. See Undergraduate Degree Requirements

2. See special college and/or department requirements

Proprofossional Poquiramonto

Fiepiolessional nequilement	5	
SPC 1600	Fundamentals of Oral Communication	3 hours
MAC 1104	College Algebra OR	3 hours
MGF 1203	Finite Mathematics	
PSY 2013	General Psychology OR	3 hours
SYG 2000	General Sociology	
Professional Preparation (Sel	lect A or B)	
	Public School Teaching	
EDF 3603	Analysis of Educational Foundations	3 hours
EDF 4214	Classroom Learning Principles	3 hours
Tech elective with advise		3 hours
B. Area of Emphasis -		
EVT 4169	Curriculum Development Techniques for	
	Industry Training	3 hours
ADE 4382	Teaching Adult Learners	3 hours
Tech elective with advise		3 hours
Instructional Core	or approval	e neuro
EVT 3365	General Methods/Testing Evaluation	
	in Vocational Education	4 hours
EVT 3502	Special Needs of Vocational Students	4 hours
EVT 4065	Principles and Practices of Vocational	4 Hours
201 1000	Education	4 hours
EVT 4368	Advanced Teaching Techniques for	+ nours
201 4000	Vocational Education	3 hours
Special Methods of Teaching		onours
EVT 3371	Course Construction Industrial Education	4 hours
Directed Field Experience	Course construction industrial Education	4 110015
EDG 4941	Directed Field Experience	12 hours
Specialization (30)	Directed Field Experience	12 Hours

1. Students must complete an area of specialization through (1) occupationally specific coursework and/or (2) credit by examination. Occupationally specific coursework may be lower or upper division and may be transferred from accredited educational institutions offering college credit. Credit by examination may be completed by meeting the state or national licensure or registration requirements for the student's area of specialization. A copy of current licensure/ registration is required. Specialization credit must be completed before student is eligible for EDG 4941, Directed Field Experience. 2. Students must provide documentation of at least two years of

occupationally related work experience prior to graduation. Electives (10)

Must be upper division courses.

Minimum Total Semester Hours

120

COLLEGE OF ENGINEERING

UNDERGRADUATE PROGRAMS

ENGINEERING

Aerospace Engineering (BSAsE) Civil Engineering (BSCE) Computer Engineering (BSCpE) Electrical Engineering (BSEE) Environmental Engineering (BSENE) Industrial Engineering (BSIE) Mechanical Engineering (BSME)

ENGINEERING TECHNOLOGY

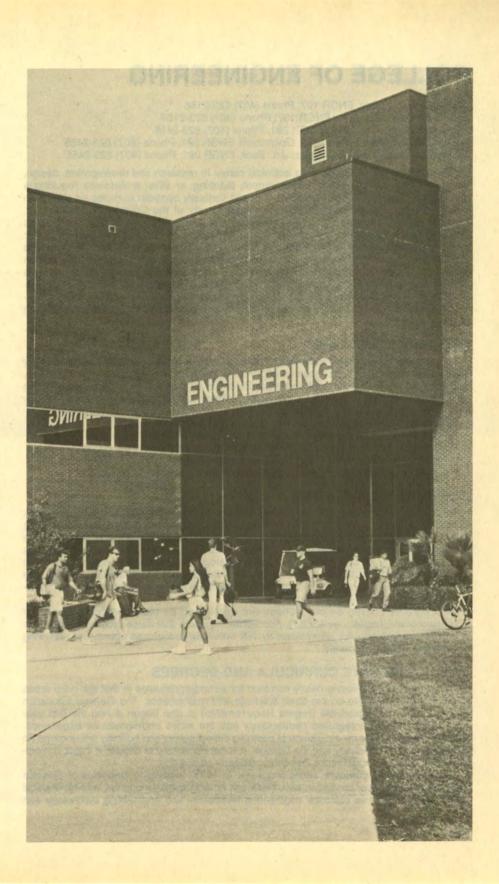
Electrical Engineering Technology (BSEET) concentrations in Electrical Systems and Information Systems Engineering Technology (BSET) concentrations in Design and Operations

GRADUATE PROGRAMS*

Master Degree Programs **Civil Engineering** Transportation Systems Water Resources Structures and Foundations Environmental Engineering Environmental Sciences Electrical Engineering Optical Sciences and Engineering Computer Engineering Industrial Engineering Manufacturing Engineering Computer Integrated Manufacturing Engineering Management Product Assurance Engineering **Operations Research** Simulation Systems Mechanical Engineering Aerospace Systems Materials Sciences and Engineering Mechanical Systems Thermo-Fluids

Doctoral Degree Programs

Civil Engineering Computer Engineering Electrical Engineering Environmental Engineering Industrial Engineering Mechanical Engineering *See the Graduate catalog.



COLLEGE OF ENGINEERING

Dean: M.P. Wanielista, ENGR 107, Phone (407) 823-2156 Associate Dean: S.L. Rice, ENGR 107, Phone (407) 823-2156 Associate Dean: R.N. Miller, ENGR 281, Phone (407) 823-2455 Director of Graduate Affairs: F.S. Gunnerson, ENGR 281, Phone (407) 823-2455 Director of Undergraduate Affairs: J.K. Beck, ENGR 281, Phone (407) 823-2455

Students who seek a challenging technical career in research and development, design, technical sales, manufacturing, management, teaching, or other professions requiring a methodical, creative solution to problems should seriously consider pursuing an education in engineering. The internationally-recognized faculty of the College of Engineering, together with its strong curricula of undergraduate and graduate programs provide an opportunity for ambitious, responsible men and women to become the leaders of our increasingly technological world. Because of the significance of science and technology to our everyday lives, today's engineer must be aware of the impact of his or her creations on society. In addition to the public health and welfare, aesthetics, economics, and energy-use implications, engineers must also consider environmental, sociological, and other "humanistic" costs. The engineering degree is also recognized as a valuable asset to those entering other professional pursuits such as the medical or law professions, architecture, or even politics.

PROGRAM OBJECTIVES

The College of Engineering seeks to produce well-qualified graduates in specifically selected disciplines, conduct research efforts of significance to the state and to the nation, and to provide technical services and expertise to the local community. In keeping with the national aspiration of maintaining excellence in science and engineering, the primary objectives of the undergraduate programs are to:

- · Encourage the mastery of engineering theories and principles
- Develop competence in design, modeling, and problem solving
- Provide hands-on experience for experiment design and safety
- · Improve skills in oral, written, and graphical communication
- Introduce the student to ethical and professional demeanor

COLLEGE ORGANIZATION

The College of Engineering is organized into five departments: Civil and Environmental; Electrical and Computer; Industrial; Mechanical and Aerospace; and Engineering Technology. Seven engineering programs and two engineering-technology programs are offered within the five departments. In addition, there are several options or concentrations that are available. All departments (except technology) offer advanced studies leading to master's degrees and the Doctor of Philosophy degree; see the Graduate catalog. The College also houses the Air Force and Army ROTC units for those students wishing to pursue military training while earning their degree.

All programs offered by the College are accredited by the Accrediting Board for Engineering and Technology (ABET). Accreditation insures that these programs satisfy the minimum requirements for acceptance by this nationally-recognized agency for reviewing engineering-degree programs.

UNDERGRADUATE CURRICULA AND DEGREES

The first-year curriculum is nearly common for all undergraduates in that the initial areas of study will concentrate on the basic sciences and mathematics. The General Education Program (see Undergraduate Degree Requirements) is also begun during the first year and, ideally, will be integrated continuously into the entire undergraduate experience. Entering students receive assistance in planning their program and typically will undergo an orientation to the University and the College. It is not necessary to choose a major immediately, but students should make that choice as early as possible.

The engineering curricula offers programs of study leading to Bachelor of Science Degrees in aerospace, computer, civil, electrical, environmental, industrial, and mechanical engineering, as well as electrical engineering technology and engineering technology with options. Graduation requirements for engineers include the satisfactory completion of the specified minimum number of credit hours (132-136 semester hours) and engineering students must earn a Grade Point Average (GPA) of 2.25 for groups of required courses in their major. The requirement for the engineering technology programs is a minimum of 128 credit hours and corresponding GPA of 2.0

It is possible for a student to earn two degrees concurrently in two majors, e.g. aerospace and mechanical engineering. The university (catalog) policy states that a **minimum** of 30 additional residency hours is required; however, the interested student should consult with his/her advisor for the specific college and/or departmental requirements. In general, the student is encouraged to spend the time more efficiently pursuing a graduate degree.

Students entering any of the engineering programs should be adequately prepared at the secondary school (or higher) level in the following basic disciplines, in addition to the minimum University entrance requirements.

- mathematics through trigonometry
- physics
- · chemistry
- biology
- · introduction to computers; computer programming

These requirements should not be ignored; those students lacking these credits may be required to complete additional coursework which is not applied toward the degree.

TRANSFER PROGRAM

Students having a non-engineering degree, or those holding a two-year degree from a community college may apply for admission to the College of Engineering through the University Admissions Office. Those applicants having the Associate of Arts degree from a Florida community college are essentially guaranteed admission; there are no additional criteria or entrance restrictions for the College. The Florida common-course-numbering system ensures that those courses being transferred into the student's program can be readily evaluated for concurrence with required courses. Petitioning for those courses under question, or those from other university systems, will be accomplished through the college Office of Undergraduate Affairs. It should be noted that students may complete all of their requirements in the General Education Program, as well as the requirements for mathematics and the basic sciences, at most of Florida's community colleges. Those students entering from the community colleges may use the catalog year associated with their entry into that earlier program assuming they have maintained their enrollment; see Undergraduate Degree Requirements. It is also possible to take some lower-division courses concurrently at the University and the community college using the Transient Student form available from Undergraduate Affairs. This option is not available during the last 30 hours of study.

Transfer students must also be aware that: 1) at least 25 percent of their program credit hours must be done in residency, and 2) if they should enter with less than 60 semester hours of credit, they **must** enroll for at least 9 hours, on campus, during any summer session.

THE ENGINEERING INTERN (EI) EXAMINATION

The EI (Engineering Fundamentals) examination is a state-administered, nationally-sponsored test that represents a defined standard of technical competency and serves as an initial step toward registration as a Professional Engineer. Students in the civil, environmental, and industrial engineering programs **must** take the examination prior to graduation. Students in the other disciplines are encouraged to sit for the exam, since they probably will never be better prepared. If a career change should occur that requires registration, it is one less step they would need to accomplish. The examination is conducted in the months of April and October with applications due in mid-December and mid-June, respectively. Applications are available in the Office of Undergraduate Affairs.

STUDENT ACTIVITIES

Each major in the College of Engineering has a technical society open to all students enrolled in the major; in most cases, they are student chapters of nationally recognized professional organizations. The students who maintain membership in these societies may meet with the senior industrial members at regularly scheduled meetings and are rewarded, both socially and educationally, by such contacts. In addition, many of these groups are involved in inter-university design/presentation/model competitions that can further enhance the total university experience.

PROGRAM SCHEDULES

Following is a listing of tentative schedules for entering students in each of the degree programs, shown for the purpose of indicating the level of effort required to complete the program in a timely manner, and to provide information regarding course prerequisites. The student should study his/her relevant schedule carefully and refer to the catalog or a department advisor to answer questions before they become a problem.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

Chair: A.E. Radwan, EN 207, Phone (407) 823-2841

Faculty: Al-Deek, Block, Carroll, Chopra, Cooper, Dietz, Hartman, Head, Kunnath, Kersten, Kuo, Leftwich, Mirmirary, Onyemelukwe, Reinhart, J. Taylor, Wanielista, Wayson, Yousef

The Department offers degrees in both Civil Engineering and Environmental Engineering. The Civil Engineering major is concerned primarily with fundamental civil engineering design and analysis in such areas as structures, geotechnic engineering, sanitary engineering, water resources, and transportation engineering. The Environmental Engineering major is concerned primarily with the interactions with humans and their environment and the planning, design, and control of systems for environmental quality management for water, land, and air environments.

Tentative Course Schedule for Entering Freshmen

Civil Engineering — 132 semester hours required

FIRST YEAR

Fall (14 hrs) *Social Science

Spring (14 hrs) *ENC 1101-English Comp. *ENC 1102-English Comp *CHM 2045-Chem Fund I/Lab *CHM 2046-Chem Fund II *MAC 3311-Calculus I *MAC 3312-Calculus II *PHY 3048-Physics Engr I w/Lab the second second Summer (10 hours)

*ECO 2013-Economics *MAC 3312-Calculus III *Humanities/History

SECOND YEAR

Fall (17 hrs) *MAP 3402-Differential Equations EGN 3310-Statics *PHY 3049-Physics Engr II EGN 3613-Engr Economics *Humanities/History *SPC 1600-Oral Communication

Spring (15 hrs) EGN 3321-Dynamics *SUR 3101-Surveying EGN 3331-Mech Materials EGN 3373-Prin Elec Engr EGN 3704-Engr & Environ

THIRD YEAR

Fall (15 hrs) EGN 3343-Thermodynamics CWR 3xxx-Engr Fluid Mech *Earth Science, GLY/GEO/BSC STA 3032-Prob/Stat Engr *POS 2041-Amer Nat Govt

Spring (16 hrs) CWR 4101C-Hydrology *Humanities elective CES 4130L-Struct Lab CES 4102-Structural Anal CWR 4201C-Hydraulics EGN 3365-Materials

FOURTH YEAR

Fall (16 hrs) EGN 4624-Engr Admin TTE 4004-Transportation Engr Approved Design Course/2 hrs CEG 4101C-Geotechnical Engr CES 4702-Struct Concrete Des or Technical elective Spring (15 hrs) CES 4605-Struct Steel Des <u>or</u> Technical elective Approved Design Course/2 hrs Technical Elective Technical Elective ENV 4561-Process Design

- Notes: 1) Courses marked (*) are available from the community colleges and are often part of the pre-engineering Associate of Arts Degree (and satisfies the General Education Program).
 - Students should consult their department for terms when courses are typically offered.
 - Students should consult with department for recommended electives or approved design courses
 - 4) Summer session required by law; see Transfer Program above
 - 5) Civil Engineering students must earn at least 33 hours in residence at UCF

Environmental Engineering - 132 semester hours required

FIRST YEAR

Fall (14 hrs) *ENC 1101-English Comp *CHM 2045-Chem Fund. I/Lab *MAC 3311-Calculus I *Social Science Spring (14 hrs) *ENC 1102-English Comp *CHM 2046 Chem Fund. II *MAC 3312-Calculus II *PHY 3048-Physics Engr I w/Lab

Summer (10 hrs) *ECO 2013-Economics *MAC 3313-Calculus III *Humanities/History

SECOND YEAR

Fall (17 hrs) *MAP 3302-Differential Equations EGN 3310-Statics *PHY 3049-Physics Engr II EGN 3613-Engr Economics *SPC 1600 Oral Communication *Humanities/History Spring (15 hrs) EGN 3321-Dynamics EGN 3331-Mech. of Materials EGN 3373-Prin Elec Engr EGN 3704-Engr Environ *Humanities Elective

Fall (15 hrs) CWR 3xxx-Fluid Mechanics EGN 3343 Thermodynamics *Earth Science, GLY/GEO/BSC STA 3032-Prob/Statistics Engr

*Earth Science, GLY/GEO/BSC STA 3032-Prob/Statistics Engr EGN 3365-Materials Fall (16 hrs)

Approved Design Course/3 hrs or EGN 4703-Systems Anal/Control CWR 4201C-Hydraulics EES 4202C-Chemical Processes ENV 4561-Process Design Technical Elective

THIRD YEAR

Spring (15 hrs) CWR 4101-Hydrology *POS 2041-Amer Nat Govt ENV 4121C-Air Pollution ENV 4351-Solid/Haz Waste EGN 4624-Engr Admin

FOURTH YEAR

Spring (16 hrs) Approved Design Course/3 hrs <u>or</u> EGN 4703-Systems Anal/Control Approved Design Course/3 hrs EES 4111C-Biological Processes Technical Elective Technical Elective

Notes: 1) Courses marked (*) are available from the community colleges and are often part of the pre-engineering Associate of Arts Degree (and satisfies the General Education PRogram).

- Students should consult their department for terms when courses are typically offered.
- Students should consult with department for recommended electives or approved design courses
- 4) Summer session required by law; see Transfer Program above
- 5) Civil Engineering students must earn at least 33 hours in residence at UCF

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Chair: N.S. Tzannes, EN 407, Phone (407) 823-2786

Faculty: Aly, Batarseh, Bauer, Belkerdid, Boreman, Brown, Christodoulou, Chung, Delfyett, DeMara, G. Dixon, Georgiopoulos, Gonzalez, Guenther, Haralambous, Harvey, Kasparis, Klee, Li Kam Wa, Linton, Liou, Malocha, R. Miller, Moharam, Mortazawi, Myler, Petrasko, R. Phillips, Qu, Richie, Soileau, Stickley, Sundaram, Wahid, Weeks, Yuan

The majors in Electrical Engineering and Computer Engineering are designed to present the basic principles, as well as in-depth studies of specific sub-disciplines, such as communication systems, controls, robotics, digital signal and image processing, computer architecture, digital systems, software engineering and knowledge-based systems, electronics, electro-optics, microwaves and antennas, micro-electronics, and solid-state devices.

Tentative Course Schedule for Entering Freshmen

FIRST YEAR

Computer Engineering — 132 semester hours required

Fall (15 hrs) *MAC 3311-Calculus I *ENC 1101-English Comp *Humanities/History EGS 1111C-Engr Comp Graphics *ECO 2013-Economics Spring (17 hrs) *MAC 3312-Calculus II *ENC 1102-English Comp *PHY 3048-Physics Engr I CHS 1440-Chem for Engr (CHM 2045/2046) *SPC 1600-Oral Communication

Summer (10 hours) *MAC 3313-Calculus III *Humanities/History *Social Science

SECOND YEAR

Fall (16 hrs) *MAP 3302-Differential Equations EGN 3310-Statics *PHY 3049-Physics Engr II w/Lab *Earth Science EGN 3420-Engineering Analysis Spring (16 hrs) EGN 3321-Dynamics

Or EGN 3358-Thermo-Fluids EGN 3373-Prin Electrical Engr EEL 3342C-Intro Digital Circuits PHY 3101 Physics Engr III EEL 3801C-Intro Comp Engr

Fall (17 hrs) EEL 3122C-Electrical Networks STA 3032-Prob. & Statistics for Engrs. EEL 3306-Semiconductor Devices EEL 4851-Engr. Data Structure *POS 2041-American. Nat'l. Govt.

THIRD YEAR

Spring (17 hrs) EEL 3657-Linear Control Systems EEL 3307C-Electronics I EEL 4882-Engr. Systems Software EEL 4767C-Comp. Syst. Design I *Humanities Elective

FOURTH YEAR

Fall (14 hrs) EEL 4884-Engr Software Design EEL 4768C-Comp. Syst. Des. II EEL recommended elective EEL recommended elective

Spring (10 hrs) EEL 4832-Computer Methods EEL 4012C-Senior Design

EEL recommended elective

- Notes: 1) Courses marked (*) are available from the community colleges and are often part of the pre-engineering Associate of Arts Degree (and satisfies the General Education Program).
 - Students should consult their department for terms when courses are typically offered.
 - Students should consult with department for recommended electives or approved design courses
 - 4) Summer session required by law; see Transfer Program above
 - 5) Computer Engineering students must earn at least 33 hours in residence at UCF

Electrical Engineering — 132 semester hours required

FIRST YEAR

Fall (15 hrs) *MAC 3311-Calculus I *ENC 1101-English Comp *Humanities/History EGS 1111C-Engr Comp Graphics *ECO 2013-Economics Spring (17 hrs) *MAC 3312-Calculus II *ENC 1102-English Comp *PHY 3048-Physics Engr I CHS 1440-Chem for Engr (CHM 2045/2046) *SPC 1600-Oral Communication

Summer (10 hours) *MAC 3313-Calculus III *Humanities/History *Social Science

SECOND YEAR

Fall (16 hrs) *MAP 3302-Differential Equations EGN 3310-Statics *PHY 3049-Physics Engr II w/Lab *Earth Science EGN 3420-Engineering Analysis Spring (16 hrs) EGN 3321-Dynamics <u>or</u> EGN 3358-Thermo-Fluids EGN 3373-Prin Electrical Engr EEL 3342C-Intro Digital Circuits PHY 3101 Physics Engr III EEL 3801C-Intro Comp Engr

THIRD YEAR

Fall (17 hrs) EEL 3122C-Electrical Networks STA 3032 Statistics EEL 3306-Semiconductor Devices I EEL 4767C-Comp. Syst. Design I *POS Amer. Nat'l Govt. Spring (17 hrs) EEL 3307C-Electronics I EEL 3470-Electromagnetic Fields EEL 3552C-Signals *Humanities Elective EEL 4750 Dig. Signal Proc. Fund.

FOURTH YEAR

Fall (13 hrs) EEL 4309C-Electronics II EEL 3657 Linear Control Systems EEL recommended elective EEL recommended elective Spring (11 hrs) EEL 4012C Senior Design EEL recommended elective EEL recommended elective

- Notes: 1) Courses marked (*) are available from the community colleges and are often part of the pre-engineering Associate of Arts Degree (and satisfies the General Education Program).
 - Students should consult their department for terms when courses are typically offered.
 - Students should consult with department for recommended electives or approved design courses
 - 4) Summer session required by law; see Transfer Program above
 - 5) Electrical Engineering students must earn at least 33 hours in residence at UCF

DEPARTMENT OF INDUSTRIAL ENGINEERING AND MANAGEMENT SYSTEMS

Chair: W. Swart, EN 307, Phone (407) 823-2204

Faculty: Armacost, Biegel, Elshennawy, Hoekstra, Hosni, Lee, McCauley-Bell, Mollaghasemi, Mullens, Pet-Edwards, Rogers, Safford, Sepulveda, Stanney, Whitehouse Faculty Associate: Kaufman

Industrial Engineers design systems which translate a specific product design into a physical reality in the most productive manner and with highest possible guality. In doing so, the industrial engineer deals with decisions regarding the right mix and type of people, materials, machines and automation (including robotics). Industrial engineers are also skilled in Engineering Economic Analysis and Information Management since they are generally considered to be the natural interface between the technical specialist and management.

Industrial Engineers are generally sought in industry, service, and governmental organizations. In the industrial sector, the industrial engineer is concerned with improving productivity and quality of the manufacturing, distribution, and management system of organizations. In the service sector, the industrial engineer is concerned with determining the most productive manner in which to deliver high-quality service to the customer. In government organizations the industrial engineer is active in assuring that tax payers receive maximum service for their tax dollars.

The Industrial Engineering approach is characterized by a systematic evaluation of alternatives using quantitative analysis, and computer simulations. As such, quantification and measurement play a key role in the day to day activities of the industrial engineer

Tentative Course Schedule for Entering Freshmen

Industrial Engineering — 132 semester hours required

FIRST YEAR

Fall (15 hrs) *MAC 3311-Calculus I *MAC 3312-Calculus II *Humanities/History *ECO 2013-Economics

Spring (16 hrs) *ENC 1101-English Comp *ENC 1102-English Comp EIN 2XXX-Intro to I.E. EGS 1111C-Engr Comp Graphics CHS 1440-Chem for Engr (CHM 2045/2046) EGN 3613-Engr Economics

Summer (10 hours) *MAC 3313-Calculus III *SPC 1600-Oral Communication *Humanities/History

SECOND YEAR

Fall (15 hrs) *MAP 3302-Differential Equations EIN 4118-Intro to Comp. Appl. *PHY 3048-Physics Engr. I EIN 3354-Intro to Cost Engr. STA 3032-Statics

Spring (16 hrs) *POS 2041-Amer Nat Govt EGN 3310-Statics *PHY 3049-Physics Engr II w/Lab EIN 3314-Work Measurement EIN 4XXX-Empirical Methods

THIRD YEAR

Fall (16 hrs) EIN 4391-Manufacturing Engr. EGN 3365-Materials EGN 3373-Prin. of Elect. Engr. EGN 3321-Dynamics ESI 4234-Quality Engr

Spring (14 hrs) ESI 4312-Operations Research ESI 4523-Systems Simulation *Social Science elective EGN 3358-Thermo-Fluids EGN 3704-Engr. Environ

FOURTH YEAR

Fall (15 hrs) EIN 4116-System Analysis EIN 4333-Industrial Controls Technical elective *Humanities elective EIN 4634-Industrial Facility Plan. Spring (15 hrs) Technical elective Technical elective EIN 4891-Seminar Design Project EGN 4624-Engr Administration *Earth Science

- Notes: 1) Courses marked (*) are available from the community colleges and are often part of the pre-engineering Associate of Arts Degree (and satisfies the General Education Program).
 - Students should consult their department for terms when courses are typically offered.
 - Students should consult with department for recommended electives or approved design courses
 - 4) Summer session required by law; see Transfer Program above
 - 5) Industrial Engineering students must earn at least 33 hours in residence at UCF

DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING

Chair: D. Nicholson, EN 381, Phone (407) 823-2416

Faculty: Anderson, J. Beck, Bishop, R. Byers, Chen, Chew, Desai, Eno, Gunnerson, Hagedoorn, Hosler, Kassab, K. Lin, Minardi, Moslehy, Nayfeh, Nuckolls, Rice, W. Smith, Ventre.

Joint Appointments: Chai, Debnath, Dhere, McBrayer, Nimmo, Richardson, Vajravelu

The Department of Mechanical and Aerospace Engineering offers undergraduate degree programs in Mechanical Engineering and Aerospace Engineering. Mechanical Engineering emphasizes design and addresses the science and technology of energy, machine, and manufacturing systems. Aerospace Engineering likewise emphasizes design, and addresses the science and technology of aeronautical and space systems. Both programs are crafted to provide a broadly based foundation for professional engineering careers and for lifelong learning. Individual courses within the programs challenge students to understand basic principles and their application, and to master advanced approaches in seeking solutions. Design, laboratory, and computer-based activities are pervasive. The capstone design and measurements courses incorporate major projects involving students in 'real world' problems. Students in the Mechanical Engineering program are expected to follow one of the three options illustrated below: Energy Systems, Mechanical Systems, and Materials.

Tentative Course Schedule for Entering Freshmen

Aerospace Engineering — 136 semester hours required

FIRST YEAR

Fall (16 hrs) *ENC 1101-English Comp *CHM 1440-Chem for Engr (CHM 2045/2046) *MAC 3311-Calculus I EGS 1111C-Engr Graphics *ECO 2013-Economics Spring (16 hrs) *ENC 1102-English Comp *MAC 3312-Calculus II *PHY 3048-PHysics Engr. I *POS 2041-Amer. Nat. Govt. *SPC 1600-Oral Communication

Summer (10 hours) *MAC 3313-Calculus III *Humanities/History *Social Science

SECOND YEAR

Fall (16 hrs) EGN 3420-Engr. Analysis *MAP 3302-Differential Eqns. *Humanities/History *PHY 3049-Physics Engr II w/Lab EGN 3310-Statics Spring (16 hrs) EGN 3373-Prin Electrical Engr. EGN 3365-Struct Prop Materials STA 3032-Prob/Statistics *Earth Science EGN 3321-Dynamics Fall (15 hrs) EGN 3353-Fluid Mechanics EAS 3010-Fund of Flight

THIRD YEAR

Spring (14 hrs) EAS 3101-Aerodynamics EAS 3800-Junior Aero Lab I EAS 4200-Flight Structures EGN 3331-Mech Materials EAS 3810-Junior Aero Lab II EGN 3343-Thermodynamics EAS 3520-Space Systems EML 4535-CAD/CAM

FOURTH YEAR

Fall (16 hrs) EML 4312-Feedback Control EAS 4105-Flight Mechanics EAS 4700-Aero Design I *Humanities elective EAS 4134-High Speed Aero

Spring (17 hrs) EAS 4710 Aero Design II PHY 3101-Physics Engr III EAS 4300 Propulsion Systems Approved technical elective/s EGN 4624-Engineering Admin

- Notes: 1) Courses marked (*) are available from the community colleges and are often part of the pre-engineering Associate of Arts Degree (that satisfies the General Education Program).
 - 2) Students should consult their department for terms when courses are typically offered.
 - 3) Students should consult with department for recommended electives or approved design courses.
 - 4) Summer session required by law; see Transfer Program above.
 - 5) Aerospace Engineering students must earn at least 34 hours in residence at UCF.

Mechanical Engineering — 132 semester hours required

FIRST YEAR

Fall (16 hrs) *MAC 3311-Calculus I *ENC 1101-English Comp CHS 1440-Chem for Engr (CHM 2045/2046) *PHY 3048-Physics Engr EGS 1111C-Engr Comp Graphics *ECO 2013-Economics

Spring (16 hrs) Spring (16 hrs) *MAC 3312-Calculus II *POS 2041-Amer. Nat'l. Govt. *SPC 1600-Oral Communication Summer (10 hours) *MAC 3313-Calculus III

*Humanities/History *Social Science

SECOND YEAR

Fall (16 hrs) *MAP 3302-Differential Equations EGN 3310-Statics *PHY 3049-Physics Engr II w/Lab *PHY 3049L-Physics Lab EGN 3420-Engineering Analysis *Humanities/History

Spring (15 hrs) EGN 3321-Dynamics EGN 3365C-Materials STA 3032-Statistics EGN 3373-Prin Electrical Engr *Earth Science

Fall (15 hrs) PHY 3101-Modern Physics EGN 3331-Mechanics of Materials EGN 3343-Thermodynamics EGN 3353-Fluid Mechanics EGN 4624-Heat Transfer

THIRD YEAR

Spring (15 hrs) EML 4535-CAD-CAM EML 4220-Vibrations *Humanities elective EML 3500-Machine Design EML 4142-Heat Transfer

FOURTH YEAR I. ENERGY SYSTEMS OPTION

Fall (15 hrs) EML 3101-M.E. Thermo EML 4312-Feedback Controls EML 4304C-Measurements EML 4501C-Senior Design I Restricted technical electives Spring (13 hrs) EML 4502C-Senior Design II EML 4703C-Fluids II Restricted technical elective Restricted technical electives

II. MECHANICAL SYSTEMS OPTION

Fall (15 hrs) EML 3262-Kinematics EML 4312-Feedback Controls EML 4304C-Measurements EML 4501C-Senior Design I Restricted technical elective Spring (13 hrs) EML 4502C-Senior Design II EML 4703C-Fluids II Restricted technical elective Restricted technical elective

III. MATERIALS OPTIONS

Fall (15 hrs) EML 3101-M.E. Thermo EML 4312-Feedback EML 4304C-Measurements EMA 4501C-Senior Design I EMA 3012L-Exp Meth Mats Spring (13 hrs) EML 4502C-Senior Design II EML 4703C-Fluids II EML 3234-Mech Beh Mats Restricted technical elective

- Notes: 1) Courses marked (*) are available from the community colleges and are often part of the pre-engineering Associate of Arts Degree (and satisfies the General Education Program).
 - Students should consult their department for terms when courses are typically offered.
 - Students should consult with department for recommended electives or approved design courses.
 - 4) Summer session required by law; see Transfer Program above.
 - 5) Mechanical Engineering students must earn at least 33 hours in residence at UCF.

DEPARTMENT OF ENGINEERING TECHNOLOGY

Chair: J. McBrayer, EN 307, Phone (407) 823-2268

Faculty: Buchanan, W. Byers, Coowar, Denning, J. Dixon, Osborne, Staub, Strange, Vazquez, Worbs

Engineering Technology is the profession in which a knowledge of the applied mathematical and natural sciences gained by higher education, experience, and practice is devoted to application of engineering principles and the implementation of technological advances for the benefit of humanity. Engineering Technology education at UCF is broad in nature, focusing primarily on analyzing, applying, implementing and improving existing technologies. This education enhances the graduate's potential for accepting a wide variety of professional opportunities, for lifelong learning, and for future career advancement.

Two baccalaureate degree programs are offered in engineering technology. they are the: Bachelor of Science in Electrical Engineering Technology (BSEET)

and

Bachelor of Science in Engineering Technology (BSET)

The bachelor of science degree programs in Electrical Engineering Technology and in Engineering Technology are aimed at preparing graduates for the practice of engineering closest to the product improvement, manufacturing, and engineering operational functions. Students entering either of the curricula in Engineering Technology should be aware that some lower level technical courses may not currently be available at UCF and that the student may need to take a limited number of courses at a community college. Students who wish to be admitted directly into the upper level engineering technology concentration should possess either the A.A. degree, with appropriate technical courses, or an A.S. (or equivalent education) degree from a Florida public college or an approved out-of-state insti-

tution in an appropriate engineering technology area. Prospective transfer students not holding the A.A./A.S. degree from a Florida public college are encouraged to apply. They will be considered on an individual basis and should consult the "Transfer Applicants" portion of the Undergraduate Catalog for additional information.

Requirements

Completion of UCF's General Education is required before the BSEET/BSET degree is granted. If a student completes the General Education Program of a Florida public community college, it will substitute for UCF's Lower Division General Education Program without a course-by-course match. Students should consult an advisor for specific course requirements. All Engineering Technology students must earn at least 32 hours in residence at the University.

Bachelor of Science in Electrical Engineering Technology (BSEET) and Bachelor of Science in Engineering Technology (BSET)

De	gree Requirements		128 hours
A.	General Education		27 hours
	(Not including Mathematics, S	Science and Computer Programming)	
	Communications		9 minimum
	ENC 1101/1102	English Composition I/II	6 hours
	SPC 1600	Fundamentals of Oral Communications	3 hours
	Cultural and Historical		9 minimum
	EUH 2000/2001	Western Civilization I/II OR	6 hours
	HUM 2211/2230	Western Humanities I/II OR	6 hours
	AMH 2010/2020	U.S. History I/II AND	6 hours
	Approved Elective	in such the second second second second second	3 hours
	Social Foundations		9 minimum
	ECO 2013	Principles of Economics I	3 hours
	POS 2041	American National Government AND	3 hours
	PSY 2013	General Psychology OR	3 hours
	SYG 2000	General Psychology OR	3 hours
	ANT 2003	General Anthropology	3 hours
-	Engine aning Taskaslany Com	The second s	44.6
в.	Engineering Technology Core		41 hours
		athematics and Science is required)	10
	Mathematics	College Alasha	12 minimum
	MAC 1104	College Algebra	3 hours
	MAC 1114	College Trigonometry AND	3 hours
	MAC 3253/3254	Applied Calculus I/II OR	6 hours
	MAC x311/x312	Calculus with Analytic Geometry I/II	8 hours
	Science		11 minimum
	PHY x048C/x049C	Physics for Engineers & Scientists I/II OR	8 hours
	PHY X053C/X054C	College Physics I/II AND	8 hours
	BSC 1020C	Biological Principles OR	4 hours
	BSC 1030C	Biology and Environment OR	4 hours
	GLY 1030	Geology and its Applications OR	3 hours
	GEO 1200	Physical Geology OR	3 hours
	GEO 3370	Resources Geography OR	3 hours
	BOT 1000C	Plant Science OR	4 hours
	ANT 3511	Human Species	3 hours
	Other		18 hours
	ENC x241	Technical Report Writing	3 hours
	ETG 3541	Applied Mechanics	4 hours
	ETI 3651C	Computer Applications	3 hours
	ETI 3671	Technical Economic Analysis	2 hours
	ETI 4110	Industrial Quality Control	3 hours
	ETI 4635	Technology Administration	3 hours

Bachelor of Science in Electrical Engineering Technology (BSEET)

Program Coordinator: William S. Byers, P.E.

This program in electrical engineering technology, leading to the BSEET degree, provides a structured curriculum with instruction in fundamentals and engineering principles applicable toward working with both present and future technologies in a variety of work environments. Graduates may find employment opportunities in such diverse fields as aerospace, instrumentation, computers, communications, consumer products, banking and education. They may become involved in applied design, product development, manufacturing, guality assurance, production and operations as well as activities such as field engineering, sales, system analysis, technical writing and software design, preparation and programming.

The EET program provides two paths of concentration, thereby providing the student a choice between either a hardware or a software emphasis. The concentration in Electrical systems provides a broad based curriculum in electrical/electronic engineering principles, and their application. Instruction and problem solving experiences are provided in both circuit and system aspects including computers, communications, controls and electrical power. The concentration in Information Systems, while providing a firm foundation in electrical/electronics principles, also includes extensive instruction in programming, system design and analysis, and systems programming. Projects in cooperation with local industry, solving real-world problems are required of all students in this concentration.

Electrical Systems

C. Required Lower Division Tech		26 hours		
	freshman and sophomore year)	minimum		
EET 1xxxC/1yyyC	DC Circuits/AC Circuits with Lab	6 hours		
EET 1xxxC/2xxxC	Electronic Devices and Circuits I/II with Lab	8 hours		
CET 1xxxC	Digital Fundamentals with Lab	4 hours		
CET x123C	Microprocessor Electronics with Lab	3 hours		
COP 1xxx	Approved Computer Programming Approved Technical Elective	3 hours 2 hours		
D. Hanna Division Creatistly Court	of the straight approximation of the particular	34 hours		
D. Upper Division Specialty Cour	ses senior years — prerequisites from groups B. and			
EET 3716C	Network Analysis	4 hours		
CET 3198C	Digital Systems	4 hours		
CET 3303	Microcomputer Technology I	3 hours		
CET 3144C	Applied Microprocessor Technology	3 hours		
CET 4333C	Applied Computer Systems I	4 hours		
EET 4158C	Linear Integrated Circuits	3 hours		
EET 4329C	Communications Systems	4 hours		
EET 4548	Power Systems	3 hours		
EET 4732	Feedback Control Systems AND	3 hours		
CET 3364	System Applications in C OR	3 hours		
CET 4334C	Applied Computer Systems II OR	3 hours		
EET 4339C	Antennas and Propagation OR	3 hours		
EET 4915	Senior Design Project OR	3 hours		
ETI 4186	Applied Reliability OR	3 hours		
ETI 4205	Applied Logistics	3 hours		
Information Systems				
C. Required Lower Division Tech	inical Courses	26 hours		
	reshman and sophomore year)	minimum		
EET 1xxxC/1yyyC	DC Circuits/AC Circuits with Lab OR	6 hours		
EET X035C	Electricity/Electronics AND	4 hours		
CET x123C	Microprocessor Electronics with Lab	3 hours		
COP xxx0	Pascal Programming	4 hours		
COP xxx1	Pascal Programming — Advanced	3 hours		
COP xxx0	Cobol Programming	3 hours		
COP xxx1	Cobol Programming — Advanced	3 hours		

COP xxx0	Fortran Programming	3 hours
COP xxx1	Fortran Programming — Advanced	3 hours
D. Upper Division Specialty Con	urses	34 hours
(to be taken in the junior and	I senior years - prerequisites from groups B. an	d C.)
CET 3303	Microcomputer Technology I	3 hours
CET 3323C	Computer Organization Technology	3 hours
CET 3383	Applied Systems Analysis I	3 hours
CET 4505	Applied Operating Systems I	3 hours
EET 3716C	Network Analysis	4 hours
CET 3198C	Digital Systems	4 hours
CET 4427	Applied Database I	3 hours
CET 4523	Applied Systems Analysis II	3 hours
EET 4158C	Linear Integrated Circuits	3 hours
CET 4915	Senior Design Project AND	2 hours
CET 4361	Applied Computer Graphics OR	3 hours
CET 4429	Applied Database II OR	3 hours
CET 4527	Applied Operating Systems II OR	3 hours
ETI 4186	Applied Reliability OR	3 hours
ETI 4205	Applied Logistics OR	3 hours
ISM 4090	Seminar in Management Information	1
	Systems OR	3 hours
MAN 3504	Production/Operations Management	3 hours

Bachelor of Science in Engineering Technology (BSET)

Program Coordinator: Richard G. Denning, P.E.

The BSET curriculum consists of a carefully integrated program which includes professional studies, liberal education, and applied mathematics and sciences. Through the selection of the upper level technical concentration students can build and tailor their program, based on previous knowledge to assist them to launch a career that best meets their needs and aspirations. The Design concentration provides advanced course work in preparation for employment at the baccalaureate level in the fields of manufacturing, testing and fabrication of mechanical parts, and the building and construction industries. Graduates may become involved in applied design, product development, manufacturing or production, to name but a few. The operations concentration provides an orientation for professional careers in technical management and operations in the manufacturing, sales, services, and construction industries. Graduates may become involved in many diverse areas including product development, manufacturing, quality assurance and logistics, sales, field engineering, technical writing and safety.

Projects in cooperation with local industry, solving real-world problems, are required of all students in the BSET program. In addition to the engineering technology core, both concentrations in the BSET program have a common lower division core as well as a common upper division core.

C. Required Lower Division Technical Courses			27 hours
(ideally scheduled during the freshman and sophomore year)			minimum
	EET x035C	Electricity/Electronics	4 hours
	CET x123C	Microprocessor Electronics with Lab	3 hours
		Drafting I	3 hours
	COP xxxx	Approved Computer Programming	3 hours
	CHM xxxxC	General Chemistry and Laboratory	4 hours
		Approved Technical Elective	3 hours
		Approved Technical Elective	3 hours
		Approved Technical Elective	2 hours
		Approved Technical Elective	2 hours
D. Up	per Division Require	ed Courses	18 hours
(to	be taken in the junio	or and senior years — prerequisites from groups B.	and C.)
	EST 4502C	Metrology and Instrumentation	4 hours
	ETD 3350C	Applied CADD	3 hours
	ETG 4530C	Strength of Materials	4 hours

ETG 4950C	Senior Design Project AND	3 hours
ETM 4220	Applied Energy Systems OR	4 hours
ETM 4232C	Applied Heat Transfer OR	4 hours
ETM 4331C	Applied Fluid Mechanics	4 hours

Design

Upper Division Specialty C	Courses — select any five courses	15 hours
(to be taken in the junior a	nd senior years - prerequisites from groups B., (C. and D.)
ETC 4241C	Construction Materials and Methods	3 hours
ETC 4242	Construction Contracts and Specifications	3 hours
ETC 4414C	Applied Structural Design I	3 hours
ETC 4415C	Applied Structural Design II	3 hours
ETI 3421	Materials and Processes	3 hours
ETM 4512C	Applied Design of Machine Elements	3 hours
	(to be taken in the junior a ETC 4241C ETC 4242 ETC 4242 ETC 4414C ETC 4415C ETI 3421	ETC 4242Construction Contracts and SpecificationsETC 4414CApplied Structural Design IETC 4415CApplied Structural Design IIETI 3421Materials and Processes

Operations

Upper Division Specia	Ity Courses — select any five courses	15 hours
(to be taken in the juni	or and senior years - prerequisites from groups B., (C. and D.)
ETI 3421	Materials and Processes	3 hours
ETI 3960	Technical Sales	3 hours
ETI 4186	Applied Reliability	3 hours
ETI 4205	Applied Logistics	3 hours
ETI 4640	Process Planning and Work Measurement	3 hours
ETI 4661C	Applied Facilities Planning and Design	3 hours
ETI 4700	Occupational Safety	3 hours
	(to be taken in the juni ETI 3421 ETI 3960 ETI 4186 ETI 4205 ETI 4640 ETI 4661C	ETI 3960Technical SalesETI 4186Applied ReliabilityETI 4205Applied LogisticsETI 4640Process Planning and Work MeasurementETI 4661CApplied Facilities Planning and Design

AIR FORCE ROTC (Aerospace Studies)

Chair: D. H. Haylett, BIO 306, Phone (407) 823-1247 Faculty: Haylett, Hernandez, Irizarry, Mack, Morant

The Department of Aerospace Studies provides pre-commissioning education for qualified students who desire to serve as commissioned officers in the active duty Air Force. The department offers both the four-year and two-year Air Force ROTC programs. The four-year program provides on-campus study during the freshman through senior years. The two year programs allow community college transfer students and other students with two academic years remaining in either undergraduate or graduate status to earn an Air Force commission while completing their studies. Both programs offer scholarships for selected students. Students are invited to write or visit the Department of Aerospace Studies to obtain additional information.

CURRICULUM

Students enrolled in the Air Force ROTC program may major in any academic discipline and earn a minor in Aerospace Studies. A major is not offered by this department. An Aerospace Engineering Degree is offered under the College of Engineering. AFROTC courses are listed under the prefix AFR. The curriculum is divided into two phases:

- General Military Course (GMC) The General Military Course of the freshman and sophomore courses for students in the four-year AFROTC program. These courses deal with the mission, organization, and structure of the U.S. Air Force, and the development of air power into a prime element of American national security.
- 2. Professional Officer Course (POC) The Professional Officer Course consists of Aerospace Studies offered during the junior and senior years. All students who seek a commission through the Air Force ROTC must complete the POC curriculum. The curriculum involves the study of concepts of leadership and management in the Air Force and an analysis of the formulation and implementation of American defense policy.

LEADERSHIP LABORATORY

Leadership Laboratory is open to students who are members of the Reserve Officer Training Corps or are eligible to pursue a commission as determined by the Professor of Aerospace Studies.

REQUISITE FOR ADMISSION TO THE PROFESSIONAL OFFICER COURSES (POC)

- 1. Be at least 17 years of age at the time of acceptance.
- Be able to complete the Professional Officer Course and complete all degree requirements prior to reaching age 26¹/₂ if entering Flight Training, or before age 30 if entering a non-flying Air Force specialty.
- 3. Pass the Air Force Officer Qualifying Test.
- 4. Pass an Air Force medical examination.
- 5. Complete the application and examination process, preferably prior to January 14 of the year in which they plan to enroll.
- 6. Selection by the Professor of Aerospace Studies and acceptance by the University.
- 7. Successful completion of a summer Field Training course.
- Enlistment in the Air Force Reserve certifying agreement to complete the POC and accept an Air Force Commission. This enlistment is terminated upon receipt of a commission.

MONETARY ALLOWANCE

All students enrolled in the Professional Officer Course receive a tax-free monetary allowance of \$100 per month.

AIR FORCE ROTC SCHOLARSHIP PROGRAM

Scholarships are phased at 4, 3, and 2-year intervals. This system provides opportunities to those enrolled in both the four-year and two-year programs. These scholarships provide for full tuition, and an allowance for fees and textbooks. Scholarship recipients also receive the \$100 monthly tax-free monetary allowance. A POC Incentive scholarship is available to eligible cadets enrolled in the last two years of our program regardless of major.

SUMMER TRAINING

All students must attend a summer Field Training course conducted at an Air Force base. This course includes junior officer training, officer career orientation, and physical conditioning. Students enrolled in the four-year AFROTC program will attend a four-week summer course, normally upon completion of the General Military Course, and they will receive approximately \$550. A six-week summer course, which includes a modified version of the General Military Course, is required for students entering the two-year AFROTC program. These students must complete their summer training prior to their formal enrollment in the Professional Officer Course. Students who complete the six-week course receive approximately \$800.

OFFICER COMMISSIONS

Students who complete the Professional Officer Course are appointed Second Lieutenants in the United States Air Force Reserve. After completing the training program and entering active duty as reserve officers, they will serve a minimum active duty tour which varies in length depending on their particular career area. Such obligations are explained in detail during the one-on-one counseling sessions conducted with each prospect by detachment officers. During their period of active service, new officers are given the opportunity to attain career status and to obtain a regular commission in the United States Air Force.

MINOR

The Department of Aerospace Studies offers a minor consisting of a minimum of 16 semester hours. Required courses: AFR 1101, 1111, 2130, 2131, 3220, 3230, 4201, 4210.

ARMY ROTC-MILITARY SCIENCE

Chair: John T. Sanders, Trailer 522, 525, 527, Phone (407) 823-2430 Faculty: Amador, Bryant, DeLeon, Harris, Killian, Morales, Reynolds

The University of Central Florida, in cooperation with the U.S. Army, provides an opportunity to earn a commission as a lieutenant and compete for an active duty assignment or accept a guaranteed Army Reserve or National Guard position. The program offers both a four-year and two-year option for students working on their Associate of Arts, Baccalaureate or Graduate degrees. The two-year option allows students with at least two academic years remaining in either undergraduate or graduate studies to meet all requirements for commissioning. Students may be eligible for the Army's new Simultaneous Membership Program (SMP), which combines Reserve Forces duty with Army ROTC officer training courses on campus. Students earn about \$2,700 in their last two years.

CURRICULUM

The Military Science curriculum is divided into three phases:

1. Basic Military Science

The Basic Military Science courses, open to both men and women, are designed for four-year participants and are normally offered during the freshman and sophomore years. These courses address military organization, equipment, weapons, map reading, land navigation, management skills, grade structure, communications, and leadership. There are no contractual obligations for students in the basic course and no commitments. It's an opportunity to see what Army ROTC is all about. (MIS 1031, 1400, 2120, and 2300)

2. Advanced Military Science

The Advanced Military Science courses are normally taken during the junior and senior years. These courses specialize in small unit tactics, how to prepare and conduct military training, military justice system, staff procedures, decision making, and leadership. Students who desire a commission as a second lieutenant are contracted and paid a subsistence allowance of \$100.00 a month up to ten months during the school year. Each student is required to take courses that meet the Professional Military Educational Requirements. These requirements require taking at least one course in each of the following areas: Written Communication Skills, Human Behavior, Military History (AMH 3540) Computer Literacy, and Math Reasoning (MIS 3301, 3410, 4421, and 4430).

3. Summer Camp

Prior to commissioning, each cadet must successfully complete an evaluation of skills learned. This evaluation is conducted at Ft. Bragg, North Carolina, during June and July. Summer Camp requirements apply only to Advanced Military Science students. Students attending the advanced camp receive approximately \$700.00.

- 4. A student can earn placement credit for the Basic Course classes and allowed entry into the Advanced Courses if he/she attended Basic and Advanced Individual Training or attends ROTC Basic Camp at Ft. Knox, Kentucky.
- Daytona Beach Campus students contact the Professor of Military Science at Embry Riddle Aeronautical University, Daytona Beach, FL, (904) 239-6469.

SUMMER TRAINING

- A summer training program is offered for students who are to be academic juniors without previous ROTC or military training. A student can earn placement credit for the Basic Course classes and allowed entry into the Advanced Courses by attending a sixweek course at Fort Knox, Kentucky, thereby allowing completion of all requirements for commissioning within two years. Students attending the summer course at Fort Knox will receive approximately \$700 pay for the period. Additionally, all lodging, meals, transportation, and uniforms will be provided at no expense.
- Qualified students can be selected to attend specialized military training during the summer months. Some of the areas of training are:

 Airborne Training, b. Air Assault Training, c. Northern Warfare Training, d. Cadet Troop Leadership Training, e. Master Fitness Trainer, f. Mountain Training.

MINOR

The Department of Military Science offers a minor consisting of a minimum of 19 semester hours. Required courses: MIS 3301, 3410, 4421, 4430 and AMH 3540.

MONETARY ALLOWANCE

All students enrolled in the Advanced Military Science Course receive a tax free monetary allowance of \$100 per month for the school year.

SCHOLARSHIPS

Four-, three-, and two-year scholarships are available for all students who qualify. These scholarships provide full tuition, and fees. Additionally, scholarship recipients receive \$100 (tax free) per month and a \$225 book stipend for the Fall & Spring semesters. Scholarship applications are processed in the December-February time frame.

REQUISITES FOR ADMISSION TO THE BASIC COURSE

- 1. Enrollment in a Baccalaureate or Masters degree program.
- 2. Full-time student status.

REQUISITES FOR ADMISSION TO THE ADVANCED COURSE

- Successful completion of Basic Course, Basic Camp, JROTC, prior military service, or permission of Department Chair.
- 2. 17 years of age at the time of entry but not more than 30 years of age at the time of commissioning. Waiverable for veterans up to age 34.
- 3. Successful completion of an Army physical examination.
- 4. Agreement to complete the Advanced Course requirements and serve on active, reserve, or national guard duty as a commissioned officer.
- 5. Full-time student status.

MINOR: SPACE STUDIES

Contact Person: E.R. Hosler; ENGR 381, Phone (407) 823-2416

In response to the needs of the Central Florida space community, UCF offers a multidisciplinary Minor in Space Studies. It is intended for students of all disciplines and includes courses from aerospace engineering, electrical engineering, environmental engineering, instructional programs, physics, physical education, and political science. Program requirements include a grade point average of at least 2.00 and a minimum of 21 credit hours, including three required courses and four elective courses.

Required courses:	
AST 2002	Astronomy
GEO 4140	Remote Sensing of the Environment
PUP 3508	Introduction to Space Studies
Elective courses:	
EAS 3010	Fundamentals of Flight
EAS 3101	Aerodynamics I
EAS 3530	Space Systems
EAS 4505	Orbital Mechanics
EGN 4830	Telecommunications
GEO 1200	Physical Geography
GEO 3370	Resources Geography
GEO 4141	Geographic Information Systems
INR 4404	Space Law
PET 4351	Applied Exercise and Human Physiology
PUP 4510	Space Policy
SCE 5825	Space Science for Educators

Completion of the Minor in Space Studies may involve course work in addition to the minimum requirements of some major programs. Students should consult with their academic advisors to confirm that all of the departmental and college degree requirements for their majors are being met. Formal enrollment should occur before nine credit hours have been completed. To obtain information and to enroll in the Minor, students should contact Dr. E. R. Hosler, Associate Chair, Department of Mechanical and Aerospace Engineering, Engr 381, (407) 823-2416.

MINOR: TECHNOLOGY AND SOCIETY

Contact Persons: Richard N. Miller, ENGR 281, Phone (407) 823-2455 J. Paul Hartman, ENGR 207, Phone (407) 823-2317.

The College of Engineering offers a minor in Technology and Society to interested UCF students. The minor is intended for students not enrolled in the College of Engineering, although students in the College may also be awarded the minor. To meet the requirements, the student must complete, with a grade point average of 2.0 or higher, a minimum of 18 hours taken from the courses listed. A minimum of 9 hours must be taken from the EGN prefix courses listed below. Students should preferably complete the following general education program coursework prior to taking this minor: ECO 2013, MAC 1104; History or Humanities sequence.

The 18 hours are to be selected from:

E	EGN 4033	Technology and Social Change
E	EGN 4813	Science in History
E	EGN 4814	Technology in History
E	EGN 4818	Technology in North America
E	EGN 4823	Topics in Urban Development
E	EGN 4824	Energy and Society
E	EGN 4830	Telecommunications
E	EGN 4825	Environment and Society
E	EGN 4832	Computers, Cybernetics and Society
E	EGN 4844	Man and Machine
1	ARH 3060	History of Architecture
(GEO 3370	Resource Geography
L	IT 3313	Science Fiction
L	IT 4433	Survey of Technical and Scientific Literature
F	PUP 3204	Environmental Politics
F	PUP 4503	Government and Science
F	PUP 4510	Space Policy
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COLLEGE OF HEALTH AND PUBLIC AFFAIRS

UNDERGRADUATE PROGRAMS

Cardiopulmonary Sciences (BS) Communicative Disorders (BA/BS) Criminal Justice (BA) Health Information Management (BS) Health Services Administration (BS) Legal Studies (BA) Medical Laboratory Sciences (BS) Molecular Biology and Microbiology (BS) Nursing (BSN) Public Administration (BA) Physical Therapy (BS) Radiologic Sciences (BS) Social Work (BSW)

PRE-HEALTH PROFESSIONAL PROGRAMS

Prechiropractic Predental Premedical Preoptometry Prepharmacy Prepodiatry Preveterinary

GRADUATE PROGRAMS*

Communicative Disorders (MA) Health Sciences (MS) Molecular Biology and Microbiology (MS) Public Administration (MPA) Social Work (MSW)

OTHER PROGRAMS

Gerontology Certification Program *See the Graduate Catalog.

COLLEGE OF HEALTH AND PUBLIC AFFAIRS

Dean: Belinda R. McCarthy, HP 214, Phone (407) 823-2352 Associate Dean: Richard E. Talbott, HP 214 Associate Dean: Jean C. Kijek, HP 219

The College of Health and Public Affairs is composed of eight departments. The health related disciplines include: Communicative Disorders, Health Sciences, Molecular Biology and Microbiology, and Nursing. The Criminal Justice, Legal Studies, Public Administration and Social Work programs comprise the public affairs unit of the college.

As a college, we are responsible for educating professionals in health, human and public service. As an integral part of the Central Florida community, we have as our mission the advancement of knowledge, education, public policy and professional practice in health and public affairs.

ADVISEMENT

Advisement Coordinator: Ms. Debbie Phillis, HP 215, Phone (407) 823-0010

The College of Health and Public Affairs Advisement Office assists students in understanding matters relating to college and university requirements and procedures. Orientation and registration are coordinated through the advisement office. Questions concerning university and college academic policies should be directed through this office.

Pre-Health Professions Advisement:

See Pre-Health Professions Advisement Office

Program Planning

Students should plan their academic programs of study in consultation with a faculty advisor appointed by the chair of the major department.

General Requirements for the Bachelors Degree

Some Departments or Programs in the College are upper-division, limited access programs. Acceptance by or registration at the University does not constitute admission to the following: Departments of Nursing, Physical Therapy, Social Work, and the Programs in Cardiopulmonary Sciences, Medical Laboratory Sciences, Health Information Management, and Radiologic Sciences. Application must be made to the appropriate program in health sciences. For nursing or physical therapy, contact Admissions Services, for Social Work, contact the Social Work department. Additional information regarding prerequisites and grade point averages may be obtained from the desired Program or Department.

The following Departments and Programs do not have limited access: Departments of Communicative Disorders, Criminal Justice/Legal Studies, Molecular Biology/Microbiology, and Public Administration; and the Program in Health Service Administration.

DEPARTMENT OF COMMUNICATIVE DISORDERS

Interim Chair: T. A. Mullin, HP 113, Phone (407) 823-2121 Faculty: Hedrick, Ingram, Mullin, Parker, Ratusnik, Talbott, Utt

The primary goal of the Department of Communicative Disorders is the preparation of clinical specialists in Speech/Language Pathology and Audiology. Undergraduate offerings are consistent with philosophies of the American Speech-Language-Hearing Association in that most coursework is designed to provide the student theoretical foundations on which to build competent clinical skills. An on-campus clinic as well as external affiliations including area public schools, community speech and hearing centers, hospital clinics, physicians' offices and industrial settings are available for the development of various clinical competencies. Faculty are engaged in generation and transmission of knowledge concerning speech language-hearing processes and impairments via ongoing research projects. The professional phase of the program in speech/language pathology and audiology is accredited by the Educational Standards Board of the American Speech-Language Hearing Association. In addition to coursework for majors, the Department offers a 4-course sequence in Sign Language: SPA 3333, SPA 4380, SPA 4381, SPA 4382.

MINOR

The Department of Communicative Disorders offers a minor consisting of a minimum of 22 semester hours.

Required courses: LIN 4710, 4710L; SPA 3002, 3101, 3112, 3112L, 4032, 4251, 4251L, 4402, and 4402L.

Licensed Speech Language and Audiology Assistant:

This new state license may be obtained by completing our minor plus one additional course as recommended by the academic advisor.

Bachelor of Arts or Bachelor of Science: Communicative Disorders

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses

3.	Required Courses		
	LIN 4710	Foundations of Language	3 hours
	LIN 4710L	Foundations of Language lab	1 hour
	SPA 3002	Introduction to Communicative Disorders	3 hours
	SPA 3050	Clinical Observation & Practice	3 hours
		(Taken Fall & Spring of Senior year)	
	SPA 3101	Physiological Bases of Speech and	
		Hearing	3 hours
	SPA 3112	Basic Phonetics	3 hours
	SPA 3112L	Basic Phonetics Lab	1 hour
	SPA 3550	Clinical Methods	3 hours
	SPA 3550L	Clinical Methods Lab	1 hour
	SPA 4011	Speech and Hearing Science	3 hours
	SPA 4032	Audiology I	3 hours
	SPA 4130	Augmentative Communication Systems	3 hours
	SPA 4201	Communicative Disorders-Articulation	3 hours
	SPA 4201L	Communicative Disorders-Articulation Lab	1 hour
	SPA 4251	Organic Speech Disorders	3 hours
	SPA 4251L	Organic Speech Disorders Lab	1 hour
1000	SPA 4310	Audiology II	3 hours
	SPA 4321	Aural Habilitation-Rehabilitation	4 hours
	SPA 4402	Communicative Disorders-Language	3 hours
	SPA 4402L	Communicative Disorders-Language Lab	3 hours
	SPA 4554	Therapeutic Communications	3 hours
4.	Statistics Requirement		
	STA 3023	Statistical Methods I	3 hours
	STA 4163	Statistical Methods II	3 hours
5.	Restricted Elective		
	A course at the 3000 or 40	000 level related to the Major (e.g. education	

A course at the 3000 or 4000 level related to the Major (e.g., education, psychology, sociology, computer, etc.) selected in consultation with the academic advisor. 6. Other Electives

Students who wish to obtain a Teacher's Certificate for the State of Florida must include the necessary course work as electives. See your academic advisor.

3 hours

 B.A./B.S. Option. Students pursuing the B.A. degree must demonstrate proficiency in a foreign language equivalent to one year while students pursuing the B.S. degree must complete six credit hours of health science courses approved by the Department.

8. Students must achieve a grade of C in required courses in the Department.

DEPARTMENT OF CRIMINAL JUSTICE AND LEGAL STUDIES

Chair: B.J. McCarthy, PH 116, Phone (407) 823-2603 Faculty: Bast, Becker, Cook, Griset, Hall, Hanson, Lanier, Lucken, Mahan, B.J. McCarthy, B.R. McCarthy, Mozee, Pyle, Sanborn, Slaughter

The Department of Criminal Justice and Legal Studies includes two undergraduate degree programs: Legal Studies and Criminal Justice.

Criminal Justice Program

Criminal Justice is a problem based field of study which focuses on the problems of crime and crime control agencies in a democratic society. The curriculum reflects the dynamic nature of the field and prepares students for challenging careers in public service.

Criminal Justice Minor

The Criminal Justice Minor consists of 18 or more semester hours. Required Courses: CCJ 3020, CCJ 3010; two of the following: CCJ 3300, CCJ 3290, CCJ 4105; plus a minimum of 6 semester hours of criminal justice courses selected with the aid of an advisor.

Legal Studies Program

The Legal Studies Program provides students with a broad understanding of basic principles of law and the role and function of the legal system. Two emphases are provided: legal-applied and legal-general. The applied emphasis prepares students for professional positions in law offices, public agencies, and business organizations. The general law emphasis program is designed to provide a general background in American society and government as well as American law. This emphasis, in addition to preparing students for law-related careers, provides a foundation for further professional or graduate education. Satisfactory completion of program requirements in either emphasis leads to the degree of Bachelor of Arts with a major in Legal Studies.

Legal Studies Minor

The Legal Studies Minor consists of 18 or more semester hours. Required courses: PLA 3013 plus a minimum of 12 semester hours of legal studies courses and 3 semester hours of law-related courses selected with the aid of an advisor.

Bachelor of Arts: Criminal Justice

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses (18 semester hours)

CCJ 3020	Criminal Justice System	3 hours
CCJ 3010	Crime in America	3 hours
CCJ 3290	Prosecution and Adjudication	3 hours
CCJ 3300	Corrections and Penology	3 hours
CCJ 4105	Police and Society	3 hours
CCJ 4701	Research Methods in Criminal Justice	3 hours
tricted Electives		

- 4. Restricted Electives
 - a. 21 additional semester hours of upper division CCJ coursework. Seniors can satisfy up to 9 hours of this requirement with internship and up to 6 hours with directed independent study; however, the combination of these non-class options shall not exceed 12 hours. Program standards must be met to be eligible for either internships or independent study credit.
 - b. 15 additional semester hours of supporting courses to be selected with and approved by the student's advisor. These courses may vary from student to student depending upon individual needs or objectives, but include selected courses from public administration, legal studies, sociology, statistics, and psychology.
- 5. Students must take a minimum of 30 hours from the department to obtain the UCF degree in Criminal Justice.
- 6. Electives

Total Semester Hours Required

Bachelor of Arts: Legal Studies

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses (15 hours)

PLA 3013	Law and the Legal System	3 hours
PLA 3105	Legal Research	3 hours
PLA 3155	Legal Writing	3 hours
PLA 3203	Civil Practice and Procedure	3 hours
PLA 3504	Property and Real Estate Law	3 hours
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- 4. Restricted Electives
 - a. 18 additional hours of Legal Studies coursework. (see applied and general emphases below)
 - b. 12 semester hours of supporting courses chosen with the approval of the student's advisor. These courses may be selected from any department or program so long as they are relevant to legal studies.
- 5. Students must take a minimum of 30 hours of the 45 hours of program requirements at UCF; and 27 hours of PLA courses must be taken at UCF.
- 6. Electives

Total Semester Hours Required

120

Applied Emphasis

Students are strongly urged to take the following courses as restricted electives:

PLA 3273	The Law of Torts
PLA 4408	The Law of Contracts
PLA 4433	Florida Partnerships and Corporations
PLA 4603	Estates and Trusts
PLA 4941	Internship

General Emphasis

Students are strongly urged to select their restricted electives from the following list:

PLA 3273	The Law of Torts
PLA 3308	Criminal Procedure
PLA 4020	Law and Society
PLA 4408	The Law of Contracts
PLA 4483	Administrative Law
PLA 4700	Professional Ethics and Liability
PLA 5937	Seminar in Contemporary Legal Problems

Supporting courses in the general emphasis are to be selected in consultation with the student's advisor but may include courses selected from the following areas: Political Science, Criminal Justice, Sociology, Psychology, History, Public Administration, and Philosophy.

DEPARTMENT OF HEALTH SCIENCES

Chair: M. J. Sweeney, (407) 823-2972

Faculty: Acierno, Barr, Bergner, Crittenden, Douglass, Drumheller, Edwards, Lytle, Mendenhall, Welker, Worrell, Youmans

The Department of Health Sciences offers a diversity of baccalaureate programs which prepare students for professions in the fields of Cardiopulmonary Sciences, Health Services Administration, Health Information Management, and Radiologic Sciences. In addition, the Department offers a graduate program in Health Sciences

The mission of the Department is to provide quality undergraduate and graduate academic and clinical instruction with an accent on educating future leaders of the health care system. The Department seeks first to strengthen existing programs, as well as to identify and develop new programs which fulfill documented need for health care resources and technology. Another goal is to foster the development of knowledge through research, publications, scientific presentations, and grantsmanship. Finally, the Department seeks to provide continuing education for the health care community and consumer health education. The Department of Health Sciences requires a minimum overall GPA of 2.5 for admission to and graduation from its Limited Access programs. In addition, a minimum grade of "C" is required for prerequisite courses and required courses within the major.

MINOR

The Department of Health Sciences offers a minor consisting of a minimum of 18 semester hours. In order to be awarded a minor in Health Sciences, a student must complete the required course work and maintain at least a 2.5 GPA and a minimum of "C" on all Health Sciences course work.

Required Courses: HSA 3122, HUN 3011, HSC 3110 and a minimum of 9 hours of upper-division courses in the Health Science Department. Majors may not count courses presently required in a department program.

Program In Cardiopulmonary Sciences

Director: O.J. Drumheller, HPB 350, Phone (407) 823-2214

The Cardiopulmonary Sciences curriculum leads to the Bachelor of Science Degree in Cardiopulmonary Sciences and includes preparation for becoming a Registered Respiratory Therapist, and for licensure in the state of Florida.

The Cardiopulmonary Sciences program is a limited access program requiring a separate application. Acceptance to the university does not necessarily constitute admission to the upper division program. Separate application must be made directly to the program prior to February 1 of the year admission is sought. Contact the program for advisement and information.

Students must be accepted by the university and meet all requirements for admission to the upper division. A 2.5 overall GPA is required for admission to and graduation from the program. Students must meet all university undergraduate degree, special college and/or departmental requirements, as well as program requirements, in order to graduate. Students are required to have completed a Basic Life Support Certification (CPR) program prior to admission.

Bachelor of Science: Cardiopulmonary Sciences

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. UCF Residency Requirement: 34 hours
- 3. See special college and/or department requirements

4. Prerequisites

STA 3023	Statistics	3 hours
MAC 1104	College Algebra	3 hours
BSC 2010C	General Biology	4 hours
MCB 3013C	Microbiology	5 hours
ZOO 3733C	Human Anatomy	4 hours
PCB 3703C	Human Physiology	4 hours
CHM 1032	General Chemistry	3 hours
CHM 2045L	Chemistry Fund Lab	1 hour
PHY 3053C	College Physics	4 hours
5. Professional curriculum		
Fall Junior		
RET 3026	Introduction to Resp Care	4 hours
RET 3484	Cardiopulmonary Physiology	4 hours
HSC 4550	Pathologic Mechanisms	3 hours
APB 4651	Medical Pharmacology I	2 hours
HSA 4193	Health Care Automation	3 hours
		16 hours
Spring Junior		
RET 4503	Chest Medicine	3 hours
RET 4244	Life Support Systems	3 hours
RET 3264	Mechanical Ventilation	3 hours

APB 4652 RET 3874	Medical Pharmacology II Clinical Practice I	2 hours 5 hours
Summer Junior		16 hours
BET 4414	Pulmonary Function Studies	4 hours
RET 3714	Pediatric Respiratory Care	3 hours
HSC 4700	Health Science Research Methods	3 hours
HSA 4180	Organization and Management Health Agencies	3 hours
100000000		13 hours
Fall Senior		
RET 4284	Cardiopulmonary Diagnostics I	3 hours
RET 3875	Clinical Practice II	8 hours
RET 4715	Neonatal Medicine	3 hours
RET 4034	Problems in Patient Management	3 hours
	in the second	17 hours
Spring Senior		
RET 4285	Cardiopulmonary Diagnostics II	3 hours
RET 4876	Clinical Practice III	8 hours
RET 4934	Selected Topics in Respiratory Care	2 hours
HSC 4008	Professional Development Health Professions	3 hours
		16 hours
	Total Semester Credit Hours Required	136

Registered Respiratory Therapist — RRT Transfer

Thirty one credit hours may be granted toward the Bachelor of Science in Cardiopulmonary Sciences for Registered Respiratory Therapists (RRT) with an Associate in Science Degree from a Florida public community college. All applicants must meet university, college, departmental, and program requirements for admission. Registered Respiratory Therapists should contact the program for RRT Transfer applications and specific information.

Program in Health Information Management

Director: C. Barr, HP 220, Phone (407) 823-2359

Health Information Managers are professional members of the modern health care team responsible for: (1) the acquisition and supervision of complete medical records on each patient, (2) the design and management of health information systems which collect, process, store, retrieve, and release health information and statistics, (3) assistance to administration, other health professionals, and medical staff in developing quality assurance programs by abstraction of medical data, preparation of statistical reports, and analysis of information, and (4) assistance in collection and analysis of data for public health services planning.

The curriculum of the Health Information Management program is approved by the Committee on Allied Health Education and Accreditation of the American Medical Association in collaboration with the Council on Education of the American Health Information Management Association.

Before acceptance to the professional phase of the program, students are required to complete the following prerequisite courses: anatomy with lab, physiology with lab, statistics, and an introductory course in finance or accounting.

Application and acceptance to the University does not constitute admission to the program. SEPARATE APPLICATION must be made directly to the upper-division, limited access HIM program prior to February 1st of the year in which prerequisites will have been met to be considered an applicant. A personal interview is also required.

Upon completion of the approved program, the student is eligible to submit an application for writing the national registration examination administered by the American Health Information Management Association to qualify as a Registered Record Administrator.

Bachelor of Science: Health Information Management

Degree Requirements

1. See Undergraduate Degree Requirements

2. UCF Residency Requirement: 35 hours

- 3. See special college and/or department requirements
- 4. Required Courses

APB 3600	Introduction to Pharmacology	3 hours
COM 3110	Business and Professional	
	Communication	3 hours
ENC 3210	Business Report Writing	3 hours
HSA 3170	Health Care Finance	3 hours
HSA 4193	Health Care Automation	3 hours
HSC 3640	Health Law	3 hours
HSC 3531	Medical Terminology	3 hours
HSC 4550	Pathophysiologic Mechanisms	3 hours
MAN 3025	Management of Organizations	3 hours
MAN 3301	Personnel Management	3 hours
MRE 3000	Introduction to Health Information	
	Management	4 hours
MRE 3110	Health Record Organization &	
	Management	5 hours
MRE 3800	Directed Practice I	2 hours
MRE 3810	Directed Practice II	2 hours
MRE 4202	Coding Procedures	5 hours
MRE 4203	Coding Procedures II	3 hours
MRE 4304	Health Information Department	
	Management	3 hours
MRE 4312	Analysis of Health Information Department	
	Operations	4 hours
MRE 4400	Health Records and Standards	4 hours
MRE 4500	Quality Assessment	4 hours
MRE 4830	Directed Practice III	2 hours
MRE 4832	Directed Practice IV	2 hours
MRE 4835	Management Affiliation	5 hours
MRE 4218	Health Information Management Systems	3 hours
	Total Semester Hours Required	130

Program in Health Services Administration

Director: S. Lytle, HPB 102, (407) 823-2972

The Program offers a baccalaureate degree in Health Services Administration and a master's degree in Health Sciences with an emphasis in Health Services Administration. The baccalaureate degree is designed for graduates of associate of science degree programs in nursing or allied health who desire to study health services administration. People within the health care industry with associate of science degrees in areas such as nursing, respiratory therapy, radiologic technologies, medical laboratory technology, dental hygiene, and others may find this program providing a migration path from the clinical side of the health care industry can also be accommodated to build a background in health services administration.

Degree Requirements:

- 1. See Undergraduate Degree Requirements
- 2. UCF Residency Requirements: 31 hours
- 3. Prerequisite Courses:

STA 2014	Principles of Statistics	3 hours
ECO 2013	Principles of Economics	3 hours
MAC 1104	College Algebra	3 hours
CGS 3000	Computer Applications for Business	3 hours

4. Required Courses		
MAN 3025	Management of Organizations	3 hours
MAR 3023	Marketing	3 hours
ACG 2001	Principles of Financial Accounting	3 hours
COM 3110	Business and Professional Communication	3 hours
HSA 3122	U.S. Health Care Systems	3 hours
HSC 4500	Epidemiology	3 hours
HSC 4564	Health Care Needs of the Elderly	3 hours
HSC 3531	Medical Terminology	3 hours
HSC 4651	Health Care Ethics	3 hours
HSC 3640	Health Law	3 hours
HSA 4180	Organization and Management of Health	
	Agencies	3 hours
HSA 4193	Health Care Automation	3 hours
HSA 3170	Health Care Finance	3 hours
HSA 4700	Health Science Research Methods	3 hours
HSA 4120	Community Health Services	3 hours
The chouse required cou	wass must be somelated with a grade of "O" or higher	

The above required courses must be completed with a grade of "C" or higher. Electives:

5. Electives:

Students with an associate of science degree in a health care clinical discipline may receive up to 30 hours of directed field experience. Students will be evaluated by their academic advisor.

Generic students without the associate of science degree should select elective hours with their advisor. Students are encouraged to work on courses that will enhance their background in the health care industry. These may be used to build minors offered by the University. Examples include: Business, Computer Sciences, Information Systems, and Public Administration. Courses leading to a Certificate in Gerontology are appropriate. Electives in advanced scientific, clinical or quantitative subjects are also advisable.

6. Total Semester Hours Required:

MINOR

The Program in Health Services Administration offers a minor consisting of a minimum of 18 semester hours. To receive a minor, the student must complete the course work and maintain at least a 2.5 GPA and a minimum of "C" on all courses required for the Health Services Administration Minor.

Required Courses: HSA 3170, HSA 4180, HSC 4500, HSA 3122, HSA 4193, and HSC 3531.

Long Term Care Administration Option

Implementation of this option is on temporary hold.

Degree Requirements

1. See Undergraduate Degree Requirements.

2. Prerequisites:	and any willing the set of the set of the	
STA 2014	Statistics	3 hours
CGS 1060	Introduction to Computer Science	3 hours
3. Requirements:		
ACG 3301	Management Accounting	3 hours
APB 3600	Introduction to Pharmacology	3 hours
DEP 3464	Psychology of Aging	3 hours
HSA 4700	Health Sciences Research Methods	3 hours
HSA 4180	Organization and Management for	
	Health Agencies	3 hours
HSA 3170	Health Care Finance	3 hours
HSC 4651	Health Care Ethics	3 hours
HSA 3122	U.S. Health Care Systems	3 hours
HSA 3210	Long Term Care Administration	3 hours
HSA 4120	Community and Public Health Services	3 hours

HSC 4243	Analysis of Instruction in the Health	
	Sciences	3 hours
HSA 4220	Long Term Patient Management	3 hours
HSC 3640	Health Law	3 hours
HSC 4550	Pathophysiologic Mechanisms	3 hours
HSC 4500	Epidemiology	3 hours
HSC 4564	Health Care Needs of the Elderly	3 hours
HSC 3531	Medical Terminology	3 hours
HUN 3011	Human Nutrition	3 hours
MAN 3301	Personnel Management	3 hours
MAR 3023	Marketing	3 hours
MRE 4420	Health Legislation	3 hours
PCB 3703C	Human Physiology	4 hours
SOW 4644	Social Services for the Elderly	3 hours
SYP 4730	Sociology of Aging	3 hours
ZOO 3733C	Human Anatomy	3 hours
HSA 4941	Internship — Nursing Home Administration	6 hours
	Total Semester Hours	132

Program in Radiologic Sciences

Director: T. J. Edwards III, HPB 104, Phone (407) 823-2747

The University of Central Florida offers the only accredited Bachelor of Science in Radiologic Sciences degree program in Florida. The Radiologic Sciences Program offers students the opportunity to specialize in either Radiography or Radiation Therapy. Radiographers and Radiation Therapists are integral members of the health care team dedicated to providing high quality patient care. Graduates are prepared to function as clinically competent Radiographers or Radiation Therapists and, with experience, advance to leadership positions in their profession. Employment opportunities in both fields are excellent.

The primary role of Radiographers is to perform medical imaging procedures for the diagnosis of disease and injury. The Radiographer enjoys an interesting and challenging variety of examinations/procedures which may include conventional radiography, fluoroscopy, vascular imaging, computed tomography and magnetic resonance imaging. Employment opportunities are available in hospitals, imaging centers, and private physician offices. Career advancement opportunities include positions in administration, education, quality assurance, and public health physics.

Radiation Therapists work closely with physicians to deliver high energy radiation for the treatment of cancer. The Radiation Therapist delivers the prescribed amount of radiation to the precise tumor site while assessing and reporting patient progress throughout the course of treatment. Employment opportunities are available in hospitals and treatment centers. Career advancement opportunities include positions in radiology administration, education, quality assurance, and dosimetry.

The program works in conjunction with Central Florida Regional Hospital, Sanford; Jewett Orthopedic Clinic, Winter Park; Halifax Medical Center, Daytona Beach; South Seminole Community Hospital, Longwood; and Winter Park Memorial Hospital, Winter Park.

The programs in Radiography and Radiation Therapy Technology are accredited by the Committee on Allied Health Education and Accreditation (CAHEA) in cooperation with the Joint Review Committee on Education in Radiologic Technology (JRCERT). Graduates are eligible to apply for admission to the certification exam administered by the American Registry of Radiologic Technologists (ARRT). The University of Central Florida is the sponsoring institution for the Radiography program. Halifax Hospital Medical Center is the sponsoring institution of the Radiation Therapy program.

The application deadline for admission to the upper-division, limited access phase of the program is February 1 of the year in which admission is sought. In addition to a formal interview, admission criteria include completion of the General Education Program and prerequisite course requirements and admission to the university as an upper division student.

A minimum overall GPA of 2.50 and a minimum grade of "C" in prerequisite and major courses is required for admission to, continuation in, and graduation from the Radiologic Sciences Program.

Bachelor of Science: Radiologic Sciences

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. UCF Residency Requirements: Radiography Program 33 hours Radiation Therapy Program — 34 hours
- 3. See special college and/or department requirements
- 4. Required courses

Prerequisites		
CGS 1060	Introduction to Computer Science	3 hours
MAC 1104	College Algebra	3 hours
PCB 3703C	Human Physiology	4 hours
PHY 3053C	College Physics I	4 hours
PHY 3054C	College Physics II	4 hours
ZOO 3733C	Human Anatomy	4 hours

Professional Phase

Radiography Program of Study

JUNIOR LEVEL		
RTE 3000	Introduction to Radiologic Sciences	3 hours
RTE 3111C	Introduction to Patient Care	2 hours
RTE 3503C	Radiographic Procedures I	3 hours
RTE 3418C	Principles of Radiographic Exposure I	3 hours
RTE 3804	Clinical Education I	4 hours
RTE 3513C	Radiographic Procedures II	3 hours
RTE 3457C	Principles of Radiographic Exposure II	3 hours
RTE 3684	Physics of Image Production	2 hours
HSC 3640	Health Law	3 hours
RTE 3367C	Medical Physics	3 hours
STA 3023	Statistical Methods I	3 hours
HSC 4550	Pathophysiologic Mechanisms	3 hours
SENIOR LEVEL		And the second second second
RTE 4563	Special Radiographic Procedures	2 hours
RTE 4782	Pathophysiology	2 hours
RTE 4814	Clinical Education II	5 hours
RTE 4824	Clinical Education III	6 hours
RTE 4573	Advanced Imaging Modalities	3 hours
RTE 4834	Clinical Education IV	4 hours
RTE 4385	Radiobiology	1 hour
RTE 4844	Clinical Education V	4 hours
RTE 4473	Quality Assurance	3 hours
RTE 4763	Anatomy for the Medical Imager	3 hours
HSC 4243	Analysis of Instruction in the	No serie official
parameters of the second second	Health Professions	3 hours
RTE 4854	Advanced Clinical Practicum	2 hours
HSA 4180	Organization and Management of	
all saw up to bob a up that	Health Agencies	3 hours
Electives:	polomical signation and and show we have to	
RTE 4209	Radiological Administrative Practice	2 hours
RTE 4903	Directed Study in Radiologic Education	2 hours
	Total Semester Hours Required	129 hours
Radiation Therapy Program	n of Study	
JUNIOR LEVEL		and the second second
RTE 1000	Introduction to Radiologic Sciences	3 hours
BTE 3111C	Introduction to Patient Care	2 hours

RIE 1000	Introduction to Radiologic Sciences	3 nours
RTE 3111C	Introduction to Patient Care	2 hours
RTE 3503C	Radiographic Procedures I	3 hours
RTE 3418C	Principles of Radiographic Exposure I	3 hours
RTE 3804	Clinical Education I	4 hours
RTE 3513	Radiographic Procedures II	3 hours

RTE 3457C RTE 3684 RTE 4550 RTE 4243 HSC 3640	Principles of Radiographic Exposure I Physics of Image Production Pathophysiologic Mechanisms Analysis of Instruction in the Health Professions Health Law	3 hours 2 hours 3 hours 3 hours 3 hours
SENIOR LEVEL		
RAT 3001	Introduction to Radiation Oncology	3 hours
RAT 3242	Oncologic Pathology	2 hours
RAT 4241	Clinical Radiobiology	3 hours
RAT 3614	Radiation Therapy Physics I	2 hours
RAT 4804	Clinical Education I	5 hours
RAT 4247	Radiation Oncology I	3 hours
RAT 4618C	Radiation Therapy Physics II	4 hours
RAT 4814	Clinical Education II	6 hours
RAT 4248	Radiation Oncology II	3 hours
RAT 4619C	Radiation Therapy Physics III	4 hours
RAT 4824	Clinical Education III	6 hours
STA 3023	Statistical Methods I	3 hours
RTE 4763	Anatomy for the Medical Imager	3 hours
HSA 4180	Org. and Mgmt. Health Agencies	3 hours
Electives:	Game Farmers and the	
RTE 4209	Radiological Adm. Practice	2 hours
RTE 4903	Directed Study in Radiologic Education	2 hours
	Total Semester Hours Required	135
	SAME IN PROPERTY AND	

DEPARTMENT OF MOLECULAR BIOLOGY AND MICROBIOLOGY

Chair: R.N. Gennaro, BL 330, Phone (407) 823-5932 Faculty: Berringer, Charba, Gennaro, Hitchcock, Jacobs, Sweeney, Thornton, Washington, White, Wodzinski

The Department of Molecular Biology and Microbiology offers curricular programs leading to a minor, a Bachelor of Science degree, and a Master of Science degree, each in Molecular Biology and Microbiology. The department also offers a Bachelor of Science degree in Medical Laboratory Sciences.

PROGRAM IN MOLECULAR BIOLOGY AND MICROBIOLOGY

The Core Curriculum in the baccalaureate program, with its broad and thorough grounding in the physical, computational, and life sciences, provides a solid foundation in concepts and applications of modern biology to contemporary and future problems. The Restricted Electives component of the baccalaureate program allows each student to enhance his/her academic preparation in areas of morphological, clinical, analytical or investigative applications. Students are also encouraged to gain research experience and exposure to specialized topics not taught in formal courses through the mechanism of directed research and independent study contracts with selected faculty. This thorough, but flexible, program, provides an excellent preparation for industry, graduate education, and for the four-year health professions (chiropractic, medical, dental, optometric, podiatry, pharmacy, and veterinary medicine).

MINOR IN MOLECULAR BIOLOGY AND MICROBIOLOGY

The Department of Molecular Biology and Microbiology offers a minor consisting of a minimum of 30 semester hours.

Required courses. (22 hours) include: BSC 2010C, MCB 3013C, PCB 3233, PCB 3233L, PCB 3523, PCB 4524, and BSC 3404.

Restricted Electives (8 hours minimum): at least two courses from the Restricted Elective category of the baccalaureate curriculum.

To be eligible for a minor in Molecular Biology and Microbiology, a student must have a GPA of at least 2.0 in all courses taken for the minor, subject to the following constraints:

A. At least 15 of the required 30 hours must be taken in the Department of Molecular Biology and Microbiology at UCF;

B. No "D" grades from other institutions will be accepted;

C. No CLEP, TSD or AP credit will be accepted.

Bachelor of Science: Molecular Biology and Microbiology

Degree Requirements:

- 1. See Undergraduate Degree requirements.
- 2. UCF Residency Requirement: 32 hours
- 3. To be eligible for a major in Molecular Biology and Microbiology, a student must complete all coursework in the baccalaureate curriculum as shown, and, with respect to the Life Sciences portion of the Core Curriculum and the Restricted Electives, earn a GPA of at least 2.0 for all coursework in each of those categories subject to the following constraints:
 - A. No CLEP, TSD, or AP credit may be used;
 - B. No "D" grades in life science courses from other institutions will be accepted;
 - C. A maximum of 3 hours of independent study, directed research, or similar credit may be used as a Restricted Elective or as a substitute for any stated Core Curriculum requirement unless prior Departmental approval is obtained;
 - D. A minimum of 20 hours must be taken at UCF in the department of the major.

Molecular Biology and Microbio	ology Undergraduate Curriculum	
I. University Requirements		27
9	am (Communication, C&H, and Soc. Sci.) [27]	
II. Departmental Requirements		82-92
A. Core Curriculum		[65-66]
Life Sciences	(obs/) // (but? both (i)	(29-30)
BSC 2010C	General Biology	(4)
BOT or ZOO 2010C	General Botany or General Zoology	(3 or 4)
MCB 3013C	General Microbiology	(5)
PCB 3063, 3063L	Genetics + Genetics Lab	(4)
PCB 3233, 3233L	Immunology + Immunology Lab	(4)
PCB 3523, 4524	Molecular Biology I, II	(6)
BSC 3404	Quantitative Biological Methods	(3)
Chemistry		(19)
CHM 2045, 2046,		
2046L	General Chemistry I, II, + Lab	(8)
CHM 3210, 3211,	and the second second second second	
3211L	Organic Chemistry I, II, + Lab	(8)
BCH 4053	Biochemistry I	(3)
Math and Stat ⁽¹⁾	the management of the subscription of the subscription of the	(9)
MAC 1104, 1114	College Algebra, College Trigonometry	(6)
STA 3023	Statistical Methods I	(3)
Physics ⁽¹⁾		(8)
PHY 3053C, 3054C	College Physics I, II	(8)
	ect 6 courses in consultation with advisor)	[17-26]
MCB 5236	Applied Microbiology	(3)
BCH 4054	Biochemistry II	(3)
BCH 4103L	Biochemical Methods	(2)
MCB 3203, 3203L	Pathogenic Microbiology + Lab	(4)
MCB 4114C	Microbial Systematics and Diagnostics	(4)
MCB 4414	Microbial Metabolism	(3)
MCB 4603	Environmental Microbiology	(3)
MCB 5205	Infectious Process	(3)
MCB 5505C	Virology	(3)
PCB 3703C	Human Physiology	(3)
PCB 5235C	Immunopathology	
PCB 52350	Endocrinology	(4)
ZOO 3733C	Human Anatomy	(3)
ZOO 3733C ZOO 4603C	Vertebrate Embryology	(4)
		(5)
ZOO 4753C	Vertebrate Histology	(5)
ZOO 5745C III. Unrestricted Electives	Essentials of Neuroanatomy	(4)
in. Onrestricted Electives	Total Credita Required for Degree	9-19
	Total Credits Required for Degree	128

Notes: (1) Those students interested in pursuing graduate or professional education are strongly advised to select the following courses: Physics for Scientists and Engineers I & II (PHY 3048, 3049, 3048L, 3049L); Applied Calculus I & II (MAC 3253, 3254) or Calculus with Analytic Geometry I & II (MAC 3311, 3312).

Program in Medical Laboratory Sciences

Director: D. Hitchcock, BIO 104, Phone (407) 823-2359

Medical technologists are involved in medical diagnosis, treatment, surveillance, management, research, and education. They use highly sophisticated equipment such as electronic cell counters, automated analyzers, computers, and microscopes in the examination of body tissues and fluids.

The curriculum is designed to give students a thorough background in the physical and biological sciences; to develop the understanding, skills, and ability essential to assume leadership roles in management and education; to develop a high level of proficiency in the clinical laboratory; and to develop an awareness for continuing education needed for professional growth.

Admission to the University does not constitute admission to the upper-division, limited access Medical Laboratory Sciences Program. SEPARATE APPLICATION must be made through the Medical Laboratory Sciences Office prior to March 1st of the year for which admission is sought. For the last seven months of the program the students will be assigned to a hospital laboratory for clinical experience. The affiliated hospitals are located in Lakeland, Orlando, Winter Haven and Rockledge. It may be necessary for the student to relocate to any of these areas for this period. A minimum 2.5 overall GPA is required for clinical assignment.

The degree in Medical Laboratory Sciences will be awarded upon completion of the University's didactic program and the clinical program in an affiliated hospital.

Upon receiving the degree in Medical Laboratory Sciences, the graduate will be eligible to write a national certification examination and the State of Florida licensure examination.

Bachelor of Science: Medical Laboratory Sciences

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. UCF Residency Requirement: 34 hours
- 3. See special college and/or department requirements
- 4. Required Courses

Prerequisites for professional phase admission

CGS 3000C	Computer Fundamentals for Business	
	Applications	3 hours
BSC 2010C	General Biology	4 hours
MCB 3013C	General Microbiology	5 hours
CHM 2045, 2046	Chemistry Fundamentals I & II	7 hours
CHM 2046L	Chemistry Fundamentals II Laboratory	1 hour
CHM 3210	Organic Chemistry I	3 hours
CHM 3211, 3211L	Organic Chemistry II & Lab	5 hours
MAC 1104	College Algebra	3 hours
PCB 3703C	Human Physiology	4 hours
STA 3023	Statistical Methods I	3 hours
ZOO 3733C	Human Anatomy	4 hours
Upper Division Professional F	Phase	
PCB 3233	Immunology	3 hours
PCB 3233L	Immunology Lab	1 hour
MLS 3220	Clinical Microscopy with Lab	2 hours
MLS 3305C	Hematology	4 hours
MLS 3xxx	Concepts in Education/Management	3 hours
MLS 4830C, 4831C,	Clinical Practice I, II, III, IV, & V	20 hours
4832C, 4833C, 4834C		
MLS 4460	Clinical Pathogenic Microbiology	4 hours
MLS 4625C, 4630C	Advanced Clinical Chemistry I & II	8 hours
MLS 4334C	Hemostasis	2 hours

	MLS 4550C	Clinical Immunohematology	4 hours
	MLS 4420C	Clinical Mycology	1 hour
	MLS 4430C	Clinical Parasitology	2 hours
	MLS 4511C	Immunodiagnostics	2 hours
	HSA 4700	Research in Health Sciences	3 hours
	MLS 4932	Medical Technology Seminars	1 hour
5.	Restricted Electives:	- plan express starts and but some	6 hours
6.	Electives:		
		Total Semester Hours Required	135

DEPARTMENT OF NURSING

Acting Chair: J. E. Dorner, HP 410, Phone (407) 823-2744 Faculty: Browne-Krimsley, Brunell, Covelli, Dorner, Giovinco, Gropper, Hennig, Kijek, Noll, Peragallo, Ramey, Smith, Wink

The nursing curriculum leads to the Bachelor of Science in Nursing degree, the basis of professional nursing practice. The BSN graduate is prepared to provide comprehensive care in a variety of acute, community, and rehabilitative settings. Program emphasis includes clinical nursing practice, health promotion and maintenance, and preparation for assuming leadership roles. The baccalaureate curriculum provides the foundation for graduate study in nursing.

Acceptance to the University does not constitute admission to the upper-division, limited access nursing major. SEPARATE APPLICATION must be made directly to the Admissions Office prior to January 15 of the year in which Fall admission is sought. Completion of the A.A. degree or General Education Program is required along with prerequisite courses with a grade of "C" or better, and completion of the university foreign language admission requirement. Graduates are eligible to take the licensing examination for registered nurses.

Bachelor of Science: Nursing

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. UCF Residency Requirement: 33 hours
- 3. See special college and or department requirements
- 4. Required Courses

Prerequisites to Nursing Major to be satisfactorily completed prior to admission to the major

	*MCB 3013C	General Microbiology	5 hours
	ZOO 3733C	Human Anatomy	4 hours
	PCB 3703C	Human Physiology	4 hours
	*CHM 2205	Introduction to Organic/Biochemistry	5 hours
	STA 2014		
	or 3023	Principles of Statistics	3 hours
	*SOW 3104	Human Growth and Development	
	or	Company Contractor Contractor	
	DEP 3004	Developmental Psychology	3 hours
	*HUN 3011	Human Nutrition	3 hours
1	and of DM.		

*Not required of RNs

RNs who have had only one semester of a combined anatomy and physiology course may satisfy the requirement for a second semester of anatomy and physiology if they complete pathophysiological mechanisms with a grade of B or better.

Upper-Division Professional Phase

1	HSC 4550	Pathophysiological Mechanisms	3 hours
	+NUR 3119	Introduction to Baccalaureate Nursing	3 hours
	+NUR 3748C	Concepts Basic to Nursing Practice	6 hours
	NUR 3066	Health Assessment	3 hours
	NUR 3165	Critical Inquiry	3 hours
	*NUR 3749C	Scientific Theories of Nursing I	6 hours
	*NUR 3217C	Scientific Theories of Nursing II	6 hours
	*NUR 3755C	Scientific Theories of Nursing III	5 hours
	*NUR 3355C	Scientific Theories of Nursing IV	5 hours

*NUR 4535C	Scientific Theories of Nursing V	6 hours
NUR 4635C	Scientific Theories of Nursing VI	6 hours
NUR 4827C	Scientific Theories of Nursing VII	6 hours
#NUR 3809	Transitional Concepts in Nursing I	3 hours
#NUR 4XXX	Transitional Concepts in Nursing II	3 hours
NUR 4797	Professional Development and Issues	3 hours
NUR 4941C	Selected Nursing Practicum	3 hours
actriated Electives: On		

5. Restricted Electives: One course in nursing

- 6. Electives: None
 - Total Semester Hours Required
- + Not required of RN students

131

- * Students who are Registered Nurses in Florida must pass examinations for credit for these courses prior to enrollment in NUR 4XXX (Transitional Concepts in Nursing II)
- # Required of RN students only

DEPARTMENT OF PHYSICAL THERAPY

Chair: TBA, TR 544, Phone (407) 823-5040 Faculty: G. Sleek, S. Janos, P. Yarbrough, J. Yuenger

The physical therapy program at the University of Central Florida is an accredited entrylevel curriculum leading to a Bachelor of Science in Physical Therapy degree. Graduates will be eligible to take the state licensure examination in any state in the United States, or comparable examination in foreign countries with practice acts regulating the practice of health professionals. Graduates of entry-level programs are prepared to practice in an ethical, legal, safe, caring and effective manner in a variety of acute, community, rehabilitative, or private health care settings, providing both physical and psychosocial intervention. Graduates are able to screen individuals to determine the need for physical therapy examination or for referral to other health professionals. They can determine in any patient with physical dysfunction a diagnosis that is within the scope of physical therapy. They can design and manage a comprehensive physical therapy plan of care that includes a comprehensive treatment plan, appropriate delegation to and supervision of other support personnel, accurate and thorough documentation of the delivery, and quantified results of, the plan of care, and participation in discharge planning and follow-up care. Graduates are also prepared to pursue graduate studies in and out of physical therapy, and/or specialty training and certification in all recognized physical therapy specialties.

The entry-level professional curriculum is a full-time program. It is seven consecutive semesters in length, including clinical practicums and internships ranging from one week to four months long. A new entering class begins the program in May of each year. Acceptance to the University, however, does not constitute admission to this upper-division, limited access program. **Separate application** must be completed for the Department of Physical Therapy at UCF by November 15 **preceding** the year in which admission is sought. Complete information regarding application procedures is available from the University Admissions Office.

Admission Requirements

A. UCF Students:

- 1. Completion of all GEP requirements.
- 2. UCF Residency Requirement: 35 hours
- 3. Satisfaction of CLAST requirement
- 4. Completion of, with no grade lower than "C", *all* courses used to satisfy **Prerequisite Requirement** (see Section D, below).
- B. Transfer Students:
 - A.A. degree from a state supported community college or State University System of Florida institution, or bachelor's degree from any accredited senior college in the United States or Canada.
 - Completion at an accredited institution in the United States or Canada, and with no grade lower than "C", all courses used to satisfy Prerequisite Requirement (see Section D, below).

- C. All Students:
 - 1. SAT or ACT scores
 - Courses strongly recommended but not required: Critical Thinking, Calculus, Biochemistry, CPR certification, medical terminology, additional biology courses, additional psychology courses. Any courses not selected in Section D.
 - 3. Overall GPA of at least 3.0, and a minimum GPA of 3.0 in prerequisite courses with a minimum grade of "C" in *all* courses used to satisfy the **Prerequisite Requirement** (see Section D, below).
- 4. A minimum of 200 documented clock hours experience working, volunteering or shadowing in a physical therapy facility with a licensed physical therapist by the application deadline.
 - 5. Demonstrated interpersonal abilities and potential for leadership.
 - 6. Competence in the use of a personal computer.
 - 7. Receipt of a completed Physical Therapy Application for Admission by the November 15 deadline.
 - Completion of all Prerequisite Requirements by the November 15 application deadline (see Section D, below).
- D. Prerequisite Requirement:
 - 1. Behavioral Sciences (a minimum of one course in each category):
 - a. General Psychology
 - b. Advanced Psychology, e.g., Developmental or Abnormal Psychology.
 - 2. Natural Sciences
 - a. Biology General Biology, Human Anatomy, and Human Physiology courses, with labs, acceptable toward a major in a biological science.
 - b. Chemistry General Chemistry, with lab, for chemistry majors, or a one-year survey sequence of General Chemistry and Organic/Biochemistry.
 - Math a course in College Algebra; and the first course in Statistics for science majors.
 - d. Physics College Physics (algebra based), or University Physics (calculus based), with labs.

Bachelor of Science: Physical Therapy

Degree Requirements

- 1. See Undergraduate Degree Requirements.
- 2. Departmental Requirements: to be eligible for a baccalaureate degree in physical therapy, a student must complete all academic and clinical education courses prescribed in the professional curriculum, as shown in Section 4 below, with no grade less than "C", and be recommended for the degree by the academic and clinical faculty.
- 3. Preprofessional Curriculum:
 - A. Prerequisite Requirements (The following is an example of a selection (40) of courses that may be used to satisfy the Prerequisite Requirement)

60

courses mai may be used	to satisfy the riferequisite nequirement)	
PSY 2013	General Psychology	3 hours
CLP 3143	Abnormal Psychology	3 hours
BSC 2010C	General Biology	4 hours
ZOO 3733C	Human Anatomy	4 hours
PCB 3703C	Human Physiology	4 hours
CHM 2045	Chemistry Fundamentals I	4 hours
CHM 2046	Chemistry Fundamentals II	4 hours
MAC 1104	College Algebra	3 hours
STA 3023	Statistical Methods I	3 hours
PHY 3053C	College Physics I	4 hours
PHY 3054C	College Physics II	4 hours
B. Remaining General Educa	tion Program	(24)
Professional Curriculum:	sound will be reaching the ball of the line of	79
A. First Professional Year		(40)
PHT 3200C	Introduction to Caring for Patients	3 hours
PHT 3110C	Clinical Gross Anatomy	6 hours
PHT 3002C	Foundations of Physical Therapy I	2 hours
PHT 3003C	Foundations of Physical Therapy II	2 hours

4.

	PHT 3120C	Clinical Kinesiology	4 hours
	PHT 3216C	Theory and Procedures of Physical Therapy I	3 hours
	PHT 3222C	Therapeutic Exercise I	2 hours
	PHT 3821	Clinical Education I	1 hour
	PHT 3142C	Clinical Neuroscience	4 hours
	PHT 3223C	Therapeutic Exercise II	2 hours
	PHT 3217C	Theory and Procedures of Physical	
		Therapy II	2 hours
	PHT 3350	Medical Science and Pharmacology I	2 hours
	PHT 3600	Introduction to Clinical Research	2 hours
	PHT 3155C	Physiology of Therapeutic Exercise	3 hours
	PHT 3069	Physical Assessment I	2 hours
Β.	Second Professional Year		(39)
	PHT 4822	Clinical Education II	2 hours
	PHT 4232C	Therapeutic Exercise III	2 hours
	PHT 4320C	Pedontogeny (Pediatric)	3 hours
	PHT 4300	Medical Science and Pharmacology II	2 hours
	CLP 4402C	Psychological Aspects of Disability	3 hours
	PHT 4233C	Therapeutic Exercise IV	2 hours
	PHT 4310C	Orthopedic Problems in Physical Therapy	2 hours
	PHT 4311C	Neurological Problems in Physical Therapy	2 hours
	PHT 4610	Clinical Research Problems I	1 hour
	PHT 4823	Clinical Education III	1 hour
	PHT 4004C	Foundations of Physical Therapy III	2 hours
	PHT 4410C	Teaching and Learning in Physical Therapy	3 hours
	PHT 4001	Professional Issues	1 hour
	PHT 4370C	Cardiopulmonary Problems in Physical Therapy	2 hours
	PHT 4372	Gerontology in Physical Therapy Practice	2 hours
	PHT 4510	Management of Physical Therapy Services	3 hours
	PHT 4620	Clinical Research Problems II	1 hour
	PHT 4831	Clinical Internship I	2 hours
	PHT 4832	Clinical Internship II	3 hours
		Total Semester Hours Required for Degree	139

PRE-HEALTH PROFESSIONALS: See Pre-Health Professions Advising.

DEPARTMENT OF PUBLIC ADMINISTRATION

Interim Chair: W. Lawther, PH 102, Phone (407) 823-2604

Faculty: Aristiqueta, Colby, K. Denhardt, R. Denhardt, Glaser, Jurie, Lawther, Shapek

The Public Administration course of study is designed to provide students with a broad understanding of the roles and functions of administrative agencies in the American system of government as well as prepare them for professional careers in public service at the federal, state, regional, or local level. Satisfactory completion of program requirements leads to the degree of Bachelor of Arts with a major in Public Administration. The baccalaureate program in Public Administration is offered on the Orlando and Brevard campuses.

Bachelor of Arts: Public Administration

Degree Requirements

- See Undergraduate Degree Requirements
 See special college and/or department requirements
 Required Courses (27 semester hours)

 dan e e e e e e e e e e e e e e e e e e e		
PAD 3003	Introduction to Public Administration	3 hours
PAD 4034	Administration of Public Policy	3 hours
PAD 4104	Administrative Theory	3 hours
PAD 4204	Fiscal Management	3 hours
PAD 4414	Public Personnel Administration	3 hours
POS 2041	American National Government	3 hours
ECO 2013	Principles of Economics I	3 hours

CGS 1060 or	Introduction to Computer Science or
CGS 3000	Computer Fundamentals for Business Applications
STA 2014	Principles of Statistics
or STA 3023	or Statistical Methods I
or	or
PAD 4270	Survey Research
or	or

a course in social science research with an emphasis on statistical methods.

4. Restricted Electives

30 additional semester hours taken from: (1) Public Administration electives including the internship; and (2) one or more allied public science fields. All courses are selected with and approved by the student's advisor. Among such supporting fields are accounting, legal studies, communications, computer sciences, criminal justice, economics, political science, social work, sociology, and statistics.

5. Electives

Total Semester Hours Required

120

3 hours

3 hours

MINOR

The public administration program offers a minor in public administration consisting of 21 hours:

- 1. All five of the required core courses for the PAD major will be required of the PAD minor. These are: PAD 3003, PAD 4414, PAD 4104, PAD 4202, and PAD 4034.
- Two additional courses may be selected from among the list of PAD restricted electives or related courses in other fields. These courses will be chosen with the consent of the PAD undergraduate advisor.

DEPARTMENT OF SOCIAL WORK

Chair: I. Colby, TR 542, Phone (407) 823-2114 BSW Program Director: C. Green Faculty: Abel, Colby, Green, Kazmerski, Leo, Pomeroy, Poole, Suh

The Department of Social Work offers a professional degree program which is nationally accredited by the Council on Social Work Education. Its primary focus is the preparation of students for entry-level professional social work practice within diverse human service organizations such as hospitals, schools, correctional settings, public welfare departments, child placement organizations, community centers, and counseling agencies.

Applications to the *limited access program* may be obtained at the Department of Social Work. For acceptance into the program students must have a 2.0 overall GPA, must have completed an AA (from a Florida State Community College) or U.C.F. General Education Program, and must have completed 18 semester hours of pre-professional courses (see Section 3 below for list of courses). Personal qualifications include intelligence, initiative, social concern, appreciation for human diversity, dependability, humanitarian interests in helping people and in improving human services and college-level reading and writing skills. Student qualifications are reviewed initially and on an ongoing basis.

To qualify for graduation and for entry into field education (SOW 4510), a student must have a 2.5 GPA in the major. Students also must complete 30 credits hours in social work at UCF to graduate from the program.

Bachelor of Social Work

Degree Requirements

- 1. See Undergraduate Degree Requirements
- 2. See special college and/or department requirements
- 3. Required Courses

UCF general education requirements, or AA degree from a Florida state community college

Pre-professional courses, to	be completed PRIOR to admission to the major:	
POS 2041	American Government	3 hours
BSC 1020C	Biology	3 hours
CGS 1060C	Computer Science	3 hours
ECO 2013	Economics	3 hours
PSY 2013	Psychology	3 hours
SYG 2000	Sociology	3 hours
Professional foundation requ		
SOW 3104	Assessing Human Development	3 hours
SOW 3111	Assessing Human Systems	3 hours
SOW 3203	Social Welfare and Community Resources	3 hours
SOW 3401	Social Work Research	3 hours
SOW 3620	Social Work with Minorities	3 hours
SOW 4431	Evaluating Social Work Practice and	
	Service Programs	
SOW 3300	Generalist Practice in Social Work	3 hours
SOW 3352	Interpersonal Skills in Social Work Practice	3 hours
SOW 4232	Social Welfare Policies and Issues	3 hours
SOW 4341	Micro-level Roles and Interventions	
	in Social Work	3 hours
SOW 4343	Macro-level Roles and Interventions	
	in Social Work	3 hours
SOW 4510	Field Education	9 hours
SOW 4522	Field Education Seminar	3 hours
Social Work Elective	and the second s	3 hours
Foreign Language or Cultura	al Diversity	6 hours
, , , , , , , , , , , , , , , , , , ,	Total Semester Hours Required	120

The Department will require that all social work majors either meet the requirements of the UCF foreign language policy for the BA degree or complete two courses in foreign culture or cultural diversity. Specific details are available from the department.

Gerontology Certification Program

4.

In recognition of the special needs of the elderly citizens of Central Florida, the University offers a fifteen hour interdisciplinary program leading to a Certificate in Gerontology. The program is completed with the undergraduate major of the student and is administered by the Department of Health Sciences. The program may be of particular interest to students who are majoring in health sciences, psychology, social work, nursing, or sociology. Other students, such as those majoring in music, music education, physical education, or art education may also find the program valuable.

To receive the Certificate in Gerontology, the students must successfully complete the following courses:

DEP 3464	Psychology of Aging	3 hours
HSC 4564	Health Care Needs of the Elderly	3 hours
SYP 4730	Sociology of Aging	3 hours
SOW 4644	Social Services for the Elderly	3 hours

Students interested in certification should contact the Department of Social Work office at (407) 823-2114.

DIVISION OF CONTINUING EDUCATION

Associate Vice President: Thomas A. Shostak Administrative Assistant: Linda Hayes Gallegos 800 North Magnolia Avenue, Suite 601 Orlando, Florida 32803 (407) 423-6935

CENTER FOR MULTILINGUAL MULTICULTURAL STUDIES

Director: Consuelo Stebbins, TR 547, (407) 823-6110 Coordinator: Myrna Creasman, TR 547, (407) 823-5515

Using contemporary teaching methodology and computer-assisted instruction, the Center for Multilingual Multicultural Studies provides English language instruction for international students and area business persons. Four levels of instruction are offered which range from beginning to advanced, and special attention is given to preparing students for academic coursework in their specialized fields of study. Full-time students enrolled at the advanced level may elect to take courses as nondegree-seeking students while enrolled in the Intensive English program. Students are required to take an entry placement test to determine their level of proficiency. Student (F-1) visas are extended to qualified applicants. The Center also offers English for Special Purposes for international business personnel.

CENTER FOR OUTREACH CREDIT PROGRAMS

Director: Dale A. Badger, TR 547, (407) 823-6108 Program Coordinator: Elizabeth Baab, TR 547, (407) 823-6114

The Center for Outreach Credit Programs serves as a facilitator for the academic colleges and performs the overall planning, coordination, and management of approved offcampus credit courses, degree programs, sponsored contract courses, and accelerated on-campus instruction for students.

Outreach credit courses and programs offered by the academic colleges and coordinated by the Center are tailored to meet the educational needs of local residents and area business, industry, and government employees. The goal of the Center for Outreach Credit Programs is to unite University and public/private sector resources for the purpose of providing to participants an opportunity to achieve personal aspirations and to maintain or enhance their professional and technical competencies. Registration in outreach credit courses does not require admission to the University, nor does it imply acceptance.

CENTER FOR PROFESSIONAL DEVELOPMENT

Associate Director: Consuelo Stebbins, TR 547, (407) 823-6110 Program Coordinator: John Duryea, TR 547, (407) 823-6111

The Center for Professional Development offers non-credit educational programs designed to meet the professional development needs of individuals and organizations throughout the State and the region. Offerings include seminars, workshops, conferences, symposia, and certificate programs that enable practitioners to seek personal enrichment and/or professional advancement. Programs are developed in cooperation with the academic colleges and institutes, and University faculty and support services are utilized to bring maximum benefit to both non-traditional and traditional learners.

The Center also works closely with business, professional, and service organizations to design the programs that best meet the needs of the working community. To substantiate the content of professional programs, as well as to offer credentials to verify a learner's participation, Continuing Education Units (CEU's) are offered to qualified and eligible participants.

DISTANCE LEARNING

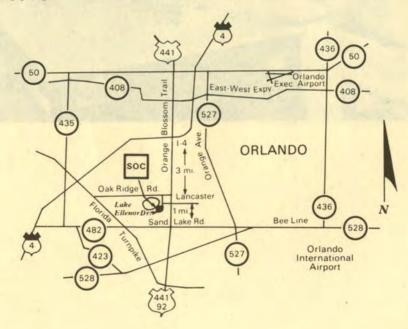
Director: Thomas A. Shostak, 800 North Magnolia Avenue, Suite 601, Orlando, FL 32803, (407) 423-6935

Through its Instructional Television Fixed Service system (ITFS), UCF offers students at area campuses and at several locations throughout Central Florida the opportunity to "attend" credit courses by way of interactive television. Among the receive sites are the two area campuses (Brevard and Daytona Beach), the two academic centers (South Orlando and Downtown), major corporations and businesses throughout Central Florida, and each of the local community colleges. Certain courses are also available to students on videotape at each of the area campuses and centers. Courses available on videotape or live television are listed each semester in the schedule of classes.

DOWNTOWN ACADEMIC CENTER

Director: Thomas A. Shostak, 800 North Magnolia Avenue, Suite 601, Orlando, FL 32803, (407) 423-6935

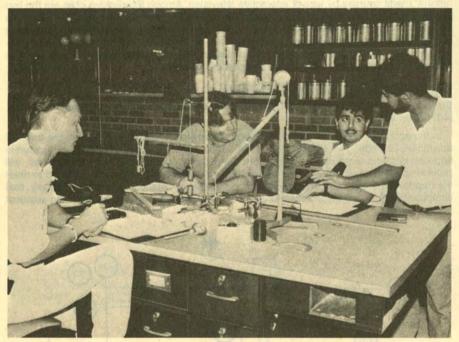
In the spring of 1995, UCF will be opening a Downtown Academic Center in the heart of downtown Orlando. The facility will provide office space for several University academic departments and support programs. Four classrooms, including a large lecture hall, will provide space for a variety of credit and non-credit courses and programs designed to meet the needs of the business and residential community of Orlando. Registration, library, and computer services will be provided for students, and parking will be available in an adjacent parking garage.



SOUTH ORLANDO CENTER

Director: Thomas A. Shostak, 7300 Lake Ellenor Drive, Orlando, FL 32809, (407) 855-0881

The South Orlando Center is located in Orlando Central Park, a site convenient to students who live or work in southwest Orange County and north Osceola County. The South Center offers upper division evening courses in business administration, criminal justice and legal studies, and hospitality management; undergraduate and graduate vocational education classes; and a graduate engineering program. It also provides a variety of noncredit programs specifically designed to meet the needs of business and industry in the area, and serves as a site for statewide meetings and workshops. A television studio at the center has the capacity to receive signals for live interactive television courses. There is a small computer lab for student use, and the library is equipped with LUIS terminals. Admissions and financial aid information is available, as well as on-site registration for all UCF courses.



INSTITUTES AND CENTERS FOR RESEARCH

CENTER FOR RESEARCH AND EDUCATION IN OPTICS AND LASERS (CREOL)

CREOL is the State University System of Florida's Center of Excellence for research and education in optical and laser sciences and engineering. CREOL was established in 1986 to bring together diverse disciplines into cohesive program in optics and lasers. Research activities at the Center are integrated with academic program to insure involvement of both students and faculty. CREOL has 28 faculty positions devoted to lasers and optical sciences and engineering which are rapidly being filled by scholars from around the world. CREOL occupies over 50,000 sq. ft. of space in the Central Florida Research Park adjacent to UCF main campus.

Research Program

CREOL research projects reflect the interdisciplinary nature of the faculty and the faculty's diverse interests and is supported by federal, state, and industrial research grants. Faculty and students pursue joint research projects with industry and government laboratories. Current research activities include: laser propagation, laser/material interaction, nonlinear optics, integrated and guide-wave optics, infrared systems, optical signal processing, laser development, detector technology, ultrafast phenomena, modern x-ray optics and lithography, laser plasma, nonlinear optical spectroscopy, diffractive optics, thin film optics, free electron lasers, optoelectronics, growth of nonlinear and laser host materials, solid state and diode pumped lasers, laser material processing and others. The research facilities include fifty laboratories equipped with over ten million dollars of state-of-the-art optics equipment.

Academic Program

The academic program involves students from various science and engineering departments and reflects the diverse interest of the faculty and students. Degrees of MS and Ph.D. in Optical Sciences and Engineering, Optical Physics, Electrical Engineering and Physics are offered at UCF. The academic program includes 25 specialized courses in electro-optics and lasers as well as basic Electrical Engineering and Physics courses. Graduate research assistantship up to \$14,000 per year are available at CREOL for highly qualified students. Exceptional students will be considered for assistantship enhancements up to \$4,000 that are available to exceptional students through the Litton Foundation and United Technologies Optical Systems.

Industrial Affiliates Program

CREOL has established an industrial affiliate program to facilitate strong cooperative relationships with industry. The program provides businesses and manufacturers with the benefits of cutting-edge research and with access to the expertise and facilities of CREOL. Faculty members are teaming with Florida-based small businesses to help them compete for federally sponsored SBIR programs. The program provides industry with effective ways to contribute to and sustain the research and teaching in laser and electro-optical technology.

For information contact CREOL, 12424 Research Parkway, Suite 400, Orlando, FL 32826. Phone (407) 658-6800. Contact persons: Dr. M.J. Soileau, Director or Dr. M.G. Moharam, Chair Academic Affairs Committee.

INSTITUTE FOR SIMULATION AND TRAINING (IST)

The Institute for Simulation and Training (IST) is an internationally recognized research institute which focuses on technology advancement in training systems, education, and simulation and modeling.

IST was established in 1982 at the University of Central Florida and is located in the Central Florida Research Park, adjacent to the UCF campus. The Naval Air Warfare Center Training Systems Division (NAWCTSD), the Army Simulation, Training and Instrumentation Command (STRICOM) are also located in the Research Park. Additionally, more than 150 training and simulation companies maintain a presence in the Orlando area, causing the

State of Florida to pass a resolution recognizing this area as the Center of Excellence for Simulation and Training technology.

The Institute serves this simulation and training community by providing a wide range of research services and working with university faculty to help develop curriculum and degree programs in simulation and training disciplines. UCF is the first university in the nation to offer a master's degree in simulation systems.

IST's research staff consists of scientists, engineers, and students. Program Managers and Principal Investigators have complete freedom to tailor interdisciplinary research teams to specific research projects. Several faculty members and graduate students have presented award winning papers at major conferences throughout the country.

IST researchers conduct basic and applied research for a broad range of training devices and programs. IST research areas include: simulation networking, visual simulation (including a Virtual Reality testbed), training systems effectiveness, artificial intelligence/expert systems, team training, computer graphics and animation, user interface design, computer architectures, simulation modeling, cognitive information processing, database design and development, and instructional systems design. Laboratories, work space and administrative offices comprise nearly 38,000 square feet of total floor space in the Park's Barnett Building. Major laboratories include: Visual Systems Lab, Language Technology Lab, Communications Lab, Visual Systems Lab, Low Cost Flight Trainer Lab, Mathematics Simulation Lab, and the Advanced Learning Technology Transfer Center.

In its role as a leader in the simulation and training community, the Institute has undertaken a program of technology transfer. Included in this effort is the development of research projects with potential commercial applications, adaptation of military technology to civilian educational markets, and the communication of research results through seminars, publications and workshops.

Contact Person: Dr. A. Louis Medin, Executive Director, 3280 Progress Dr., (Bennett Building), Orlando, FL, 32826-0544, Phone (407) 658-5000; FAX (407) 658-5059

SPACE EDUCATION AND RESEARCH CENTER (SERC)

The Space Education and Research Center (SERC) is an interdisciplinary organization that relies on faculty participation from all five colleges of the University.

SERC's goal is to maximize space research opportunities for UCF faculty and students, while providing highly valued results to the space community.

SERC Objectives are to:

- · Facilitate the performance of research to advanced space technology.
- · Serve as a catalyst to advance educational opportunities and experiences.
- · Provide researchers with access to the upper atmosphere and space.
- Upgrade UCF capabilities through training and development programs.
- Advocate UCF's contributions to commercial space services.
- · Be an active participant in the international space community.

Space research areas of interest include advanced launch systems, communications, the earth systems sciences, educational technology, and space optics. Over 50 faculty members at the University have expertise and experience in these areas.

In education, SERC serves to aid in the development of new space related courses and programs. SERC also works with industry, government and the Central Florida school districts to improve science and mathematics education through the use of space applications and technology.

Contact Person: William Rock, Director, 12424 Research Parkway, Suite 157, Orlando, FL 32826, Phone: (407) 658-5599, Fax: (407) 658-5595

CENTER FOR APPLIED HUMAN FACTORS IN AVIATION (CAHFA)

The Center for Applied Human Factors in Aviation (CAHFA) has as its mission the enhancement of safety in the nation's airspace system through applied human factors research, systems design and training strategies. Chartered in 1990, CAHFA is a research consortium established between UCF and Charter partner Embry-Riddle Aeronautical University, Daytona Beach, Florida. CAHFA's professional staff maintains offices on both campuses. The complimentary strengths of the two universities are combined to create a research resource that is without peer for solving a vast assortment of aeronautical human factors problems. CAHFA research initiatives are targeted to significantly reduce human factors related accidents and incidents by determining the efficacy of and by developing strategies for achieving improvements in human performance.

Contact Person: Dr. Jefferson M. Koonce, Director and Chief Scientist, Phone (407) 823-1011; FAX (407) 823-5862

FLORIDA SOLAR ENERGY CENTER (FSEC)

The Florida legislature created FSEC in 1974 to conduct research on alternative energy technologies, to improve the quality of available solar energy equipment, and to educate the public about energy options. Located on a 16-acre complex at Cape Canaveral, the center serves as a statewide institute administered by the University of Central Florida.

FSEC conducts state, federal, and privately supported research in photovoltaics, energy use in buildings, electrical end uses, solar water heating, innovative air conditioning systems, and the production and use of hydrogen. In addition, the center has developed and administers state-mandated programs that require the testing, certification, and approval of all solar energy equipment manufactured or sold in Florida. Through its public information office, FSEC responds to more than 15,000 requests for energy information each year. The center also conducts seminars and workshops for teachers and professionals statewide, and its technical library boasts one of the nation's most extensive holdings on solar and alternative energy. Current projects involve solar thermal systems, electric utilities research, hydrogen and energy systems, among others. For information contact the Florida Solar Energy Center, 300 State Road 401, Cape Canaveral, FL 32920-4099.

Contact Person: Dr. David Block, Director, Phone (407) 783-0300; FAX (407) 783-2571

FLORIDA-CANADA INSTITUTE

The Florida-Canada Institute is hosted by the University of Central Florida for the State of Florida. The purpose of the Institute is to create and foster educational, commercial, cultural and social exchanges between Canada and Florida. The Institute offers such programs as the Canadian Speakers Series and Summer Seminars on Canadian Studies for school teachers. It provides opportunity for the state-wide dissemination of information about Canada to K-12 schools. Palm Beach Community College is the Florida State Division of Community Colleges co-host for the Florida-Canada Institute.

Contact Person: Dr. M. Elliot Vittes, Director, Phone (407) 823-2608.

FLORIDA-CENTRAL EAST EUROPE INSTITUTE

The Florida-Central East Europe Institute is hosted by the University of Central Florida and Lake Sumter Community College for the Florida International Affairs Commission. The purpose of the Institute is to create and foster educational, commercial, cultural and social exchanges between the countries in central and eastern Europe and Florida.

Contact Person: Dr. Richard Astro, Director, Research Pavilion, Suite 135, Phone: (407) 658-5570 or (407) 647-8022.

SMALL BUSINESS DEVELOPMENT CENTER

The Small Business Development Center (SBDC) is part of a statewide organization designed to promote economic development by responding to the needs of the small business community. The SBDC, located in the College of Business Administration at the University of Central Florida, is responsible for a geographic area including Orange, Osceola, Lake, Citrus, Volusia, Flagler, and Sumter counties. Regional centers located at Stetson University, Brevard Community College and Seminole Community College assist small business in those areas. Assistance is provided through workshops and individual counseling in the following areas:

- Personnel
- Bookkeeping
- Business Tax
- Franchising

- Marketing
- Sources of Financing
- Product Innovation
- Business Plan Development

Additional programs provide assistance to clients in the areas of government contracting and energy conservation.

Contact Person: Mr. Aloyse T. Polfer, Director, BA, Phone (407) 823-5554.

CENTER FOR ECONOMIC EDUCATION

The Center for Economic Education strives to increase public knowledge of economic principles and their applications in daily life.

Researchers at the Center develop, collect, and distribute economic educational materials. They also consult with and provide instruction to area schools (K-12), community colleges, and community organizations. Instruction focuses on the principles of economics and their use in making rational economic decisions. Affiliated with the National Council on Economic Education and the Florida Council on Economic Education, the Center also conducts research in economic education.

Contact Person: Dr. Robert L. Pennington, Director, BA 325, Phone (407) 823-2870

INSTITUTE FOR STATISTICS

The Institute for Statistics provides statistical consulting and analytical support to all areas of the University. The Institute makes valuable contributions to research by supporting non-statistical researchers with statistical consulting assistance during the planning of experiments and investigations, analysis of data, and the evaluation of results.

The Institute also provides statistical support to various government agencies and private organizations.

Contact Person: Dr. Mark E. Johnson, Director, Phone (407) 823-2289.

DICK POPE, SR. INSTITUTE FOR TOURISM STUDIES

The Dick Pope Sr. Institute for Tourism Studies is dedicated to improving the quality of the tourism product and increasing the benefits of tourism accruing to the industry, the state and local community. To this end the Institute is involved in a variety of programs in the fields of research and public awareness.

The research includes the collection, development and dissemination of information relevant to the tourism and hospitality industry in the areas of marketing, consumer behavior and visitor satisfaction, feasibility, economic, motivational, and forecasting. Some of the Institute's patrons include tourism promotion agencies at the state and local levels; tourism development commissions; professional associations; and private enterprises such as attractions, hotels, motels, food-service establishments, ground and air transportation companies, travel agencies and tour operators, and other related businesses.

The Institute devotes significant efforts to increasing public awareness of the tourism industry in Florida and elsewhere, and of the contribution of the industry to the social and economic welfare of the general public.

Contact Person: Dr. Ady Milman, Director, Phone (407) 823-2188

SMALL BUSINESS INSTITUTE

Business schools have for some years been interested in getting students out of the classroom and involved with real business problems rather than "textbook" situations. By sponsoring the Small Business Institute program, the Small Business Administration does not only satisfy this need, but at the same time provides free professional help to small businessmen who are in need of managerial guidance.

The SBI program uses a team of senior-level undergraduate or graduate-level students who, under faculty supervision, provide management counseling and technical assistance to small business clients. Examples of these services are: general management audits, development of business plans, establishment of accounting systems, design of inventory systems, cost analysis, pricing strategies, and evaluation of alternative markets.

The major objective of the College of Business Administration at the University of Central Florida is to educate men and women for positions of productive responsibility in business and the professions. UCF's Small Business Institute program stresses analytic ability and the student's learning skills in recognizing and coping with change. The Small Business Institute program at the same time provides on the job experience and sound academic training for the student.

Contact Person: Dr. Ron Rubin, Director, Phone (407) 823-2682

INSTITUTE OF GOVERNMENT

The Institute of Government, an affiliate of the Florida Institute of Government, is housed in the Department of Public Administration and provides training and development as well as technical assistance to federal, state, and local government agencies and intergovernmental associations such as the Florida League of Cities. Training workshops, conferences, seminars, action research projects, citizen surveys, strategic planning, and organization development programs are among the services offered by the Institute.

Director: Ms. Marilyn Crotty, Phone: (407) 423-6335

INSTITUTE FOR TECHNICAL DOCUMENTATION

The Institute for Technical Documentation offers a variety of services of client companies, including the development of original technical documentation, the translation of documentation written in foreign languages, and the development of seminars to assist clients in writing their own documentation.

The Institute consists of a core of permanent professional staff, supplemented by University faculty, staff, and students, all of whom have demonstrated expertise in technical writing of documentation. These services are enhanced by the cooperative efforts of educators, engineers, foreign language experts, psychologists, and scientists who act as consultants to the Institute.

Computer-assisted processing aids in translating foreign languages, word processing and editing text, gathering reference material, and conducting information searches. Trained writers, established facilities, and continued contact with personnel in industry and research enable the Institute to engage in a wide variety of documentation projects.

Contact Person: Dr. Daniel Jones, Director, FA 301, (407) 823-2212.

CENTER FOR EXECUTIVE DEVELOPMENT

The Center for Executive Development of the College of Business Administration is committed to providing the best management and executive development programs in the State of Florida. Utilizing the resources of the College and University faculty, visiting executives and educators from around the world, the Center provides management and executive seminars in the areas of real estate, small business, general manager, hospitality and human resources management for over 5,000 participants per year. Programs run from one day to over two weeks in length. Center activities are coordinated by program coordinators who are responsible for the following areas: Public Programming, In-House — Custom Seminars, Real Estate/Small Business 2000 and the Special Projects Groups. Examples of current programming within the Center includes: Train-the-Trainer, Management Development Series, Electronic Meeting/GroupWare Systems, Negotiation Skills, Purchasing, Supervising and Managing People, Lockheed Management Institute, Tax and Accounting Conference.

Also housed within the *Center* is the *International Center for Business Leadership (ICBL)*. The function of the *ICBL* is to extend the reach of the College of Business to the global arena with programs that attract participants from around the nation and the world. The *ICBL* will use a UCF and global faculty network to provide world-class management and executive education programs for individuals and organizations.

Contact Person: Dr. Craig McAllaster, Director, Phone (407) 823-2446.

OAK RIDGE ASSOCIATED UNIVERSITIES (ORAU)

Since 1989, students and faculty of the University of Central Florida have benefited from its membership in Oak Ridge Associated Universities (ORAU), a consortium of colleges and universities and a management and operating contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education, the DOE facility that ORAU manages, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry,

and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the *Resource Guide* and *the Minority Research Education Programs* brochure, which are available by calling the contacts below.

ORAU's office for University, Industry, and Government Alliances (UIGA) seeks opportunities for collaborative research and development alliances among ORAU's members, private industry, and major federal facilities. Current alliances include the Southern Association for High Energy Research, the Bioelectromagnetics Research Consortium, High Performance Computing, Bioprocessing, Pan American Association for Physics, Materials Science Forum, and international initiatives in support of the New Independent States in Central and Eastern Europe. Other UIGA activities include the sponsorship of conferences and workshops, the Visiting Scholars program, and the Junior Faculty Enhancement Awards. A copy of *Especially for Members*, which details UIGA's programs, is available from the contacts below.

For more information about ORAU and its programs, contact Dr. A. Louis Medin, ORAU Council member, at 407-658-5000; or contact Ann H. Patton, ORAU Corporate Secretary, at 615-576-3306.

COURSE DESCRIPTIONS

CLASSIFICATION OF COURSES

The University course numbering system is as follows:

1000-2999	are freshman and sophomore level courses and are designed
	primarily for these students.
3000-4999	are junior- and senior-level courses and are designed primarily
	for these and other advanced students. When approved for
	inclusion in an individual program of graduate study by a super-
	visory committee approved by the Dean of Graduate studies,
	selected 4000-4999 courses may serve the needs of individual
	graduate students.
5000-5999	are beginning graduate and advanced undergraduate level
	courses - open to graduate students and those seniors who
	receive approval of the appropriate Dean(s).
6000-6999	are beginning and professional level courses open only to grad-
	uate students and do not apply toward a baccalaureate degree

(See Graduate Catalog) FLORIDA'S STATEWIDE COURSE NUMBERING SYSTEM

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System. This common numbering system is used by all public postsecondary institutions in Florida and by two participating private institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions.

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

The course prefix and each digit in the course number have meaning in the Statewide Course Numbering System (SCNS). The list of course prefixes and numbers, along with their generic titles, is referred to as the "SCNS taxonomy." Descriptions of the content of courses are referred to as "course equivalency profiles."

Prefix	Level Code (first digit)	Century Digit (second digit)	Decade Digit (third digit)	Unit Digit (fourth digit)	Lab Code
SYG	1	0	1	0	
Sociology, General	Freshman level at this institution	Entry-level General Sociology	Survey Course	Social Problems	No laboratory component in this course

Example of Course Identifier

GENERAL RULE FOR COURSE EQUIVALENCIES

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

For example, a survey course in social problems is offered by 31 different postsecondary institutions. Each institution uses "SYG _010" to identify its social problems course. The level code is the first digit and represents the year in which the students normally take this course at a specific institution. In the SCNS taxonomy, "SYG" means "Sociology, General," the century digit "0" represents "Entry-Level General Sociology," the decade digit "1" represents "Survey Course," and the unit digit "0" represents "Social Problems."

In science and other areas, a "C" or "L" after the course number is known as a lab indicator. The "C" represents a combined lecture and laboratory course that meets in the same place at the same time. The "L" represents a laboratory course or the laboratory part of a course, having the same prefix and course number without a lab indicator, which meets at a different time or place.

Transfer of any successfully completed course from one participating institution to another is guaranteed in cases where the course to be transferred is offered by the receiving institution and is identified by the same prefix and last three digits at both institutions. For example, SYG 1010 is offered at a community college. The same course is offered at a state university as SYG 2010. A student who has successfully completed SYG 1010 at the community college is guaranteed to receive transfer credit for SYG 2010 at the state university if the student transfers. The student cannot be required to take SYG 2010 again since SYG 1010 is equivalent to SYG 2010. Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to native students. It is the prerogative of the receiving institution, however, to offer credit for courses successfully completed which have not been designated as equivalent.

Sometimes, as in Chemistry, a sequence of one or more courses must be completed at the same institution in order for the courses to be transferable to another institution, even if the course prefix and numbers are the same. This information is contained in the individual SCNS course equivalency profiles for each course in the sequence.

THE COURSE PREFIX

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

AUTHORITY FOR ACCEPTANCE OF EQUIVALENT COURSES

State Board of Education Rule 6A-10.024(17), Florida Administrative Code, reads:

When a student transfers among institutions that participate in the common course designation and numbering system, the receiving institution shall award credit for courses satisfactorily completed at the previous participating institutions when the courses are judged by the appropriate common course designation and numbering system faculty task forces to be equivalent to courses offered at the receiving institution and are entered in the course numbering system. Credit so awarded can be used by transfer students to satisfy requirements in these institutions on the same basis as native students.

EXCEPTIONS TO THE GENERAL RULE FOR EQUIVALENCY

The following courses are exceptions to the general rule for course equivalencies and may not be transferable. Transferability is at the discretion of the receiving institution:

- A. Courses in the _900-_999 series (e.g., ART 2905)
- B. Internships, practica, clinical experiences, and study abroad courses
- C. Performance or studio courses in Art, Dance, Theater, and Music
- D. Skills courses in Criminal Justice
- E. Graduate courses

College preparatory and vocational preparatory courses may not be used to meet degree requirements and are not transferable.

Questions about the Statewide Course Numbering System and appeals regarding course credit transfer decisions should be directed to Dr. David Dees in Enrollment and Academic Services, AD 210, Phone (407) 823-2691 or the Florida Department of Education, Office of Postsecondary Education Coordination, 1101 Florida Education Center, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling (904) 488-6402 or Suncom 278-6402.

An alphabetical listing of prefixes:

ACG	Accounting General
ACO	Accounting: Occupational Technical
ADE	Adult Education
ADV	Advertising
AFH	African History
AFR	Air Force ROTC
AMH	American History
AML	American Literature
ANT	Anthropology
APA	Applied Accounting
APB	Applied Biology
ARE	Art Education
ARH	Art History
ART	Art
ASH	Asian History
AST	Astronomy
AVM	Aviation Management
BCH	Biochemistry
BCN	Building Construction
BOT	Botany
BSC	Introductory Biology
BTE	Business Teacher Education
BUL	Business Law
CAP	Computer Applications
CBH	Comparative Psychology & Animal
ODIT	Behavior
CCE	Civil Construction Engineering
CCJ	Criminology & Criminal Justice
CDA	
	Computer Design/Architecture
CEG	Civil Geotechnical Structures
CES	Civil Engineering Structure
CET	Computer Engineering Technology
CGN	Civil Engineering
CGS	Computer General
CHI	Chinese
CHM	Chemistry
CHS	Chemistry — Specialized
CIS	Computer & Information Systems
CJT	Criminal Justice Technology
CLA	Classical and Ancient Studies
CLP	Clinical Psychology
COC	Computer Concepts
COE	Cooperative Education
COM	Communications
COP	Computer Programming
COT	Computer Theory
CPO	Comparative Politics
CRM	Computer Resources/Management
CRW	Creative Writing
CWR	Civil Water Resources
CYP	Communication Psychology
DAA	Dance Activities
DAE	Dance Education
DEP	Development Psychology
EAB	Experimental Analysis of Behavior
EAS	Engineering: Aerospace
ECM	Engineering: Computer Mathematics
ECO	Economics

ECP	Economic Problems & Policy
ECS	Economic Systems & Development
EDA	Education: Administration
EDE	Education: Elementary
EDF	Education: Foundation
EDG	Education: General
EDH	Education: Higher
	Education: Middle School
EDM	
EDP	Education: Psychology
EDS	Education: Supervision
EEC	Education: Early Childhood
EED	Education: Emotional Disorders
EEL	Engineering: Electrical
EES	Environmental Engineering Science
EET	Electrical Electronic Technology
EEX	Education: Exceptional Child - Care
	Competencies
EGC	
	Guidance & Counseling
EGM	Engineering: Mechanical
EGN	Engineering: General
EGS	Engineering: Support
EIN	Engineering: Industrial
ELD	Education: Specific Learning
	Disabilities
EMA	
	Engineering: Materials
EME	Education: Technology & Media
EML	Engineering: Mechanical
EMR	Education: Mental Retardation
ENC	English Composition
ENG	English — General
ENL	English Literature
ENU	Engineering: Nuclear
ENV	Engineering: Environmental
ENY	Entomology
EPH	Education: Physical & Multiple
23.34	Handicapped
ESE	Education: Secondary
ESI	Engineering Systems — Industrial
ESL	English as a Second Language
EST	Electronic Specialty Technology
ETC	Engineering Tech: Civil
ETG	Engineering Tech: General
ETI	Engineering Tech: Industrial
ETM	Engineering Tech: Mechanical
EUH	European History
EVI	Education: Visually Impaired - Blind
EVS	Environmental Science
EVT	Education: Vocational Technical
EXP	Experimental Psychology
FIL	Film
FIN	
	Finance
FLE	Foreign Language Education
FOL	Foreign and Biblical Languages
FOT	Foreign & Biblical Languages in
101	
	Translation
FRE	French Language
EDIAL	

- FRW French Literature (Writings) FSS Food Service Systems

GEA Geography: Regional Areas GEB General Business GEO Geography GER German Language GEW German Literature (Writings) GLY Geology HBR Modern Hebrew Language GLY Geology HBT Hebrew Language Translation HFT Hotel and Restaurant HLP Health Education HMW Modern Hebrew Literature (Writings) HSA Health Services Administration HSC Health Science HUM Humanities HUN Human Nutrition IDH Interdisciplinary Honors INP Industrial & Applied Psychology INR International Relations Information Systems Management ISM ISS Interdisciplinary Social Sciences ITA Italian Language ITW Italian Literature (Writings) Judaic Studies JOU Journalism JST LAE Language Arts & English Education PHH Philosophy, History of LAH Latin American History Leisure LEI Linguistics PHS Physics — Specialized Library Science PHT Physical Therapy LIN Library Science PHT Physical Therapy Literature PHY Physics LIS LIT
 MAA
 Mathematics — Analysis
 PHZ
 Physics Continued

 MAC
 Mathematics — Calculus &
 PLA
 Paralegal/Legal Asst./Legal Admin.
 Precalculus POS Political Science MAD Mathematics — Discrete MAE Mathematics Education
 MAN
 Management
 PSB
 Psychology of Personality

 MAN
 Management
 PSB
 Psychobiology

 MAP
 Mathematics — Applied
 PSC
 Physical Sciences

 MAR
 Marketing
 PSY
 Psychology

 MAS
 Mathematics: Algebraic Structures
 PUP
 Public Policy
 MAT Mathematics PUR Public Relations MCB Microbiology RAT Radiation Therapy MET Meteorology MGF Mathematics: General & Finite RED Reading Education
 MHF
 Mathematics: History & Foundations
 REE
 Real Estate

 MIS
 Military Science
 REL
 Religion

 MLS
 Medical Laboratory Science
 RET
 Respiratory Therap
 MMC Mass Media Communication RMI Risk Management & Insurance

 MRE
 Medical neoded

 MTG
 Mathematics: Topology & Geometry

 MUC
 Music: Composition

 MUE
 Music Education

 MUH
 Music: History/Musicology

 MUH
 Music: Music Literature

 MUH
 Music Ensembles

 SOP
 Social Psychology

 SOW
 Social Work

 MRE Medical Records MRE Medical Records MTG Mathematics: Topology & Geometry MUT Music: Theory MVB Music: Applied --- Proceeding

 MVB
 Music: Applied — Brasses
 SPC
 Speech Pathology & Addibiogy

 MVB
 Music: Applied — Brasses
 SPC
 Speech Communication

 MVK
 Music: Applied — Keyboard
 SPN
 Spanish Language

 MVO
 Music: Applied — Other Instruments
 SPS
 School Psychology

 MVP
 Music: Applied — Percussion
 SPW
 Spanish Literature (Writings)

MVS Music: Applied - Strings MVV Music: Applied - Voice MVW Music: Applied - Woodwinds NUR Nursing NUU Nursing Universals OCE Oceanography OST Office Systems Technology PAD Public Administration PCB Process Cell Biology PCO Psychology for Counseling PEL Physical Education Acts (GEN) -Object Centrd., Land PEM Physical Education Acts (GEN) -Perform Centrd., Land PEN Physical Education Acts (GEN) -Water, Snow, Ice PEO Physical Education Acts (PROFNL) - Object Centrd., Land PEP Physical Education Acts (PROFNL) - Perf. Centrd. Land PEQ Physical Education Acts (PROFNL) - Water, Snow, Ice PET Physical Education Theory PGY Photography Philosophy PHI PHM Philosophy of Man & Society POT Political Theory PPE Psychology of Personality REA Reading REL Religion RET Respiratory Therapy RTE Radiological Sciences SPA Speech Pathology & Audiology

- SSE Social Studies Education
- STA Statistics
- STD Student Development
- SUR Surveying
- SYA Sociology Analysis
- Sociology of Demography and Area SYD of Studies
- SYG Sociology, General
- Sociology Social Organizations Sociology Social Processes SYO
- SYP

COURSES NUMBERED 0-999

- TAX Taxation
- THE Theatre
- TPA Theatre Production & Administration
- TPP Theatre Performance & Performance Training
- TTE Transportation & Traffic Engineering
- Urban and Regional Planning URP
- VIC Visual Communication
- Z00 Zoology

Depending upon previous background and test scores earned, individual students may be required to complete more than the minimum number of credits required for graduation in their respective programs. Courses numbered less than 1000 (Statewide Common Course Numbers) are subcollegiate level and may not be counted in meeting degree credit hour requirements for graduation.

SPECIAL COURSES

In addition to the regular courses listed in this catalog, special courses may be available. Consult your academic advisor for details. . . .

	Undergraduates		Grad ¹	
Directed Independent Studies	3905	4906	5907	
Directed Independent Research		4912	5917	
Special Topics/Seminars	3930	4932	5937	
*Internships, Practicums, Clinical Practice	3940	4941	5944 ²	
Cooperative Education (COE) ³	1949, 2949	3949, 4949	5949	
Honors Undergraduate Thesis	3970	4970		

*These courses may be assigned variable credit. Some may be repeated upon approval. The Special Graduate Courses are primarily for graduate students, but may be taken by advanced seniors with the consent of their deans.

²Enrollment is limited to those students who are fully admitted to the Graduate Program. ³Enrollment is limited to those students who are admitted into the co-op program.

PR: PREREQUISITE

A course in which credit must be earned prior to enrollment in the listed course.

CR: COREQUISITE

A course which must be taken concurrently with or prior to the listed course.

CI: CONSENT OF THE INSTRUCTOR

HOURS CODE

Each course listed is followed by a code which shows hours of credit and contact hours.

Example: ECI 5215C Hydraulic Engineering

ECI 5215C is offered by the College of Engineering (EN), carries 3 hours of credit, but requires 5 contact hours which consist of 2 hours in class and 3 hours laboratory or field work.

EN 3(2,3)

AVAILABILITY OF COURSES

The University does not offer all of the courses listed in the catalog each year. The Class Schedule should be consulted for those courses offered each semester.

ACG 2021

Principles of Financial Accounting: PR: Sophomore standing and MAC 1104 or equivalent, Nature of accounting, financial statements, the accounting cycle, assets, current liabilities, long-term debt, and owner's equity; accounting for proprietorships and corporations.

ACG 2023

Principles of Accounting I and II: PR; Junior standing and MAC 1104 or equivalent. Same as 2021, 2071. Credits may not be earned in both ACG 2023 and the ACG 2021, 2071 sequence.

ACG 2071

Principles of Managerial Accounting: PR ACG 2021 and MAC 1104 or equivalent. The purpose of this class is to thoroughly familiarize the student with the various uses of accounting information for planning and control.

ACG 3101

Intermediate Financial Accounting I: PR: Junior standing and MAC 1104, ECO 2013 and ECO 2023; and ACG 2071 or ACG 2023 or its equivalent with a grade of "C" in the accounting course. Review of the accounting cycle, financial statement preparation and the framework of accounting theory. An in-depth study of current assets, fixed assets, and intangible assets.

ACG 3111

Intermediate Financial Accounting II: PR: ACG 3101 with a grade of "C" or better. Accounting theory and practice for current and long-term liabilities, stockholders' equity earning per share, investments, revenue recognition, and selected current topics.

ACG 3113

Financial Accounting II: PR: ACG 3103 with a grade of "C" or better. A continuation of ACG 3103. ACG 3301

Management Accounting: PR: C.I. and Junior standing. To thoroughly familiarize the student with the various uses of accounting information for planning and control.

ACG 3361

Cost Accounting I: PR: Junior standing, MAC 1104, ECO 2013, and ECO 2023, and ACG 2071 with a grade of "C" in ACG 2071, completion of or concurrent enrollment in ACG 3101. Cost concepts, cost of goods manufactured, job order costing, process costing, standard costing, relevant cost analysis, and overhead/joint cost allocations.

ACG 3501

Financial Accounting for Governmental and Nonprofit Organizations: PR: ACG 3101 with a grade of "C" or better, or C.I. Accounting for governments and other nonprofit organizations, with emphasis on financial reporting issues and problems.

ACG 4203

Advanced Accounting: PR: Intermediate Financial Accounting II with a grade of "C" or better. Accounting for business combinations and the preparation of consolidated financial statements. Accounting issues related to foreign operations. Also includes a study of current reporting topics.

ACG 4401

Accounting Information Systems I: PR: ACG 3101 and CGS 3000, with a grade of "C" or better. An introduction to manual and computer-based accounting information systems.

ACG 4651

Auditing: PR: ACG 3111 and ACG 4401 with a grade of "C" or better. The standards, practices, and procedures followed in the audit function.

ACG 5005

Financial Accounting Concepts: PR: Acceptance into the graduate program. (Not open for Accounting majors.) The conceptual background for financial statements.

ACG 5206

Financial Accounting V: PR: ACG 3111 or C.I. and meet graduate school admission requirements. Problems of partnerships, accounting for branches, bankruptcy, installment sales, accounting for estates and trusts, and interim reporting.

ACG 5255

International and Multinational Accounting: PR: ACG 3111 or C.I. and meet graduate school admission requirements. An examination of the environmental factors affecting international accounting concepts and standards. Cross-country differences in accounting treatments are compared.

ACG 5346

Cost Accounting II: PR: ACG 3361, ACG 3111, FIN 3403, ECO 3411 or C.I. and meet graduate school admission requirements. Overhead allocation, capital budgeting and analysis. EOQ analysis, decentralization, and quantitative decision analysis.

BA 3(3,1)

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BA 3(3,0)

BA 3(3.0)

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BA 6(6.0)

BA 3(3.0)

BA 3(3.0)

BA 3(3,1)

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BA 3(3.0) BA 3(3,0)

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BA 3(3.0)

ADV 4101 **AFR 1101** AFR 1111 **AFR 2130 AFR 2131** The Development of Airpower II: A study of the development of aerospace capabilities since World Air Force Leadership and Management I: An introductory study of Air Force management fundamen-**AFR 3230** Air Force Evaluation and Management II: A concluding study of Air Force management fundamentals, AFR 4201 National Security Forces in Contemporary American Society I: Examination of the military and its AFR 4210 National Security Forces in Contemporary American Society II: PR: An examination of defense AMH 2010 U.S. History: 1492-1877: Survey of U.S. History from 1492-1877.

ACG 5675

BA 3(3,0) Operational Auditing: PR: ACG 4123, ACG 3111 and meet Graduate school admission requirements. The standards, principles, practices, and procedures followed in the internal audit function.

ED 3(3.0) Teaching Adult Learners: Effective teaching techniques including technology, distance instruction, and support systems appropriate to the special needs of adult learners.

ADV 4000

Principles of Advertising: Overview of the field of advertising; purposes, techniques, the role of agencies, advertisers and the media.

ADV 4003

Advertising Layout and Preparation: PR: ADV 4000 or C.I. Advertising design and layout for print media; reproduction methods and requirements; art background not required.

Advertising Copy and Campaigns: PR: ADV 4000 or C.I. and Grammar Proficiency Exam. Creative copywriting for print, RTV, and other media. Campaign strategies and formulation.

ADV 4103

Radio-Television Advertising: PR: ADV 4000 or C.I. Radio and television advertising sales, including interpretation of rate structures, program audiences, and creative approaches to sponsor needs.

The Air Force Today I: History, mission, organization, and doctrine of the United States Air Force and a study of U.S. Strategic Offensive and Defensive Forces.

The Air Force Today II: A brief review of the Army, Navy, and Marine force. An introduction to special operations and counterinsurgency.

The Development of Airpower I: A study of the development of airpower from experiments by 18thcentury balloonists to the achievement of combat airpower capabilities during World War II.

War II, highlighting technological advancements and the role of aerospace power in the contemporary world

AFR 3220

tals, communications skills, and basic leadership styles.

including performance evaluation skills.

role in American society. A study of the framework and formation of defense strategy.

implementation and its impact on the decision-making process. A study of the military justice system and its protection of individual rights.

AMH 2020

U.S. History: 1877-Present: PR: AMH 2010 or C.I. Survey of U.S. History from 1877 to the present. May be taken before AMH 2010.

AMH 2020H

Honors U.S. History: 1877-Present: PR: AMH 2010 or C.I. Same as AMH 2020 with honors-level content.

ACG 5506

Accounting for Governmental and Nonbusiness Organizations: PR: ACG 3111 and meet Graduate School admission requirements. (Not open to students with credit for ACG 3501 or equivalent)

ACG 5625

BA 3(3.0) Auditing and EDP: PR: ACG 4401, ACG 3111, ACG 4651 and meet school admission standards, An examination of auditing procedures followed when a company uses a computer to process financial records.

ACG 5636

BA 3(3.0) Advanced Auditing: PR: ACG 4401, ACG 3111, ACG 4651, ECO 3401 and meet Graduate school admission requirements. Special topics relative to the standards, practices, and procedures followed in the audit function.

BA 3(3.0)

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EN 1(1,2)

EN 3(3,2)

EN 3(3.2)

EN 3(3,2)

EN 3(3,2)

AS 3(3.0)

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AS 3(3.0)

EN 1(1.2)

EN 1(1,2)

AMH 3370

American Economic History: PR: AMH 2010 and 2020 or C.I. An introduction to the economic development of the U.S., with emphasis on agriculture, labor, industrialization, transportation, and banking.

AMH 3402

History of the South to 1865: PR: AMH 2010 or 2020 or C.I. Development of the southern colonies. beginning sectionalism, the cotton economy, and slavery. Calhoun's constitutional theories, secession, Civil War and its aftermath.

AMH 3403

History of the South Since 1865: PR: AMH 2010 and 2020 or C.I. Reconstruction, the "solid South" and the racial dilemma, progressivism for whites only, southern literature, 20th-century economic, political and social changes, and the new Reconstruction.

AMH 3421

History of Florida to 1845: PR: AMH 2010 and 2020 or C.I.

AMH 3423

Florida History 1845-Present: PR: AMH 2010 and 2020 or C.I.

AMH 3441

History of the Frontier: Eastern America: PR: AMH 2010 and 2020 or C.I. The progression of the westward movement from the colonial settlements to the Mississippi, considered as an interpretive approach to American history.

AMH 3442

History of the Frontier: Western America: PR: AMH 2010 and 2020 or C.I. The development of the trans-Mississippi West and its impact upon American history.

AMH 3540

Military History: A survey of US military history from the European background of the colonial period through the contemporary military experience.

AMH 3560

Women in American History: Women in colonial America, "republican" motherhood, "separate spheres," suffrage battle, entry into paid labor force, new educational and professional opportunities, changing family pattern, "new" feminism.

AMH 3570

Black American History: PR: AMH 2010 and 2020 or C.I. History of Negroes from their African heritage through American slavery to freedom and their role in the 20th-century America.

AMH 3586

History of the Hispanic Minorities in the U.S.: Course begins with 16th century through the modern period. Special emphasis on Chicanos, Puerto Ricans, and Cubans.

AMH 3610

Sport in America: History of sport from colonial times to present. Emphasis on social and economic development, intercollegiate and professional sport, and changing attitudes toward work, sport, and play. AS 3(3.0)

AMH 3800

Canadian History: Canada since Colonial times and the present, but with emphasis on the period since the British North America Act, 1867.

AMH 4110

Colonial America, 1607-1763: PR: AMH 2010 and 2020 or C.I. The voyages of discovery, the origins of the thirteen colonies, and their political, economic, social, and religious life in the 17th and 18th centuries.

AMH 4130

The Age of the American Revolution, 1763-1789: PR: AMH 2010 and 2020 or C.I. The American Revolution — its origins, course, and impact upon American society — the Articles of Confederation, the Philadelphia Convention and its work.

AMH 4140

Jacksonian America: PR: AMH 2010 and 2020 or C.I. The Confederation era, the Federalists, Jeffersonian Democracy, and the War of 1812.

AMH 4160

Jacksonian America: PR: AMH 2010 and 2020 or C.I. The risk of American nationalism, Jacksonian Democracy, the Mexican War, and sectional conflict.

AMH 4170

Civil War and Reconstruction: PR: AMH 2010 and 2020 or C.I. Reconstruction, and impact of industrialism

AMH 4201

The Gilded Age of Progressivism: PR: AMH 2010 and 2020 or C.I. The Rise of Industrialized and Urbanized America, The emergence of the New South and the New West, the Populist Movement, overseas expansion, Progressivism.

AS 3(3.0)

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AMH 4231

United States History: 1914-1945: PR: AMH 2010 and 2020 or C.I. The progressive Reforms of Woodrow Wilson, World War I, post-war prosperity, the Depression, and the New Deal; World War II. AS 3(3.0)

AMH 4270

United States History: 1945-Present: PR: AMH 2010 and 2020 or C.I. Contemporary America from World War II.

AMH 4311

American Culture I: PR: AMH 2010 and 2020 or C.I. The European Backgrounds: Puritanism: Enlightenment; the Great Awakening; Revolutionary Thought: Romanticism; the Southern Mind and the Yankee Response: Popular Culture and the rise of recreation.

AMH 4313

American Culture II: PR: AMH 2010 and 2020 or C.I. The Darwinian Revolution: revolt of the intellectuals; the media explosion; mass entertainment in mass culture; the loss of community, the nuclear age, and presentism.

AMH 4510

Rise of the United States to World Power, 1776-1914: PR: AMH 2010 and 2020 or C.I. The evolution of basic American policies. American expansion. America's major wars, and the emergence of America as a world power.

AMH 4511

United States as a Great Power: 1914-Present: PR: AMH 2010 and 2020 or C.I. American foreign policy in World War I, the interwar period, World War II, and the Cold War.

AMH 5116

Colloquium in U.S. Colonial History: PR: Senior Standing or C.I. Reading and discussion of the literature on selected topics in U.S. history.

AMH 5137

Colloquium in U.S. Revolutionary Period: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics in the Revolutionary Era, 1763-1789.

AMH 5149

Colloquium in Early U.S. Hist., 1789-1815: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics of the early national period.

AMH 5169

Colloquium Age of Jackson: PR; Senior Standing or C.I. Intensive reading and class discussion on selected topics of the Jacksonian age.

AMH 5176

Colloquium in Civil War and Reconstruction: PR: Senior Standing or C.I. Intensive reading and class discussion on selected topics of the Civil War and Reconstruction era.

AMH 5219

Colloquium in Late 19th Century U.S.: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics of late 19th-century U.S.

AMH 5296

Colloquium in 20th Century U.S.: PR: Senior Standing or C.I. Reading and class discussion on selected topics in 20th-century U.S.

AMH 5391

Colloquium in U.S. Cultural History: PR: Senior Standing or C.I. Students will read and discuss a common or diverse body of the significant literature in the field.

AMH 5407

Colloquium in American South: PR: Senior Standing or C.I. Intensive reading and class discussion on selected topics of Southern history from colonial origins to the present.

AMH 5446

Colloquium in U.S. Frontier: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics of frontier history.

AMH 5515

Colloquium in U.S. Diplomatic History: PR: Senior Standing or C.I. A survey of the historical literature of American foreign policy.

AMH 5566

Colloquium: Women in American History: Intensive reading and class discussion on selected topics of Women in American History from colonial time to the present. AML 3031 AS 3(3,0) American Literature I: PR: ENC 1102, Major American writers from beginning through Whitman. AML 3051 AS 3(3,0)

American Literature II: PR: ENC 1102. Major American writers from Twain to present. AML 4101 AS 3(3,0)

American Novel: PR: ENC 1102. Analysis of major American novelists.

AS 3(3.0)

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AML 4321 AS3(3.0) AS 3(3,0) ANT 2003 AS 3(3.0) AS 3(3.0) AS 3(3.0) The Emergence of Civilizations: The emergence of high civilizations in Europe, Africa, Asia, and the AS 3(3,0) Old World Prehistory: A comparative study of social evolution in Africa, Europe, and Asia from the ear-AS 3(3.0) Archaeology of Complex Societies: Theoretical perspectives on ancient hierarchies of power. AS 3(3.0) Mesoamerican Archaeology: An introduction to the prehistory of Mexico. Guatemala and upper Central AS 3(3.0) ANT 3211 Archaeology and the Rise of Human Culture: The evolution of human society from foraging and hunt-ANT 3241 AS 3(3 0) ANT 3262 AS 3(3,0) Rural Society: An introduction to rural society in the U.S. and abroad. Problems of third world develop-AS 3(3.0) Law and Culture: An introduction to law as an organizing force in society, including a study of primitive ANT 3302 AS 3(3.0) ANT 3311 AS 3(3.0) Indians of the Southeastern United States: A study of the social and cultural history of the Indians of ANT 3312 AS 3(3.0) Ethnology of North American Indians: A survey of the aboriginal cultures of North America, with ANT 3313 AS 3(3.0) **ANT 3328** AS 3(3.0) AS 3(3.0)

AML 4153

American Poetry at Mid-Century: PR: ENGL 1102 and LIT 3000. Study of major figures from the "Middle Generation": Berryman, Bishop, Jarrell, Lowell, Plath, Rich, Roethke, and others. AMI 4261 AS 3(3.0) Literature of the South: PR: ENC 1102 or C.I. Development of Southern literature from its beginnings

in the "Old South" through the post-Civil War and the Southern-Renaissance to the present. Emphasizes reading from Poe, Ransom, Tate, Faulkner, Porter, Warren, O'Connor, Percy, and Styron.

Modern American Literature: PR: ENC 1102, Major writers of modern American literature. AMI 5156

Modern American Poetry: PR: Study of trends, modes, major figures (Eliot, Pound, H.D., Stevens, Hart, Crane, Moore, W.C. Williams, etc.) within the Modernist movement in American poetry.

General Anthropology: An introductory survey of the four major subfields of anthropology: Social Anthropology, Physical Anthropology, Linguistics, and Archaeology,

ANT 3122

Archaeological Method and Theory: A survey of archaeological field and laboratory techniques, including the interpretation of written archaeological reports.

ANT 3141

ancient Americas.

ANT 3142

liest humans to the beginnings of recorded history.

ANT 3145

ANT 3163

America from earliest times through the Spanish conquest.

ing groups to the earliest cities and states.

Magic, Ritual, and Belief: Patterns in religious behavior in various societies, with primary emphasis on myth, rite, taboo, and festival social phenomena.

ment in the rural sector.

ANT 3271

forms of law and social control.

Sex, Gender and Culture: The traditional and changing roles of women and men viewed in a cross-cultural perspective.

the Southeast

emphasis on the pre-contact cultural condition.

Indians of North America High Plains: A study of the social and cultural history of the Indians of the North American High Plains.

Maya Archaeology: An examination of the Prehistoric Maya culture focusing on both the archaeology and current issues in the field.

ANT 3332

People and Cultures of Latin America: An overview of the history and society of the peoples of Latin America, emphasizing patterns of subsistence and social organization.

ANT 3360

Peoples of the Far East: A survey of the peoples of China, Japan, and Korea from the anthropological perspective.

AS 3(3.0)

AS 3(3.0)

ANT 3363 AS(3,0) Anthropology of Japan: An examination of Japanese culture and its contemporary behavioral and organizational patterns by drawing upon archaeology, cultural history, linguistics, cultural anthropology, and social organization.
ANT 3410 AS 3(3,0) Cultural Anthropology (Anthropology II): An introduction to human diversity as exemplified among various cultures and ethnic groups.
ANT 3422 AS 3(3,0) Peoples of the World: A comparative study of religion, family, politics, philosophy, and other elements of socio-cultural organization of pre-literate societies.
ANT 3511 AS 3(3,0) The Human Species: Human biological variation in an evolutionary perspective.
ANT 3541 AS 3(3,0)
Biobehavioral Anthropology: An introduction to the study of human behavior in terms of mutual inter- action between human biology and cultural environments.
ANT 3610 AS 3(3,0)
Language and Culture: PR: Sophomore standing: The study of language in a non-western setting; lan- guage and behavior; language and perception.
ANT 4084 AS 3(3,0)
Anthropological Method and Theory: Method, theory, research design and field techniques in the anthropological endeavor.
ANT 4124 AS 9(9,0)
Advanced Archaeological Fieldwork: Supervised archaeological fieldwork. Students admitted only with permission of instructor.
ANT 4180 AS 3(1,4)
Seminar in Laboratory Analysis: The processing of archaeological finds from excavation through publication.
APA 3471 BA 3(3,0)
Accounting for Engineers: General Accounting principles and practice, cost accounting, budgeting, and control techniques. Not usable for BSBA degree credit.
APB 3600 HPA 3(3,0)
Introduction to Pharmacology: Review of terminology and regulations. Study of drug types and usage.
APB 4651 HPA 2(2,0)
Medical Pharmacology I: Drugs in pulmonary diseases; effects on nervous system, and neuroeffectors, depressants & stimulants; influence on metabolism and endocrines. (MDRV) Bronchodilators, mycolytics, etc.
APB 4652 HPA 2(2,0)
Medical Pharmacology II: PR: APB 4651 or C.I. Drugs used in cardiovascular disorders. Includes inotropic, chronotropic agents, beta blocker drugs, calcium channel antagonists.
ARE 3550 AS 3(3,0)
Introductory to Art Therapy: A survey of the literature, theories and practices of art therapy.
ARE 3554 AS 3(3,0) Art Therapy Methods: This course presents methodologies used by the Art Therapists and demon-
strates how Art Therapy is put into practice. ARE 3662 AS 3(3,0)
Community Arts I: A survey of the basic theoretical issues related to community arts programming.
ARE 3663 AS 3(3,0)
Community Arts II: A survey of the basic methodologies for applying the theoretical issues to commu- nity arts programming taught in Community Arts I.
ARE 3944 AS 3(2,3)
Community Arts Practicum: A supervised experience for students to facilitate art programming in a variety of community settings.
ARE 4262 AS 3(3,0)
Methods in Art Administration: PH: ARH 3820. Theories and methodologies for designing, implement- ing and administering art programs for a variety of populations.
ARE 4313 ED 3(2,1)
Art in the Elementary School: Basic principles, purposes, scope and sequence: organization for instruction; evaluation of activities; selected art experiences.
ARE 4351 ED 3(2,1)
Teaching Art in the Elementary School: PR: EDF 4214 and EDG 4321. Transition from university art
studio practices to public school teaching of art. Organizing, designing and analyzing art experiences, activities and classroom environments for the elementary school classroom.

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methodology relative to the high school and junior high school settings.	
ARE 4356	ED 3(3,1)
Teaching Art Appreciation & Criticism in the Classroom: PR: ARH 2050 and ARH 2051.	
nation of art appreciation programs and concepts toward planning curriculum for the study of	
popular art, art criticism, and aesthetics for specific educational settings.	
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	S 12(0,12)
Community Arts Internship: An on-site in-depth experience for community arts majors with	a concen-
tration in administration, education, or therapeutic experience.	
ARE 5251	ED 3(2,1)
Art for Exceptionalities: Concepts, principles, and methods of integrating art processes into	
tion of the physically, emotionally, and mentally handicapped.	
	FD 0/0 1)
ARE 5255	ED 3(2,1)
Arts in Recreation: Art activities and experiences appropriate for use in playground, leisure	e services,
occupational orientation and other recreational areas.	
ARE 5454	ED 3(3,0)
Found Arts: PR: C.I. Materials available for instruction in the public schools will be explored	in depth in
relation to their appropriateness and productive gualities.	
ARE 5648	ED 3(3.0)
Contemporary Visual Arts Education: PR: C.I. Continued study of current programs and in	novations
in public school Visual Arts Programs.	
ARH 2050	AS 3(3,0)
The History of Art I: Painting, sculpture and architecture from the Prehistoric Era th	rough the
Renaissance period.	
ARH 2051	AC 2/2 0)
	AS 3(3,0)
The History of Art II: Painting, sculpture and architecture from the Baroque through the 20th of	century.
ARH 2051H	AS 3(3,0)
Honors History of Art II: Same as ARH 2051 with honors-level content.	
ARH 3060	AS 3(3,0)
History of Architecture: History of Architecture — Survey of Western architectural styles.	10 0(0,0)
ARH 3520	AS 3(3,0)
African Art: Teach the continuatives between African, Afro-Caribbean and Afro-American Arts	. ·
ARH 3530	AS 3(3,0)
Asian Art: History of visual arts of China, Japan, India, and other Eastern cultures.	
ARH 3683	AC 2/2 01
	AS 3(3,0)
Southern Folk Arts: History of Folk Architecture, Ceramics, Painting, Sculpture, Textiles and	id roys in
three main Southern ethnic cultures: EuroAmerican, Afro-American, and American Indian.	
ARH 3710	AS 3(3,0)
History of Photography I: History of still photography from its earliest inception to 1900. The	content of
this course is designed for art majors.	
ARH 3711	AS 3(3,0)
History of Photography II: History of still photography from the early 20th century to the pre-	
	esent. The
content of this course is designed for art majors.	
ARH 3720	AS 3(3,0)
History of Prints: History of printmaking in the Western world, surveying works by the "great print	itmakers."
ABH 3728	AS 3(3,0)
American Art: Surveys American Art to 1900. Leading artists are identified and representat	
ples of their work are discussed within the context of major themes, patterns, sources.	ive exam-
A STATE OF	2.4
ARH 3802	AS 3(3,0)
Happenings Art: To study the aesthetic and social significance of "Total Art" in its attemp	t to break
down the customary distinctions between life and art.	
ARH 3820	AS 3(3,0)
Visual Arts Administration: Vitas: grant applications; Personnel; copyright laws; museum prac	
ARH 4170	AS 3(3,0)
Greek & Roman Art: A study of the art and architecture of the ancient civilizations of the Medi	terranean,
comprising Greece, Eturia, and Rome.	
ARH 4310	AS 3(3,0)
Early Italian Renaissance Art: A survey of Italian Art and Architecture from 1300 to 1500.	
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ART 4352

methodology relative to the high school and junior high school settings.

ARH 4312	AS 3(3,0)
Later Italian Renaissance Art: A survey of Art in Italy, from the High Renaissance through Ma	
ARH 4350	AS 3(3.0)
Baroque Art: A study of European Art in the 17th and 18th centuries.	
ARH 4430	AS 3(3,0)
19th Century Art: A survey of the trends and developments in art during the 19th century, ind	
art of America and of Western Europe.	
ARH 4450	AS 3(3,0)
20th Century Art: PR: ARH 2051. A survey of the art from Fauvism, Futurism, Cubism to the	
present.	
ARH 4545	AS 3(3,0)
Art of India: Art and architecture of India from prehistoric times through the Gupta, Rajput, a	
periods.	
ARH 4458	AS 3(3,0)
Women and Art in the 20th Century America: A course on women artists, feminist aesth	
women's artistic cultures, focusing on 20th century America.	
ARH 4655	AS 3(3,0)
Meso American Art: A survey of the art of Mexico and Central America, from the Pre-	
through the Spanish Colonial, to the 20th century.	
ARH 4690	AS 1(1,0)
Mexican Art — Fieldwork: A field trip in connection with ARH 4655.	ALCONT THE
ARH 4800	AS 3(3,0)
Theory and Criticism of the Visual Arts: Criteria of criticism, analysis of works, elements of	
ogy and sociology of art. Developments in the art of the 20th century.	
ARH 4892	AS 3(3,0)
Women in Art: A survey of women artists from ancient times to the present as well as a study	
aesthetics and ideology have played in determining the ways in which women have been repr	
art.	
ARH 5451	AS 3(3,0)
Artistic Worldviews: PR: Post-Bac. status, 9 hours of art courses, or C.I. Art from individual	s and cul-
tural perspectives of varying ethnic, religious, occupational, regional, and generational groups.	
ARH 5478	AS 3(3,0)
Contemporary Women Artists: PR: 6 credits of art courses or C.I. An in-depth study on con	
Contemporary Women Artists: PH: 6 credits of art courses or C.I. An in-depth study on con women artists from a feminist perspective.	
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women artists from a feminist perspective. ARH 5893	AS 3(3,0)
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	5 3(2,3)
Three-Dimensional Design: PR: ART 2202C or C.I. Intermediate problems in three-dimensional i als, processes, forms.	materi-
	5 3(2,3)
Design in Advertising: PR: ART 2201C. Principles and techniques. Not open to art majors specing graphic design. Intended for visual arts education majors and general university elective.	
	5 3(3,2)
Graphic Design II: PR: ART 3239C or C.I. Methods, materials, and processes related to pero studies in graphic design.	ceptual
	5 3(3,2)
Graphic Design I: PR: ART 2201C, 2202C, or C.I. Current: Use of type, color and illustration on elements and mechanical separations.	
	5 3(3,2)
Type & Design: A survey of type, calligraphy and letter forms and their appropriate use as subject for graphic design and publication.	
	5 3(2,3)
Intermediate Drawing I: PR: Six semester hours of Drawing Fundamentals or C.I. Intermediate pro in drawing, with emphasis on the human form.	
	5 3(2,3)
Intermediate Drawing II: PR: C.I. Continuation of Intermediate Drawing I.	200.01
ART 3400C AS Printmaking: PR: ART 2201C, 2202C, and three semester hours of Drawing Fundamentals or C.I	5 3(2,3)
	5 3(2,3)
Painting: PR: Three semester hours in Design Fundamentals and three semester hours in D	
Fundamentals or C.I. Concentration of basic techniques and aesthetic factors in painting.	
ART 3610C AS	5 3(2,3)
Computer Graphics: PR: ART 3280C; or C.I. Intermediate problems involving the use of cor graphic systems for Advertising Art, Page Layout, and Scientific Illustrations.	mputer
ART 3701C AS	3(2,3)
Sculpture: PR: Six semester hours in Design Fundamentals, to include three semester hours in dimensional work, or C.I.	three-
	5 3(2,3)
Advanced Ceramics: PR: ART 3110C. May be repeated for credit.	
	5 3(2,3)
Fibers, Fabrics, Textiles and Synthetics: Textile design and production, including non-loom we processes. May be repeated for credit.	eaving
	3(3,0)
Advanced Fiber & Fabrics: Textile design and production, including non-loom weaving processes be repeated for credit.	
	3(2,3)
Metals, Woods, Leathers and Stones: Processes and techniques of production.	
	5 3(3,2)
Advanced Graphic Design: PR: ART 3239C, ART 3232C, or C.I. Practical studio problems emphasis on organization of visual design elements.	
	3(3,2)
Special Problems in Graphic Design: PR: ART 3232C or C.I. Advanced problems in visual designeproduction. May be repeated for credit.	gn and
	5 3(2,2)
Advanced Drawing: PR: ART 3331C. May be repeated for credit.	2(2 2)
ART 4402C AS Advanced Printmaking: PR: ART 3400C. May be repeated for credit.	5 3(2,3)
	3(2,3)
Advanced Computer Graphics: PR: ART 3848C or C.I. Design problems involving the u advanced computer graphic systems for Advertising Art, Graphic Design and Scientific Illustration.	use of
ART 4530C AS	3(2,3)
Advanced Painting: PR: ART 3510C. May be repeated for credit.	
	3(2,3)
Advanced Sculpture: PR: ART 3701C. May be repeated for credit.	-
ART 5109C AS Multi-Cultural Crafts Design: The content of this course will include an appreciation for and the p	3(3,0)
tion of Western and Non-Western art forms.	nouuc-

ASH 4404

China in 19th and 20th Centuries: PR: EUH 2000 and 2001 or C.I. The Mongols in China; coming of the Europeans; social structure; Communist movement; Japanese aggression.

ASH 4442

Modern Japan, 19th and 20th Centuries: PR: EUH 2000 and 2001 or C.I. A survey of the Tokugawa Shogunate; Western contact in the 19th century; World War I; Japanese militarism; World War II; and U.S. occupation.

AST 2002

Astronomy: Descriptive survey of solar system, galaxies and universe; physical properties of stars, H-R diagram, stellar evolution, black holes, neutron stars.

AVM 4510

Airline Management: PR: HFT 1000. The trends, operation, practices, and procedures of the airline industry. Special emphasis on ticketing, scheduling, marketing, and terminal management.

BCH 4053

Biochemistry I: PR: CHM 3211. A consideration of proteins, carbohydrates, nucleic acids, enzymes and their effect on biochemical systems, and inter-relationship of intermediary metabolism.

BCH 4054

Biochemistry II: PR: BCH 4053. Continuation of BCH 4053.

BCH 41031

Biochemical Methods: PR: BCH 4053. A laboratory course stressing the application of the chemical arts to the separation, identification, and quantification of materials of biological significance.

BES 3512

Behavioral Weight Control: Application of behavioral techniques to produce weight loss. Diet, exercise, and behavioral self-regulation principles are used in an individual student case study approach.

BOT 1000C

Plant Science: Plant life related to biological principles and the physical and cultural impact of plants on human individuals and civilization. Designed for non-majors.

BOT 2010C

General Botany: PR: High school biology or C.I. Introduction to botany; plant structure and function. with emphasis on forms and applications important to man and science. Open only to students whose major requires this course.

BOT 3154C

Local Flora: PR: BOT 2010C or C.I. Recognition and identification of Florida higher plants, especially those common to central Florida, stressing environmental and ethnobotanical significance. Weekend field trips may be required.

BOT 3680

Florida Wildflowers: PR: CI. The biology of wildflowers of Florida, their identification, taxonomy, distribution, flowering times, and roles played in the environment and welfare of man.

BOT 3800

Ethnobotany: PR: C.I. Historical and modern uses of plants economically important in various cultures. Designed for majors and non-majors.

BOT 3820

Plants and the Urban Environment: PR: C.I. The selection, placement, propagation and care of ornamental plants in residential and industrial areas. Designed for majors and non-majors.

BOT 4223C

Plant Anatomy: PR: BOT 2010C. A study of development, structure and function of the principal organs and tissue of vascular plants.

BOT 4303C

Plant Kingdom: PR: BOT 2010C. A survey of the plant kingdom utilizing comparative morphology, structure and functions to demonstrate relationships among extant and extinct forms.

BOT 4503C

Plant Physiology: PR: PCB 3023 or C.I. A Study of mechanisms used by plants to copy with the environment.

BOT 4623C

Plant Geography and Ecology: PR: 8 hours Botany or C.I. The major climatic plant formations of the world, historical and contemporary plant geography, and ecology.

BOT 4713C

Plant Taxonomy: PR: BOT 2010C. An introduction to systematic classification and identification of vascular plants, with emphasis on the flora of peninsular Florida.

BOT 5495C

Bryology: PR: BOT 4303C or C.I. A lecture-laboratory survey course on the diversity and classification of mosses, liverworts, and hornworts, with special emphasis on those found in Florida.

AS 3(3.0)

AS 3(3.0)

BA 3(3,0)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 2(0.6)

AS 2(2,0) AS 4(3,2)

AS 4(2.4)

AS 3(1.4)

AS 4(2,6)

AS 3(2,1)

AS 3(3,0)

AS 5(3,6)

AS 4(3.3)

AS 4(3,2)

AS 4(3,3)

AS 5(3,6)

AS 3(2,3)

BOT 5686

Conservation and Management of Native Plants: PR: BOT 4713C, PCB 3043 and/or BOT 4503C or C.I. Identification, conservation, propagation and management of Florida rare, endangered, indicator or reclamation species.

BOT 5705C

Plant Biosystematics: PR: Graduate standing or C.I. Evolutionary processes among plant taxa and populations utilizing cytology, morphology, biochemistry, breeding systems and co-evolution. AS 4(3.2)

BSC 1020C

Biological Principles: A study of various biological factors which affect the health and survival of man in modern society. Designed for non-majors.

BSC 1030C

Biology and Environment: Biological implications of the interaction among human society, population, and technology in relation to the environment and natural systems. Designed for non-majors.

BSC 2010C

General Biology: PR: High school biology or C.I. Basic principles, unifying concepts, and facts of modern biology. Introduction to quantitative biological experimentation. Open only to students whose major requires this specific course.

BSC 2010H

General Biology Honors: PR: Eligibility for Honors Program. Basic principles and unifying concepts of modern biology. Introduction to quantitative experimentation using intensive, open-ended labs.

BSC 3404C

Quantitative Biological Methods: PR: BSC 2010, MCB 3013, CHM 2046, A laboratory course which presents modern methods and instrumentation used in guantitative biological experimentation. AS 3(3.0)

BSC 4103

History of Biology: PR: C.I. People and events involved in the development of major biological concepts and disciplines. Suitable for majors and non-majors.

BSC 5034

Biology and Society: PR: C.I. Biological concepts applied to current human problems - food production, pollution, diseases, energy, life support systems, natural ecosystems. Designed for teachers.

BTF 3402

Business Instructional Analysis I: PR: EDG 4321, Techniques, materials, and instructional media; psychological principles, evaluation, and current trends in typewriting instruction.

BTE 4410

Course Construction in Business Education: PR: EVT 3365 or C.I. An overview and examination of business curriculum and methodology integrated into the vocational frameworks. Planning and preparation of materials, managing the laboratory and involvement in vocational student organizations.

BUI 3130

Legal Environment of Business: PR: Junior standing. Analysis of the law as a dynamic social and political institution in the business environment, including ethical consideration. (Not open to Accounting majors).

BUL 3320

Business Law I: PR: Junior Standing. Introduction to law; a social and political institution in the business environment. Analysis of statutory and common law principles involved in the formation, operation, and termination of recognized business organizations. Analysis of the effects of government regulation on business activity, including anti-trust and securities regulation.

BUL 3321

Business Law II: PR: BUL 3320. Coverage of the Uniform Commercial Code; the law of commercial transactions, including sales, commercial paper, secured transactions and suretyship, contracts, wills and trusts, and property law.

BUL 5125

Legal and Social Environment of Business: PR: Admission to graduate program. Analysis of the legal and ethical environment of business, the effects of legislation and regulation on business activity, and the role of law and ethics in the decision-making process.

CBH 3003

Comparative Psychology: PR: PSY 2013. A study of comparative behaviors of lower animals.

CCE 4004

Construction Engineering I: PR: EGN 3331 and CEG 4101C. Building construction, materials and types of construction, soils in construction and handbook applications in the field of construction engineering. Also form work design.

CCE 5005

Construction Engineering II: PR: CCE 4004 or C.I. Construction planning, equipment, and methods used in heavy construction.

ED 2(2,1)

AS 3(3.0)

ED 4(4,0)

BA 3(3.0)

BA 3(3,0)

BA 3(3.0)

BA 3(3.0)

AS 3(3,0)

EN 3(3,0)

EN 3(3.0)

AS 4(3.3)

AS 4(3,2)

AS 4(3.2)

AS 4(3.2)

AS 4(3.3)

HPA 3(2.4)

CCE 5035

Construction Law and Project Management: PR: C.I. Contracts, specifications, and law for engineers, Strategic planning, management, development, design and production of construction projects. Value engineering, project funding and cash flow.

CC.1 3010

Crime in America: A survey of crime and criminality in the United States, with emphasis on crime data. its weaknesses, and types of criminal behavior.

CCJ 3020

Criminal Justice System: An examination of the components and of their interdependence in light of their traditional autonomy.

CCJ 3210

Criminal Law in Action: Basic concepts of criminal law: elements of major crimes, criminal responsibility, defenses, and parties to crime.

CCJ 3290

Prosecution and Adjudication: PR: CCJ 3020 or PLA 3013 or C.I. Examination of structures and goals of offices and prosecution and criminal trial courts, and of the processes of charging, adjudicating, and sentencing defendants.

CCJ 3300

The Corrections and Penology: PR: CCJ 3020 or C.I. Theories, structures, and methods of institutional and non-institutional processing and treatment of convicted criminals and juvenile offenders.

CCJ 3341

Community-Based Corrections: PR: CCJ 3020 and CCJ 3300 or C.I. An overview and analysis of correction interventions and treatment programs in the community.

CCJ 3451

Justice System Technology: PR: CCJ 3020 or C.I. Examination of the relevance of scientific and technological developments to justice systems and their applicability to the operations and management of the systems.

CCJ 3452

The Criminal Justice Manager: PR: CCJ 3020 or C.I. Elements of first-line supervision and executive development. Administrative leadership; its nature; methods, and traits. Recent theories and research in leadership.

CCJ 3483

Labor Relations in Criminal Justice; PR: CCJ 3020 and CCJ 3452 or C.I. Examine the role of public sector labor relations in criminal justice to include management-employee relationships, collective bargaining process, employee organizations, and federal-state laws.

CCJ 4105

Police and Society: PR: CCJ 3020. An examination of the varied roles of police in contemporary society. Emphasis is on dynamics of police/citizen interactions and the police subculture.

CC.I 4459

Justice Agency Operations: PR: CCJ 3020 and CCJ 3452 or C.I. Elements, functions, and processes essential to the continuing management of various criminal justice agencies, institutions and court systems.

CCJ 4486

Criminal Justice Ethics: Focuses on the ethical issues and problems commonly encountered in the criminal justice system (policy courts and corrections).

CCJ 4540

Delinguency Control: PR: CCJ 3020 and CCJ 3290 or C.I. Examination of programs and institutions including juvenile court process, intake services, and remedial procedures and practices.

CCJ 4630

Comparative Justice Systems: PR: CCJ 3020 and CCJ 3290 or C.I. A survey of contemporary foreign criminal justice and differences emerging from various political, cultural and legal systems.

CCJ 4640

Organized Crime: An examination of organized crime, including structures, history and activities, and of issues surrounding efforts to define and control it.

CCJ 4651

Drugs and Crime: Focuses on the problems of drugs and drug control in contemporary society. Students will examine the problems of drugs in our society as well as specific strategies used by criminal justice agencies to prevent and control illicit drug use.

CCJ 4661

Terrorism: PR: CCJ 3020 and CCJ 4105 or C.I. An examination of competing ideologies of a variety of social and political conflicts (both international and domestic) that give rise to terrorism and of the implications for the criminal justice system.

HPA 4(4.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 4(4.0)

HPA 3(3,0)

HPA 3(3,0)

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EN 3(3,0)

HPA 3(3.0)

HPA 3(3.0) HPA 3(3.0)

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HPA 3(3.0)

CCJ 4670

Women and Crime: This course covers women in criminal justice as offenders and prisoners, as well as crime victims and professionals working in the system.

CC.I 4701

Research Methods in Criminal Justice: Overview of the social science research methodology used in criminal justice, covers the major forms of research designs used by social science and evaluates their strengths and weaknesses.

CCJ 4941

Criminal Justice Internship: PR: C.I. Internship in municipal, county, state or federal criminal justice agency. Includes assignments in police, courts, corrections components.

CCJ 5406

Research and Technology Implementation: Changing roles of social and physical sciences as related to the objectives and administration of public safety agencies.

CCJ 5466

Financial and Planning for Public Safety: Acquisition, control, and management of resources for criminal justice and public safety agencies; organization of finance systems, planning mechanisms and strategies for the budgetary process.

CCJ 5467

Justice and Safety System Manpower: Processes essentials to administration to human resources in criminal justice and public safety agencies; structure and processes for acquisition, training, and maintenance of personnel.

CCJ 5485

Issues in Justice Policy: Examination of selected issues of public policy regarding the functions and roles of criminal justice agencies vis-a-vis other government departments or agencies and public purposes.

CDA 3100

Introduction to Computer System Architectures: PR: CGS 1060 or equivalent. System architecture, CPU organization and instruction execution, CISC and RISC architectures, memory systems, and graphics. AS 1(1.0)

CDA 3500

Introduction to Data Communications: PR: CDA 3100. I/O processing, DMA, interrupts, asynchronous and synchronous data communications, serial communication standards, modems, and protocols.

CDA 3504

Introduction to Computer Networks: PR: Data Communications. Computer network concepts wide area networks, metropolitan area networks, local area networks, internet, ethernet, tokenring, Arcnet, Novell netware, applications.

CDA 4131

Programming for Large Scale Digital Systems: PR: Computer Science Major or C.I. and COP 3402C. Programming techniques and instruction sets for large scale digital computers.

CDA 4150

Introduction to Computer Architecture: PR: Computer Science Major or C.I. and COP 3402C and EEL 3341 C. Survey of machine instructions, processor characteristics, and microprogramming concepts.

CDA 4300

Microprocessor Fundamentals: PR: Computer Science Major or C.I., COP 3402C and EEL 3341C. Semiconductor Technology, 8-bit and 16-bit Microprocessor Architectures and programming, memory system design, I/O methods, interrupts, development system concepts.

CDA 4311

Microprocessor Application: PR: Computer Science Major or C.I. and CDA 4300. Total system design methodology and applications, advanced topics on microprocessors, patent search and applications.

CDA 4312

Microprocessor Interface: PR: Computer Science Major or C.I. and CDA 4300. Interfacting of CPU to various devices, CPU support devices, peripheral devices and controllers, BUS concepts and standards, single chip computers.

CDA 5106

Advanced Computer Architecture I: PR: CDA 4150. Evolution of computer architecture; memory organization; cache; virtual memory; highspeed processor design; pipeline multi-functional and array machines; special architecture case studies; overview of channel architecture.

CDA 5110

Parallel Architecture & Algorithms: PR: COT 4210, CDA 5106. General-purpose vs. special-purpose parallel computers; arrays, message-passing; shared-memory; Taxonomy; parallization techniques; communication synchronization and granularity; parallel data structures; automatic program restructing.

CDA 5215

Architecture and Design of VLSI Systems: PR: CDA 4150 or equivalent. Overview of VLSI technology. Stick diagrams; logical design of basic subsystems; integrated system design tools; design of a VLSI computer system.

HPA 3(3.0)

AS 1(1.0)

HPA 3(3.0)

AS 1(1.0)

AS 3(3.0)

AS 3(3.0)

AS 3(2.2)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 6-9(0.12-36)

HPA 3(3.0)

AS 3(2.2)

AS 3(2.2)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

VLSI Design Tools: PR: CDA 5210, a strong programming background and C.I. VLSI implementation systems; layout languages; graphic tools; sticks compactor; design rule checking algorithms; simulation models; routing algorithms; silicon compilers; knowledge-based VLSI tools.

CDA 5213

CDA 5212

VLSI Testing and System Integration: PR: CDA 5210. Test vectors; fault models; design for testability; LSSD; languages for testing; performance measurements; interrupts, BUS concepts and standards; testing and systems integration.

CEG 3301

Engineering and Environmental Geology: PR: EGN 3310 and CHS 1440 or equivalent. Principles of physical geology, with emphasis on engineering and environmental topics. Study of land forms, geologic maps, geologic structure, weathering, groundwater, mass wasting, and earthquakes.

CEG 4101C

Geotechnical Engineering I: PR: EGN 3331 and EGN 3353. Engineering properties and classification of soils. Design considerations for compaction, seepage, consolidation, and settlement analysis. **CEG 4805C** EN 2(1,2)

Geotechnical Engineering Design: PR: CEG 4101C and CEG 5015. Project course on design of foundations and other soil structures using geotechnical design methodologies.

CEG 4812

Historical Developments in Civil Engineering: Seminar covering major historical developments in civil engineering.

CEG 5015

Geotechnical Engineering II: PR: CEG 4101C. Continuation of CEG 4101C with emphasis on shear strength and design factors for earth pressures bearing capacity, and slope stability.

CEN 5016

Software Engineering: PR: COP 4020 and knowledge of Ada. Introduction to the design and implementation of software systems. Emphasis is placed on object-oriented methodologies using Ada with application to real-time systems design. A project is required.

Structural Analysis I: PR: EGN 3331, Topics in structural mechanics, energy methods, analysis of determinate and indeterminate structures by flexibility, stiffness and methods.

CES 4101

Structural Analysis II: PR: CES 4102. Special structures; introduction to matrix structural analysis. dynamic loads including wind and earthquake.

CES 4130L

Structures Laboratory: PR: EGN 3331; CR: CES 4102. Laboratory exercises on the behavior of structures and structural materials.

CES 4605

Structural Steel Design: PR: CES 4102 or C.I. Design of steel structural members. Selected topics in beam design, column design, plastic design, connections and built-up members. EN 2(1,2)

CES 4608C

Steel Design: PR: CES 4605. Project course on design of steel structures using steel and structural analysis methodologies.

CES 4702

Structural Concrete Design: PR: CES 4102 or C.I. Principles of designing reinforced concrete members. Selected topics in concrete mixes, beams, columns, and ultimate analysis.

CES 4709C

Concrete Design: PR: CES 4702. Project course on design of concrete structures using concrete and structural analysis methodologies.

CES 5143

Matrix Structural Analysis: PR: CES 4102 or equivalent. Optimization and matrix methods applied to the design of real structures.

CET 3123C

Microprocessor Electronics I: PR: EET 3035C. Introduction to microprocessors. Includes machine language programming, an introduction to microprocessor-based system architecture, and binary and hexadecimal arithmetic.

CET 3144C

Applied Microprocessor Technology: PR: CET 3198C and CET 3303. DC Circuit Analysis and Microprocessor Fundamentals. Analysis and design of the components, architecture, and interfacing of a microcomputer. Specific reference to IBM compatible microcomputers and peripherals. Troubleshooting and repair are emphasized in the laboratory.

CES 4100 EN 3(3.0)

EN 3(3,0)

EN 1(0,3)

EN 3(3,0)

AS 3(3.0)

EN 3(3,0)

EN 3(3,0)

EN 2(1.2)

EN 3(3.0)

EN 3(2,3)

EN 3(2,2)

EN 4(3.2)

AS 3(3 0)

AS 3(3.0)

EN 3(3.0)

EN 1(1.0)

CET 3198C

Digital Systems: PR: DC Circuits and Digital Circuits 1. Advanced digital circuits. A review of Karnaugh mapping, truth tables, Boolean Algebra, and flip flops, followed by indepth analysis of more complex MSI and LSI devices used in computers.

CET 3303

Microcomputer Technology I: PR: CET 3123C and a high-level programming language. Microcomputer assembly programming, including overview of architecture and operating system environment. **CET 3323C** EN 3(2.2)

Computer Organization Technology: PR: EET 3035C. Digital logic gates, memory devices, Karnaugh Maps, combinational logic, arithmetic units, registers and sequential logic.

CET 3364

Systems Applications in C: PR: CET 3198C, CET 3303, COP 3220, or knowledge of C. Use of C language in control of system processes, DOS and BIOS interrupts, and interfacing with assembly language.

CET 3383

Applied Systems Analysis I: PR: Programming II (Pascal II). Study of system analysis, design, development and implementation cycle. Includes Object Oriented Programming (OOP) to implement system programs.

CET 4131C

Microprocessor Electronics II: PR: CET 3123C. A continuation of CET 3123C, with emphasis on applications of microprocessor applications in engineering technologies.

CET 4138

Digital Programmable Devices: PR: CET 3198C or equivalent and CI. Architecture and applications of various types of programmable logic devices. Design entry methods, e.g. HDL, schematic capture, etc. Lab exercises using PALS, PLDs, and FPGSs.

CET 4188

Microcomputer Technology II: PR: CET 3303. Continuation of CET 3303. Advanced assembly language programming including macros, system subroutines, high-level language interfacing, device drivers, and operating system enhancements.

CET 4333C

Applied Computer Systems I: PR: CET 3198C and CET 3303. Microprocessor based systems design and implementation. System components; memory; input/output devices, busses, process control architecture, timing and troubleshooting.

CET 4334C

Applied Computer Systems II: PR: CET 3198C and CET 3303.Computer communications methods with emphasis on serial and parallel data communications and computer networking.

CET 4361

Applied Computer Graphics in Technology: PR: COP 2001 and MAC 3253. Fundamentals of computer graphics using high-level structured language and graphics libraries.

CET 4381

Digital Signal Processing: PR: EET 4329C and COP 1200 or equivalent. Introductory treatments of the concepts of digital signal processing. Survey of current applications, including consideration of available hardware and software.

CET 4427

Applied Database I: PR: CET 3383. Design and implementation of data base systems within the concept of central administration, structured data storage. Programming project.

CET 4429

Applied Database II: PR: CET 4427. Continuation of CET 4427 - Study of Hierarchical database system. Programming project is required.

CET 4505

Applied Operating Systems I: PR: COP 2001. Modifying the operating systems to support new types of devices. Analysis of limitations and strengths of commercial mass storage operating systems in industry. O.S. tool box usage.

CET 4523

Applied Systems Analysis II: PR: CET 3383. Continuation of CET 3383, with emphasis on distributed processing which includes the interfacing of minis, mainframes, software, communications, and data base technology into a responsive information system.

CET 4527

Applied Operating Systems II: PR: CET 4505. Continuation of CET 4505, with emphasis on multitasking. Multi-users environmental programming project is required.

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EN 4(3.2)

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EN 4(2.4)

EN 4(3.2)

EN 4(4.0)

CET 4915

Senior Design Project: PR: Computer, Electronics, or Information Systems Engineering Technology senior within 18 semester hours of graduation. Supervised individual or group projects involving project definition, planning, design, development, testing and evaluation. Progress reports and final report are required.

CET 4931

Current Topics in Technology: PR: C.I. Study of recent state-of-the-art computer related topics from recognized electronics and computer oriented technical journals and texts. Requires written and verbal communication.

CGN 3501

Civil Engineering Materials: PR: C.I. The characterization of materials used in civil engineering works to include concrete, soils, bituminous, polymers and composite materials.

CGN 4300

Civil Engineering Systems: PR: EGN 3331, EGN 3353, and STA 3032, Application of mathematical techniques associated with operations research to the design and operation of systems that concern civil and environmental engineers.

CGN 5320C

Geographic Information systems: Programming theory and application of Geographic Information Systems to Civil Engineering projects.

CGN 5504C

Civil Engineering Materials: PR: C.I. Structure, properties and applications of materials used in civil engineering including concrete, steel, asphalt, wood, soils, and composite materials.

CGN 5506C

Asphalt Concrete Mix Design: PR: CEG 4101. Properties of asphalt, aggregate and asphalt mixtures. Marshall mix design, Hveem mix design, pavement rehabilitation.

CGS 1060C

Introduction to Computer Science: History, typical computer, number systems, control and data flow, peripheral components, memory devices, effects of computers on society, applications of computers. Not open to Computer Science Majors.

CGS 3000C

Computer Fundamentals for Business Applications: Hardware/software for business data processing; survey use of business applications programs utilizing prewritten programs. Not open to Computer Science Majors.

CGS 3061

Personal Computing: Survey of personal computers on the market; applications for education, entertainment and clerical work; programming in BASIC with exercises. Not open to Computer Science Majors.

CGS 3100

Business Applications Programming: PR: CGS 3000 or equivalent. Basic programming concepts and techniques, algorithm design, documentation, programming for selected business applications using BASIC. Programming projects. Not open to Computer Science majors.

CGS 3262

Survey of Hardware: PR: CGS 3100. Survey of microcomputer hardware. Machine instructions, loaders, file structures, file maintenance, operating systems, utility programs, and architecture. Not open to Computer Science majors.

CGS 3300

Survey of Software: PR: CGS 3262. Introduction to the fundamentals of information systems development and systems requirements. Evaluation and use of current software. System design case studies. Not open to Computer Science majors.

CGS 3422

Programming and Numerical Methods: CR: MAC 3312. Programming with a high-level language (e.g., FORTRAN), I/O, formatting and manipulation of one and two-dimensional arrays, with emphasis on numerical problems. Not open to Computer Science Majors.

CGS 3508

Modern Word Processor Concepts: PR: CGS 1060C. The history, features, design and commands of Windows environment word processor - text entry and editing summary of command and built-in functions, dictionaries and thesaurus, and formatting and report control.

CGS 3511

Spreadsheet Handling and Macros: PR: CAP 3517. The spreadsheet ranges, graphics, linking sheets (spreadsheets and others), and basic and intermediate macros.

CGS 3517

AS 1(1,0) Spreadsheet Concepts: PR: CGS 1060C. The history, features, design and commands of the spreadsheet environment. File handling data entry and editing summary of command and built-in functions. Formatting, order of evaluation.

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EN 3(2.3)

EN 3(3,0)

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EN 3(2.2)

AS 3(2.2)

AS 3(2.1)

AS 1(1,0)

AS 1(1.0)

EN 2(0.4)

EN 3(3.0)

AS 3(3,0)

CGS 3518

Spreadsheet Handling and Decision Making Tools: PR: CGS 3511. Advanced macros, database facilities, linkages to other decision making tools, and algorithmic issues.

CGS 3581

Document Presentation & Graphics: PR: CAP 3508. Additional publishing software, introducing presentation techniques, CD-ROM, and more advanced presentations.

CGS 3582

Advanced Techniques and Desk Top Publishing: PR: CAP 3581. Advanced presentation schemes with the introduction and use of hypertext, sound, and animation. Desk Top Publishing. AS 3(3.0)

CGS 4140

Computerized Health Information Systems: PR: CGS 3000 or equivalent. Analysis of computerized health information systems, with emphasis upon the design and implementation phases. On-site visitations of several local computerized health information systems. Not open to Computer Science majors.

CGS 4453

Introduction to Robot Vision: Pin hole camera and eye, perspective and orthographic projections, edges, regions, binary images, recognizing human faces, mobile robots, texture, illusions, robot arm kinematics.

CGS 4630

Introduction to Artificial Intelligence: PR: COP 3530 and COT 3100. Current methods in Al: knowledge-based systems, representation, inference, planning, natural language. Programming in Lisp or Prolog required.

CGS 5415

Computer Vision: PR: COP 3530. Image formation, binary vision, region growing and edge detection, shape representation, dynamic scene analysis, texture, stereo and range images, and knowledge representation

CGS 5610

Machine Learning: PR: CGS 4630 or C.I. Origin/evaluation of machine intelligence; machine learning concepts and their applications in problem solving, planning and "expert systems;" symbolic role of human and computers.

CGS 5635

Artificial Intelligence and Prolog: PR: CGS 4630. Analysis of deductive databases, applications of logic programming to knowledge representation and "expert systems."

CGS 5636

Advanced Artificial Intelligence: PR: CGS 4630. Al theory of knowledge representation, "expert systems," memory organization, problem solving, learning, planning, vision, and natural language.

CGS 5725

Computer Graphics Systems I: PR: COP 3530 or equivalent. Architecture of graphics processors; display hardware; principles of programming and display software; problems and applications of graphic systems.

CHI 1120

Elementary Chinese Language and Civilization I: Designed to initiate the student to the major language skills; listening, speaking, reading and writing.

CHI 1121

Elementary Chinese Language and Civilization II: PR: CHI 1120 or equivalent.

CHM 1020

Concepts in Chemistry: PR: MAC 1104 or MGF 1203. Concepts will be examined to provide insight into the significant role that chemistry plays in our culture. Intended as a general education course. AS 3(3,0)

CHM 1032

General Chemistry: PR: MAC 1104, MGF 1203 or equivalent. An introductory study of the fundamental concepts of chemistry, primarily oriented toward Biology Education COH and PA and Engineering Technology majors.

CHM 1032L

General Chemistry Laboratory: CR: CHM 1032. An introductory study of physical and chemical properties of elements and compounds.

CHM 2045

Chemistry Fundamentals I: PR: High school chemistry or CHM 1032. Basic physical theory of chemical reactivity, atomic structure, chemical bonding, periodicity, stoichiometry, equilibria, thermodynamics, and kinetics.

CHM 2045H

Honors Chemistry Fundamentals I: PR: Admission to University, Honors Program and high school chemistry. Same as CHM 2045 with honors-level content.

CHM 2046

Chemistry Fundamentals II: PR: CHM 2045. Continuation of CHM 2045.

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AS 4(4,1)

AS 3(3,0)

AS 1(0,3)

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AS 4(3.3)

AS 3(3,0)

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AS 1(1.0)

AS 3(3.0)

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CHM 2046H

Honors Chemistry Fundamentals II: PR: 2045H. Same as CHM 2046 with honors-level content. AS 1(0,3) CHM 2046I

Chemistry Fundamentals Laboratory: PR: CHM 1032 or CR: CHM 2046. Illustration of chemical principles and introduction to the techniques of inorganic and physical chemistry.

CHM 2205

Introduction to Organic and Biochemistry: PR: CHM 1032 or equivalent. An introduction to organic chemistry, stressing the chemistry of functional groups and a survey of the biochemistry of proteins, carbohydrates, lipids, and nucleic acids.

CHM 3120C

Analytical Chemistry: PR: CHM 2046, 2046L. Laboratory practices of classical and instrumental analysis. Choice of preferred analytical methods and techniques is emphasized through applications involving both inorganic and organic systems.

CHM 3210

Organic Chemistry I: PR: CHM 2046. Theory and applications of organic chemistry: structure, bonding, kinetics, thermodynamics, reaction mechanisms, synthesis, and stereochemistry. Structure elucidation via spectrometic techniques.

CHM 3211

Organic Chemistry II: PR: CHM 3210. Continuation of CHM 3210.

CHM 32111

Organic Laboratory Techniques I: PR: CHM 3210. An introduction to the laboratory techniques of organic chemistry, including the preparation, reaction, and analysis of organic compounds.

CHM 3212L

Organic Laboratory Techniques II: PR: CHM 3211 and 3211L. Open-end laboratory to develop synthesis techniques and structure elucidation skills.

CHM 3410

Physical Chemistry I: PR: CHM 2046, PHY 3049, and MAC 3312. Rigorous treatment of atomic and molecular structure, thermodynamics, kinetics, and chemical bonding.

CHM 3411

Physical Chemistry II: PR: CHM 3410. Continuation of CHM 3410.

CHM 3411L

Physical Chemistry Laboratory: CR: CHM 3411. Classical as well as modern instrumental techniques coupled with computer data processing to measure physical properties and determine atomic and molecular Parameters.

CHM 4130C

Advanced Analytical Laboratory Technique: PR: CHM 3211, CHM 3120C and CHM 3411. A lecturelaboratory course designed to give in-depth coverage to modern methods of analysis including electrochemistry, spectroscopy, and separation techniques.

CHM 4220

Advanced Organic Chemistry I: PR: CHM 3211. Theoretical and physical organic concepts of organic systems from the perspective of modern structural theory, thermodynamics and kinetics.

CHM 4221

Advanced Organic Chemistry II: PR: CHM 3211 and CR: CHM 3410. A survey of organic reaction mechanisms and their application to synthetic chemistry.

CHM 4610

Inorganic Chemistry: CR: CHM 3411. A discussion of descriptive inorganic chemistry based on various bonding theories, thermodynamics, and kinetics.

CHM 4610L

Inorganic Chemistry Laboratory: PR: CHM 4610. A study of physical and chemical properties and synthetic techniques in Inorganic Chemistry.

CHM 5235

Applied Molecular Spectroscopy: PR: CHM 3120C and CHM 3211. Determination of chemical structure through interpretation of UV. IR, NMR and Mass Spectra.

CHM 5305

Applied Biological Chemistry: PR: CHM 3211. The identification from plants, synthesis, assessment of bioactivity, and design of pharmaceuticals and agrochemicals, as well as the impact of biotechnology in the chemical industry.

CHM 5450

AS 3(3,0) Polymer Chemistry: PR: CHM 3211. An introduction to the chemistry of synthetic polymers. Synthetic methods, polymerization mechanisms, characterization techniques, and polymer properties will be considered.

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AS 5(5,0) AS 5(3.6)

AS 4(3,3)

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AS 3(3,0) AS 2(0,6)

AS 2(0,6)

AS 4(3.1)

AS 3(3,0)

AS 2(0.6)

AS 4(2,6)

AS 3(3.0)

AS 3(3,0)

AS 3(3,0)

CHM 5451

Polymer Chemistry Laboratory: PR: CHM 3211 AND CHM 3410. A laboratory course designed to introduce students to the major polymerization mechanisms. Polymer synthesized in the laboratory will be characterized using modern instrumental methods.

CHM 5580

Advanced Physical Chemistry: CR: 3411 and PR: MAC 3313. Selected topics of thermodynamics, kinetics, guantum mechanics, and structure.

CHM 5711

The Chemistry of Materials: PR: CHM 3211, CHM 4130C, and CHM 3411. Structure and properties of chemical products, with an emphasis on the correlation between molecular form and the functional properties deemed desirable for the product.

CHS 1440

Fundamentals of Chemistry for Engineers: PR: One year of high school chemistry or CHM 1032. Basic concepts of chemistry, with emphasis on problem solving and engineering applications. Atomic and molecular structure, states of matter, stoichiometry, equilibria, electrochemistry and thermodynamics.

CHS 3501

Introduction to Forensic Science: Intended for majors and non-majors to provide an overview of the specialty areas in Criminalistics (crime lab).

CHS 3505

Forensic Microscopy: PR: CHM 2046 or C.I. The study of the polarized light microscope and its use in the identification and comparison of trace evidence.

CHS 3511

Trace Evidence: PR: CHS 3505. An advanced study of the techniques used to identify and compare trace evidence.

CHS 3531

Forensic Analysis of Controlled Substances: PR: CHM 3120C. The study of the presumptive tests, isolation, and instrumental techniques used in identification of controlled substances.

CHS 4110C

Nuclear and Radiochemistry: PR: CHM 3120C and CR: CHM 3411. A lecture-laboratory course examining theories of fundamental particles, the chemical effects of nuclear transformations and the special uses of isotopes.

CHS 4200

Concepts in Industrial Chemistry: PR: CHM 3410, An introduction to industrial practices, emphasizing the application of chemical principles in the development of a commercial process or product.

CHS 4591

Forensic Science Internship: PR: C.I. Credit for full-time work (15 weeks: 600 hours) for a professional forensic laboratory. This course may be repeated for credit.

CHS 5241

Chemical Dynamics II: PR: CHS 5240. Continuation of CHS 5240.

CHS 5250

Chemical Synthesis I: PR: CHM 3211, and 3411; or equivalent. Survey of chemical synthesis from the standpoint of planning a synthesis, intermediates, special techniques, protection of functional groups, experimental design and optimization of reaction conditions.

CIS 4321

Data Processing Systems Analysis and Design: PR: Computer Science Major or C.I. and COP 3530. Data organization; physical storage; database system architecture. Students participate in the design of a data processing system.

CIS 4322

Data Processing Systems Implementation: PR: Computer Science Major or C.I. and CIS 4321. System implementation project. Students experience the task of implementing a large computing system.

CIS 5101

Computational Techniques in Management Information Systems: PR: COP 4710. Computers in management information systems; analysis, design approaches, processing methods and data management; use of state-of-the-art software in design and development.

CJT 3820

Security Administration: Discussion of modern security administration and the security-law enforcement interface, emphasizing a systems approach and utilizing the design of a security plan for a plant.

C.IT 3821

Practical Security Applications: An examination of basic security principles applied to practical specific security situations encountered in the Central Florida area.

CJT 3842

Special Security Problems: Review and application of basic security principles to retail security, transportation/cargo security, utility security, computer security, and other special security situations.

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AS 3(2,3)

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AS 3(3.0)

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HPA 3(3.0)

AS 2(2,0)

CLA 3850

Classical Mythology: Myths of the Greeks & Romans studied through excerpts from ancient sources and experienced through works of art, literature, and music.

CLA 3851

Comparative Mythology: Common themes found in the myths of various cultures; theories of their origins, meaning and value in human experience.

CI P 3003

Psychology of Adjustment: PR: PSY 2013. Psychological principles of adjustment; application of psychology to problems in living. Designed for non-majors. AS 3(3.0)

CLP 3143

Abnormal Psychology: PR: PSY 2013. Classification, causation, and treatment of deviant patterns of behavior.

CLP 3302

Clinical Psychology: PR: PPE 3003 and CLP 3143. An overview of approaches to psychopathology, methods of clinical assessment, and various approaches to individual and group counseling.

CLP 3413

Contemporary Behavior Therapy: PR: CLP 3143. Emphasis on the underlying principles and the specific intervention procedures which are utilized in contemporary behavior therapy, including treatment strategies for particular behavior disorders.

CLP 4134

Childhood Psychopathology: PR: PSY 2013, CLP 3143, DEP 3004, PPE 3003. An in-depth survey of the prevalence, classification, symptoms, diagnosis, consequences and treatments of disorders of infancy, childhood and adolescence.

CLP 4402C

Psychology of Physical Disability: PR: PSY 2013. Psychological aspects of physical disability and rehabilitation. Psychological adjustment, body-mind relationships, family and societal dynamics relative to therapeutic intervention.

CLP 5166

Advanced Abnormal Psychology: Consideration of classification, causation, management and treatment of emotional disorders. Review of theories and research in the field. Lecture/Laboratory.

CMC 4240

Corporate/Institutional Video: PR: RTV 3200, RTV 3260 (RTV 3260 may be taken concurrently). Preparation of non-broadcast corporate/institutional video programs including planning, budgeting, production, and evaluation.

COM 3011

Communication and Human Relations: Introduction to semantics: symbols and meaning and the relationship with human behavior.

COM 3110

Business and Professional Communication: PR: SPC 1600 or C.I. Theoretical and practical training in effective presentational speaking for business and professions.

COM 3120

Organizational Communication: A study of communication functions and problems within the contexts of hierarchies.

COM 3311

Communication as a Behavioral Science: Basic principles of the behavioral science approach to the study of contemporary communication.

COM 3701

Humor in Communication: Designed for upper division organizational and interpersonal communication majors, course probes the involvement of humor in language, message transmission, cognition, and social functioning.

COM 4461

Intercultural Communication: Study of variables affecting messages and participants in intercultural contexts.

COM 4462

Conflict Management: The study of communication in everyday conflicts.

COP 2500

AS 3(3,0) Computer Science I: PR: Knowledge of Modula-2, college algebra and college trigonometry. Techniques of algorithm development; structured programming concepts; algorithms for searching and sorting procedures; computer experience with a procedure-oriented language.

COP 2501

Computer Science II: PR: COP 2500. Continuation of COP 2500; recursion; simple data structures; program verification; continued experience with a procedure-oriented language.

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COP 3120

Programming in COBOL: PR: CGS 3100 or C.I. COBOL programming fundamentals, concepts of sequential, indexed, and random files. Programming projects. Not open to Computer Science majors. AS 3(3,0)

COP 3200

Computer Programming: PR: College algebra and trigonometry or equivalent. Problem definitions, algorithms, flow charts, digital computer programming using a higher level language (FORTRAN). Not open to Computer Science Majors.

COP 3210

Pascal Programming Language: Lecture and programming experience in Pascal. COP 3220

C Programming Language: PR: Knowledge of a procedural high-level programming language. Lecture and programming experience in C.

COP 3230

ADA Programming Language: PR: Knowledge of a procedural high-level programming language. Lecture and programming experience in ADA.

COP 3341

UNIX: PR: Knowledge of the C programming language. Lecture and programming experience in UNIX. AS 3(3,0) COP 3400

Assembly Language: PR: COP 2501 or equivalent programming experience. Computer structure, number systems, data representation, arithmetic and logic instructions, addressing schemes, looping techniques, sequential input/output, subroutines, macros, and other topics. AS 3(2.1)

COP 3402C

Computer Systems Concepts/Programming: PR: COP 3400C, Data Structures and Knowledge of C. Linker, loader, assembler design and development. Detailed examinations of one computer's operating system and its associated architecture. Advanced topics in assembly language, including file input/output. COP 3530 AS 3(3,0)

Computer Science III: PR: COP 2501 and COT 3100. Design and analysis of implementation techniques of abstract data types, such as stacks, queues, linear lists, arrays, trees, and heaps.

COP 3701

Data Base Handling: PR: Database Concepts. The relational model conceptual design principles, requirement analysis. Normal forms in relational database, theory, report generation. AS 1(1.0)

COP 3703

Database Concepts: PR: CGS 1060C. The relational model using current software, logical and physical data structures, data concepts and modeling conceptual database design. Implementation and physical design relational database language fundamentals.

COP 3712

Advanced Database Handling & Programming: PR: COP 3701. Advanced programming techniques, low level functions, database in a network environment, performance issues, advanced report generation, and data security.

COP 4020

Programming Languages I: PR: COP 3530. Survey of programming languages (LISP, MODULA, SIM-ULA, SMALLTALK, ADA, CLU). Basic concepts underlying programming languages: data typing, data abstraction, binding, parameter evaluation, concurrency, functional programming.

COP 4124

AS 3(3,0) COBOL Environment: PR: Computer Science core. Basic and advanced features; creation of user libraries; system utilities; file processing; sub-program linkage; programming efficiencies; compiler study; assembly interfaces, and JCL.

COP 4600

AS 3(3,0) Programming Systems: PR: COP 3402 and COP 3530. The function and organization of operating systems. Design and implementation considerations regarding operating systems, compilers, assemblers and loaders.

COP 4710

Databases: PR: COP 3530. Basic concepts of databases, I/O processing, file organization and access, study of selected database systems, database project.

COP 5021

Programming Languages II: PR: COP 4020 and COT 4210. Introduction to compiler construction, parsing, parser generators, attributed grammars and the implementation of block structures and recursion. Students write a high-level language translator.

COP 5570

Software Tools: PR: COP 4600 and COP 5021. Systems programming languages, concurrent programming, design and implementation of software development/maintenance tools. A large programming project is required.

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COP 5611

Operating System Design Principles: PR: COP 4600, Structure and functions of operating systems, process communications techniques, high-level concurrent programming, virtual memory systems, elementary queueing theory, security, distributed systems, case studies.

COP 5711

Principles of Data Base Systems: PR: COP 4710. Physical data organizations, popular data base systems, data models, reorganization, security, recovery, concurrency, distributed data base, data base machines.

COT 3100

Introduction to Discrete Structure: PR: MAC 3311 and knowledge of a programming language. Logic, sets, functions, relations, combinatorics, graphics, Boolean algebras, finite-state machines, Turing machines, unsolvability, computational complexity.

COT 4110

Tools for Algorithm Analysis: PR: COP 3530 and COT 3100. Tools from discrete and continuous mathematics for analyzing complexity of algorithms. Order notation use and manipulation.

COT 4210

Discrete Computational Structures: PR: COT 3100, MAC 3312, Review of discrete structures, introduction to automation theory, computational complexity, analysis of algorithms, computability theory, and formal languages.

COT 4500

Numerical Calculus: PR: COP 2501 or CGS 3422 and MAC 3312. Numerical methods for finding roots of nonlinear equations, solutions of systems of linear equations, and ordinary differential equations.

COT 5310

Formal Languages and Automata Theory: PR: COP 4020 and COT 4210. Classes of formal grammars and their relation to automata, normal forms, closure properties, decision problems. LR(K) grammars.

COT 5405

Design and Analysis of Algorithms: PR: COT 4210 and COT 4400. Classification of algorithms, e.g., recursive, divide-and-conquer, greedy, etc. Data Structures and algorithm design and performance. Time and space complexity analysis.

COT 5507

Computational Methods/Applications: PR: COT 4500. Computational solution techniques for algebraic equation, ODE and PDE Models of applications selected from science, engineering, applied mathematics, and computer science.

COT 5510

Computational Methods/Linear Systems: PR: COT 4500 and MAS 3113. Mathematical models for linear systems, linear programming, the simplex method, integer and mixed-integer programming, introduction to nonlinear optimization and linearization.

CPO 3034

Politics of Developing Areas: Comparative analysis of theories, problems and politics of development in Third World nations.

CPO 3103

Comparative Politics: Government and politics in selected nations, with emphasis upon comparative analysis of contemporary problems, politics, political culture, behavior, and institutions.

CPO 3104

Politics of Western Europe: PR: POS 2041 or C.I. An examination of the political and economic dynamics of Western Europe in the post-1945 era.

CPO 3132

Introduction to Canadian Studies: A multi-disciplinary approach to the study of Canada, its people, culture, government, and economy.

CPO 3403

Politics of the Middle East: PR: POS 2041 or C.I. An examination of the dynamics of Middle East politics, including both regional and international dimensions.

CPO 3614

Politics of Eastern Europe: PR: POS or C.I. An examination of the political and economic dynamics of Eastern Europe in the post-1945 era.

CPO 4062

Comparative Judicial Process: Study of courts and judges in cross national context. Focus upon judicial recruitment, decisional patterns, and policy outcomes.

CPO 4123

Government and Politics of Great Britain: A survey of British government, society, politics and institutions, emphasizing parliamentary traditions. Britain's foreign policy and European role will be discussed.

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CPO 4133

Government & Politics of Canada: Examines the origins and development of Canadian government. Focuses on the functioning of federalism, nationality politics, foreign policy, and relations with the United States.

CPO 4303

Comparative Latin American Politics: Comparative analysis of politics, society and culture in Latin America and selected countries of the region.

COP 4643

Government and Politics of the Soviet Union: Study of the origins, institutions, and functioning of the Soviet system, including the role of the Communist party and its influence on domestic and foreign policy formation and implementation.

CRT 4931

Current Topics in Technology: PR: C.I. Study of recent state-of-the-art computer related topics from recognized electronics and computer oriented technical journals and texts. Requires written and verbal communication.

CRW 1001

Imaginative Writing for Non-English Majors: An introduction to imaginative writing for non-English majors. Students will explore a variety of traditional and non-traditional forms of imaginative writing. AS 3(3.0)

CRW 3003

Creative Writing for English Majors: PR: ENC 1102 and English or English Ed. major, or C.I. An exploratory course in the several types of creative writing; group analysis of original writing; critical reading of established authors.

CRW 3100

Fiction Writing: PR: CRW 3000. English majors in creative writing specialize in fiction writing; advanced group analysis and criticism of work produced by individual students.

CRW 3300

Poetry Writing: PR: CRW 3000. Practice in writing poetry; group analysis and criticism of work produced by individual students.

CRW 3310

Structure of Verse: PR: ENC 1102. Intensive study of the structural characteristics of English, poetry, metrical systems, rhyme, scansion, and poetic rhetorical devices.

CRW 3410

Writing Scripts: PR: CRW 3000 and Grammar Proficiency Exam. Theory and practice of writing scripts for film and TV.

CRW 3540

Literary Magazines: PR: CRW 3000. Examination of fiction and poetry trends in current literary magazines, identifying editorial policies in publication of contemporary literature.

CRW 4114

History of Prose Style: PR: ENC 1102. A review of English prose style from 1611 to 1960. **CRW 4122**

Advanced Fiction Writing Workshop: PR: CRW 3100. Intensive writing practice in fiction. Peer critique and group discussion of original manuscripts. May be repeated once for credit.

CRW 4123

Science Fiction Writing: Study of science fiction literature and writing of original science fiction stories. Workshop format with critique of writing assignments.

CRW 4320

Advanced Poetry Writing Workshop: PR: CRW 3300. Intensive writing practice in poetry. Peer critique and group discussion of original manuscripts. May be repeated once for credit.

CRW 4420

Advanced Scriptwriting Workshop: PR: CRW 3410. Intensive writing practice in writing scripts. Peer critique and group discussion of original manuscripts.

CRW 5932

Teaching Creative Writing: PR: C.I. Creative writing practicum.

CWR 3201

Engineering Fluid Mechanics: CR: EGN 3343. Fundamentals of fluid mechanics with hydraulic applications: fluid properties, hydrostatics, dimensional analysis, energy, momentum, continuity, and steady flow.

CWR 4101C

Hydrology: PR: STA 3032; EGN 3353, Hydrological cycle, probabilistic forecasting, rainfall excess meteorology, groundwater, storm-water runoff, flood routing and design applications.

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CWR 4203C

Hydraulics: PR: CWR 3201 (Engineering Fluid Mechanics). Continuation of CWR 3201 with emphasis on piping networks, pumps, and hydraulic systems. Laboratories with civil and environmental engineering applications.

CWB 5205

Hydraulic Engineering: PR: CWR 4101C and CWR 4203C. Concepts of fluid mechanics and hydrodynamics applied to natural and man-made flow of intent to civil and environmental engineering.

CWR 5545

Water Resources Engineering: PR: CWR 4101C, CWR 4201C. Systems identification and solution to complex water allocation problems, and other hydraulic engineering designs and operations using economic analysis and operations research techniques.

DAA 2200

Theatre Dance I: Fundamentals of Classical Ballet; includes practical class work as well as Dance History lectures.

DAA 3000

Theatre Dance: PR: DAA 2200 & 3201 or C.I. Specialized study of Theatre Dance styles of the 1920s to the 1980s. Demonstration and performance of students highlighting segments of Broadway shows. May be repeated for credit.

DAA 3100

Theatre Modern Dance: PR: DAA 2200 & 3201 or C.I. Exploration of form, style, and technique in creative movement. Includes practical class work and history lectures.

DAA 3201

Intermediate Classical Ballet: PR: DAA 2200 or C.I. In-depth study of classical ballet technique, including principles, theory, and practice technique.

DDA 3500

Intermediate Jazz Dance: PR: DAA 2200 or C.I. Introduction of the basic movements of American Jazz Dance, including practical class work as well as Jazz Dance history.

DAA 3600

Theatre Tap Dance: Exploration of form, style, and technique in the basic fundamental movements of tap dance. May be repeated for credit.

DAA 4501

Advanced Jazz Dance: PR: DAA 2200 & DAA 3500 or C.I. In-depth study of Jazz Dance as a major style of dance, using theory and practice in jazz technique.

DAA 4710

Theatre Dance Choreography and Performance: PR: By audition. Students will create and present a piece choreographed and performed by other dancers in concert. May be repeated for credit.

DAE 3300

Dance Techniques: Analysis of creative dance and movement techniques as they relate to the teaching of physical education.

DAE 3370

Dance and Rhythmics: The development of skill proficiency and instructional strategies in rhythmics and dance techniques, and fundamental movement patterns for grades K-12.

DEP 3004

Developmental Psychology: PR: PSY 2013. The effects of genetic, psychological, maturational and social factors on behavior throughout the life cycle.

DEP 3202

Psychology of Exceptional Children: PR: PSY 2013. Psychological problems of exceptional children. including diagnosis, associated emotional problems, effects of institutionalization, special class placement, attitudes, and appropriate intervention methods.

DEP 3212

Psychological Approaches to Mental Retardation: PR: PSY 2013. The problems of mentally retarded citizens, including diagnosis, environment versus heredity, legal restrictions, institutionalization, as well as methods of behavioral remediation.

DEP 3464

Psychology of Aging: PR: PSY 2013. An examination of basic psychological processes related to the aging process, with emphasis on the applied implications of changes in perceptual-motor, social emotional and cognitive-intellectual function.

DEP 5057

Developmental Psychology: PR: Graduate admission or C.I. Psychological aspects of development including intellectual, social, and personality factors.

AS 3(2.2)

ED 3(2,1)

ED 3(1.2)

AS 3(3.0) AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(2,2)

EN 3(3.0)

EN 3(3.0)

EN 3(2.2)

AS 3(2.2)

AS 3(2.2)

AS 3(2,2)

AS 3(2.2)

AS 3(2.2) AS 3(2,2)

AS 3(2.2)

FAB 3703

Principles of Behavior Modification: PR: EXP 3404, An examination of the control of behavior through applications of principles and theories of learning. Examples are drawn from clinical and social psychology and from child rearing. Lecture/Practicum.

EAB 3704

Behavioral Self Control: PR: PSY 2013. Application of behavioral and biofeedback techniques to selfregulation.

EAB 5765

Applied Behavior Analysis with Children and Youth: PR: DEP 5057 and EXP 5445 or C.I. Advanced survey of principles, procedures, and techniques of applied behavior analysis, with special attention to applications with children and youth.

EAS 3010

Fundamentals of Flight: PR: PHY 3048; CR: MAC 3313. Principles of the engineering sciences are used for a concise treatment of topics in aerodynamics, performance, stability and control, astronautics, and propulsion systems.

EAS 3101

Aerodynamics I: PR: EAS 3010. Theory of incompressible flow over airfoils and finite wings including potential flow concepts and classical methods. Applications of theory to the aerodynamic design of flight vehicles.

EAS 3530

Space Systems: PR: PHY 3101. Engineering aspects of current space flights, mission goals, the space environment, vehicle characteristics, performance, and flight paths. Mission support: communications, computers, launch equipment.

EAS 3800C

Junior Aerospace Laboratory I: PR: PHY 3049L. Corequisite: EAS 3010. Theory, calibration and use of instruments. Measurement techniques, analysis of data, report writing. Subsonic flow, material properties.

EAS 3810C

Junior Aerospace Laboratory II: PR: EAS 3800. Theory, calibration, and use of instruments. Measurement techniques, analysis of data, report writing. Supersonic flow, vibrations.

EAS 4105

Flight Mechanics: PR: EAS 3101, EML 4312. Design and analysis of performance, static stability, dynamic stability, and control of aircraft.

EAS 4134

High-Speed Aerodynamics: PR: EAS 3101. Continuation of EAS 3101. Normal and oblique shock waves, nozzles and wind tunnels, methods of analyzing compressible flow about airfoils, wings, and bodies. Viscous boundary layers and applications to the design process.

EAS 4200

Flight Structures: PR: EGN 3420, EGN 3331, Load analysis and fundamental design of structural components of aircraft and space vehicles. Classical and modern computer techniques using fatigue analysis and finite element methods.

EAS 4210

Space Structural Dynamics: PR: EAS 4200, EML 4312 or C.I. Analytical mechanics and linear system theory. Modern approach to control of lumped parameter systems. Review of space structure applications. Use of finite element methods.

EAS 4300

Aerothermodynamics of Propulsion Systems: PR: EAS 4134. Fundamental analysis and design considerations of propulsion systems. Turbojets, ramjets and rockets.

FAS 4400

Spacecraft Attitude Dynamics: PR: EML 4312. Kinematics and dynamics of rigid and multibody spacecraft rotational motion. Attitude control with momentum exchange activitors and thrusters.

EAS 4400

Spacecraft Attitude Dynamics and Control: PR: EML 4312. Kinematics and dynamics of rigid and multibody spacecraft rotational motion. Attitude control with momentum exchange activitors and thrusters

EAS 4505

Orbital Mechanics: PR: EGN 3321, MAP 3302. Two-body problem, orbital equations, orbital transfer, earth satellite operation.

EAS 4700C

Aerospace Design I: PR: EAS 3810. Application of the design process to the team solution of a stateof-the-art problem. Airplanes and space vehicles, systems and devices are considered.

EAS 4710C

Aerospace Design II: PR: EAS 4700. Continuation of the design process in the team building and testing of a prototype/model of an airplane, spacecraft, system or device.

AS 4(3.2)

AS 3(3.0)

AS 3(3.0)

EN 4(4,0)

EN 3(3.0)

EN 3(3.0)

EN 2(1,3)

EN 2(1,3)

EN 3(3,0)

EN 3(3.0)

EN 3(3,0)

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EN 3(3.0)

EN 3(3,0)

EN 3(3.0)

EN 3(3,0)

EN 4(2,5)

EN 4(2,5)

FAS 5123

Intermediate Aerodynamics: PR: EAS 4134, CR: EML 5060, Aerodynamic characteristics of airfoils. finiate wings, waves, wing-body combinations, viscous flow and flow instabilities, Airfoil design,

FAS 5157

V/Stol Aerodynamics and Performance: PR: EAS 4105, CR: EML 5060, Momentum theory, blade element theory, hover and forward flight, stability, aeroelasticity.

FAS 5302

Direct Energy Conversion: PR: EML 3101 and PHY 3101. Direct methods of energy conversion: particular emphasis on fuel cells, thermoelectrics, thermionics, solar energy, photovoltaics, and magnetohydrodynamics. Analysis and systems design.

EAS 5315

Rocket Propulsion: PR: EAS 4134 or EML 4703. Analysis and performance of rocket motors; selection and thermochemistry of chemical propellants: liquid and solid propellant rockets.

ECM 5135

Engineering Math Analysis I: PR: MAP 3302. Topics in advanced engineering mathematics, including systems of differential equations, phase plane, linear algebra, and vector differential calculus.

ECM 5741C

Microcomputer-based Monitoring and Control Systems: PR: EEL 3342; EEL 4767C or C.I. Machine language programming; software development aids; systems design; interfacing considerations. BA 3(3,0)

ECO 2013

Principles of Economics I: An introduction to macroeconomics, including an overview of the market economy; national income, employment, and price level determination, stabilization policies, and international economics.

ECO 2013H

Honors Principles of Economics I: PR: Open to Honor Students only. Same as ECO 2013 with honors-level content.

ECO 2023

Principles of Economics II: The determination of prices in a market economy; their role in allocating consumer and producer goods and in distributing incomes, including attempts to improve market efficiency through public policy.

ECO 3101

Intermediate Price Theory: PR: ECO 2023 and ECO 2013. Theoretical study of the behavior of households, firms, and the markets in which they operate with issues and applications.

ECO 3203

Aggregate Economic Conditions Analysis: PR: ECO 2013 and ECO 2023. A study of the measurement, analysis, and control of aggregate economic activity.

ECO 3223

Money and Banking: PR: ECO 2013. Nature of money, commercial banking system, and monetary theory, and their relationship to the level of economic activity and activities of the Federal Reserve and U.S. Treasury.

ECO 3401

Mathematical Economics I: PR: ECO 2013 and 2023 and MAC 1104. The study of economic processes expressed as equations and economic systems as mathematical models.

ECO 3411

Quantitative Methods and Business Decision Analysis: PR: Junior standing, ACG 2071, ECO 2013. 2023, and ECO 3401. The use of statistical methods as scientific tools in the analysis of economics and business problems.

ECO 3622

American Economic History: PR: ECO 2013 and 2023. Survey of the history of American economic development. Involves application of economic analytical tools to American history.

ECO 3703

International Economics: PR: ECO 2023 and ECO 2013. Fundamental principles of international trade and foreign exchange, including the balance of payments and problems of foreign economic policy.

ECO 3723

International Commercial Policy: PR: ECO 2013 and ECO 2023. Presents the fundamentals of international commercial policy, with special emphasis on U.S. trade policy since WW II.

ECO 4303

History of Economic Thought: PR: ECO 2023 and ECO 2013. A study of the principal ideas of the major contributors to the development of economic thought.

ECO 4412

Economic Statistics and Econometrics: PR: ECO 3411. Concepts and methods of developing, analyzing, and interpreting measures of economic activity, and business and economic change.

BA 3(3.0)

BA 3(3.0)

BA 3(3.0)

BA 3(3,0)

EN 3(3.0)

EN 3(3.0)

EN 3(3.0)

EN 3(3.0)

EN 3(3.0)

EN 3(2.3)

BA 3(3,0)

BA 3(3.0)

BA 3(3,0)

BA 3(3.0)

BA 3(3.0)

BA 3(3.0)

BA 3(3.0)

BA 3(3.0)

ECO 4504

Economics of the Public Sector: PR: ECO 2023. A study of fiscal institutions and decision-making, and how government budgetary policy (spending, taxing, borrowing, and debt management) affects the economy and its citizens.

ECO 5005

Economic Concepts: PR: Acceptance into the graduate program. Introduction to micro and macro economic analysis.

FCO 5415

Statistics for Business and Economics: PR: Acceptance into the graduate program and MAC 3233. Statistical theory and problems relating to business and economics, including time series and correlation theory, index number theory and statistical inference.

ECP 3004

Seminar on Current Economic Topics: PR: ECO 2013 and 2023. Current economic problems and issues. Emphasis on the social and ethical aspects of economic policy and the interrelatedness of economic and non-economic activities.

ECP 3203

Contemporary Labor Economics: PR: ECO 2023 and ECO 2013. The analysis of labor problems and issues in a dynamic contemporary economy through the interaction of the four major institutions: households, firms, government, and unions.

ECP 3433

Transportation Economics: PR: ECO 2023 and ECO 2013. Economic characteristics and governmental regulation of public carriers. Consideration of competitive relations between modes of transportation and criteria for public investment in transportation and criteria of public investment in transportation systems.

ECP 4403

Business, Government, and Industrial Organizations: PR: ECO 2023 and ECO 2013. A study of the performance of industries representative of various types of market structure and practices, as well as the public policies affecting these industries.

ECP 4603

Urban and Regional Economic Problems: PR: ECO 2023 and ECO 2013. Analysis of the location, organization and problems of urban and regional economic activities.

ECP 4703

Managerial Economics: PR: Junior standing. ACG 2071 or ACG 2023, ECO 2023, ECO 2013 and ECO 3411. The uses of economic analysis in economic decision-making and business policy formulation

ECS 4003

Comparative Economic Systems: PR: ECO 2023 and ECO 2013. An analysis of the fundamental institutions of the American economic system with those of socialist and command economics. Emphasis is placed on performance criteria and economic modeling.

ECS 4013

Economic Development: PR: ECO 2023 and ECO 2013. The study of problems, theories, and issues of economic development with reference to the third world.

FCS 4231

Japanese Prosperity: A Study of Human Resource Development: PR: Honors Students. A study of the rapid economic transformation of the Japanese economy with a special focus on the role of human resource development.

ECS 4303

Economics of European Integration: PR: ECO 2013 and ECO 2023. Presents the development of the European Community, with emphasis on the characteristics of the Single European Act (EC '92).

EDE 3942

Internship I (Elementary): PR: EDG 4321, RED 3012, MAE 3810 AND 3811 or MAE 3112. Student teaching assignment in an elementary school under the supervision of a certified classroom teacher.

EDE 3943

Internship I (K-12): PR: Except. Ed. Majors; EDG 4321; RED 3012; MAE 3112, Student teaching under the supervision of a certified teacher. Half in elementary, half in secondary.

EDE 4943

ED 7-12(0.35) Internship II (Elementary): PR: EDE 3942 or EDE 3943. Student teaching in an elementary school under the supervision of a certified classroom teacher. Scheduled concurrent seminars.

EDE 5541

Individualized Instruction in the Elementary School: PR: Regular Certificate or C.I. Study of basic philosophy, organizational patterns, techniques, materials, and activities related to individualizing instruction in the elementary school classroom.

BA 3(3,0)

BA 3(3.0)

BA 3(3.0)

BA 3(3.0)

BA 3(3,0)

BA 3(3.0)

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BA 3(3,0)

BA 3(3.0)

BA 3(3.0)

ED 3-6(0.16)

ed 3-6(0.16)

ED 3(3,0)

ED 3(3.0)

ED 3(3.0)

ED 3(3.0)

ED 3(3.0)

Introduction to Education: An overview of the teaching profession and contemporary issues affecting teachers and students. For students considering a career in any area of professional education.

EDE 2240

EDE 2005

Introduction to Applications of Technology in Education: Classroom applications of instructional media including computers.

EDE 3337

Individual Adjustment in Education: PR: Education major, Junior standing, Individual assessment and exploration of careers in education. Includes field study.

EDF 3603

Analysis of Educational Foundations: PR: Junior standing or C.I. Analysis of and participation in general and specific dimensions of teaching with socio-economic, historical and philosophical factors emphasized.

EDF 4214

Classroom Learning Principles: PR: EDF 2xxx, Junior standing or C.I. Principles of learning as applied to classroom teaching situations, with emphasis on student development, behavior, self-concept and motivation.

EDF 4286

Applications of Technology in Education: Classroom applications of instructional media, including computers. Includes experiences with equipment, commercial and teacher-made media, and their uses, **FDF 4604**

ED 3(3.0) Overview of Education: A brief analysis of the American educational system, focusing on social political, economic, and intellectual development through an internal atmosphere of interaction and discussion.

EDF 5245

Preparation and Management of Classroom Instruction: PR: C.I. Study of strategies for instructional planning and classroom management that result in optimum learning.

EDG 4321

Teaching Strategies I: EDF 2xxx, Junior Standing or C.I. Analysis of the learning environment: emphasis on planning for instruction, skill development, and measurement and evaluation.

EDG 4324

Teaching Strategies II: PR: EDG 4321 and EDF 4214. Varieties of learning and teaching styles, appropriate methods of teaching thinking skills, problem solving, reading, and writing across the curriculum.

EDG 4941

Directed Field Experience: PR: Approval of Professional Laboratory. Field experience in an appropriate educational setting under the direction of a supervising teacher and/or university supervisor.

EDG 5325

Techniques for the Developing Professional in Education: PR: C.I. Analysis, study, development, and use of techniques for enhanced instruction in the educational setting.

EDG 5337

Teaching Individuals, Small and Large Groups: PR: C.I. Study of teaching skills for effectively instructing individuals in various educational groups, with consideration of developmental and behavioral characteristics of students.

EDG 5745

ED 3(3,0) Teaching the Non-English Student: PR: FLE 3063 or C.I. Bilingual and non-linguistic instruction in curriculum areas in English as a second language.

EDG 5941

Clinical Practice: PR: Admission to STEP II, III or IV. Clinical Internship in an appropriate educational setting under the direction of a university supervisor or peer teacher.

EDM 5235

Teaching in the Middle School: Methods of middle school teaching; team planning and teaching; development and learning patterns of the emerging adolescent; use of alternative teaching strategies.

FDS 5356

Supervision of Professional Laboratory Experiences: PR: C.I. Study of the undergraduate professional laboratory experiences program, with emphasis on the role and responsibilities of the Teacher Education Associate or Supervising Teacher.

EDS 5357

Supervision of Clinical Experiences: PR: C.I. Study of the Beginning Teacher and STEP Programs with emphasis on the Role and Responsibilities of the Peer Teacher or Building Level Administrator.

EEC 2001

Introduction to Early Childhood Education: An overview of early childhood education and services for young children and their families. Includes historical roots, societal changes, program differentiation and future trends.

ED 3(3.0)

ED 3(3,0)

ED 3(3.0)

ED 1-8(0,1-8)

ED 2-8(0,11)

ED 3(3,0)

ED 3(2.1)

ED 3(3.0)

ED 3(3.0)

ED 3(3.0)

ED 3(3.0)

ED 3(3.0)

ED 4(4.0)

EEC 2301

Active Learning Teaching Strategies: Studies an integrated developmental-interactionist approach to curriculum planning and design. Equipment selection, room arrangements, daily schedules and active learning teaching strategies are emphasized.

EEC 3268

Play Development: Explores play development, facilitation, intervention and assessment. Designing play environments is emphasized.

FEC 3610

Social and Emotional Development of Young Children: Provides an indepth understanding of the social and emotional development of the young child. Examines the implication for curriculum development.

EEC 3940

Integration Internships: Field based placement in which the students will have supervised practice integrating course content areas.

EEC 4271

Early Intervention: Provides an overview of development assessment, and intervention with at-risk and handicapped infants and toddlers.

EEC 4402

Cultural and Family Systems: Explores the institution of family in its cultural context as a living dynamic system.

EEC 4510

Infant/Toddler Care and Education: Provides the knowledge and skills that will enable the student to become a competent worker with very young children and their families.

EEC 4524

Organization and Management in Early Childhood: Provides students with managerial and supervisory skills required to administer a developmentally appropriate early childhood program.

FEC 4603

Guidance of Young Children: PR: EEC 3610. Provides students with techniques to guide the behavior of young children.

EEC 4936

Seminar in Early Childhood: Current trends, issues and advocacy in field of early childhood education. Includes guidance and clarification concerning student teaching.

FEC 4943

Student Teaching: Provides opportunities for student teachers to use the knowledge and skills they acquired in a supervised public school setting.

FEC 5205

Programs and Trends in Early Childhood Education: PR: Regular Certificate or C.I. Philosophy, content, facilities, instructional materials, and activities appropriate for children ages 3 to 8 years; current research; issues and trends. Concurrent laboratory experiences.

EEC 5206

Organization of Instruction in Early Childhood Education: PR: Regular Certificate or C.I. Organization in instruction relating to language arts, social sciences, mathematics, health and physical education, problems relating to reading readiness and cognition (K-3). Concurrent laboratory experiences.

EEC 5208

Creative Activities in Early Childhood: PR: Regular Certificate or C.I. Organization of instruction and methods for creative activities involving music, art, literature and educational toys, integration of activities, and basic skills curriculum (K-3). Concurrent laboratory experience.

EED 3250

Behavioral Issues of the Emotionally Handicapped: An introduction to functional schema of the field to include behavior management techniques, theories, legal considerations, counseling skills, etiology, prevention and utilization of community services.

EED 4011

Introduction to the Emotionally Disturbed: PR: Senior standing. Development and practice of appropriate cognitive, affective, and motor strategies for selected categories, levels, and degrees of severity of exceptional population.

EED 4210

Curriculum and Program Adaptation, E.H.: Development of highly specialized curriculum and identification, evaluation, modification, and use of curriculum materials and programs for students with emotional handicaps.

EED 4243

Teaching the Emotionally Handicapped: Instructional strategies with emphasis on motivational strategies, development, implementation and evaluation of the IEP, modification of regular education instructional practices, crisis intervention and prevention.

ED 3(3,0)

ED 3(3.0)

ED 4(4.0)

ED 3(3,0)

ED 3(3,0)

ED 3(3.0)

ED 3(3,0)

ED 3(3.0)

ED 2(2.0)

ED 12(0.12)

ED 3(3.0)

ED 3(3.0)

ED 1-2(0,1-2)

ED 3(3 0)

FD 3(3.0)

ED 3(3.0)

ED 3(3.0)

ED 3(3,0)

FEL 3122C

Electrical Networks: PR: EGN 3373, PHY 3049L. Analysis and design of linear circuits, transients, network function. Laplace transform.

EEL 3140C

Analog Filter Design: PR: EEL 3307C, EEL 3122. Analog filter design, both passive and active, from low pass prototypes using frequency transformations and based on low sensitivity. EN 3(3.0)

FEI 3306

Semiconductor Devices I: PR: EGN 3373. Electronic devices including p-n junctions, bipolar transistors, field effect transistors and device models.

EEL 3307C

Electronics I: PR: EEL 3306, EEL 3122C. Electronic devices. Analog electronic circuits. Amplifier analysis and design. Frequency effects.

EEL 3341C

Introduction to Digital Circuits: PR: COP 2000 and PHY 3049, Logic gates, memory devices, combinational and sequential subsystems. Karnaugh Maps. Intended primarily for computer science majors. EN 3(2,3)

FEL 3342C

Introduction to Digital Circuits and Systems: PR: PHY 3049 or C.I. Switching theory and devices. Combinational and sequential logic. Logic design using standard components such as ROM, arithmetic units, multiplexers, registers, and counters.

EEL 3470

Electromagnetic Fields: PR: EEL 3122 and MAP 3302. Introduction to electric and magnet fields and electromagnetic waves.

EEL 3552C

Signal Analysis & Communications: PR: EEL 3122. Signal theory, Fourier series and integral. Design of modulation systems.

EEL 3657

Linear Control Systems. PR: EEL 3122C. Control theory. Transfer function modeling. Nyquist criteria, root locus, Bode plots. Design of lead and lag compensation.

EEL 3801C

Introduction to Computer Engineering: PR: Knowledge of a high level programming language, CR: EEL 3342C. Introduction to the field of computer engineering. The course covers the C Language, basic computer organization, and an introduction to assembly language programming.

EEL 4012C

Senior Design: PR: For E.E.: EEL 4309, EEL 4767C, and all required EEL 3XXX courses; for CpE: EEL 4768C, EEL 3307C; CR: EEL 4884, Applications of engineering design to realistic and meaningful problems. Constraints such as economic factors, safety, reliability, aesthetics, ethics, social impact and engineering organizations are considered.

EEL 4205

Electric Machinery: PR: EEL 3122, EEL 3470. Fundamentals of DC and AC electric machines. **EEL 4216** EN 3(3,0)

Fundamentals of Electric Power Systems: PR: EEL 3122 or C.I. Three-phase power representation and analysis, transformers, per unit system, symmetrical components, faults, transmission lines.

EEL 4309C

Electronics II: PR: EEL 3307C, EEL 3342C. Ideal Op-Amps and applications. Introduction to Logic Circuits; Bipolar, MOS and CMOS families; Flip-flops and memory cells, comparators and timing circuits: A/D and D/A converters.

FFI 4314

Device Electronics for Integrated Circuits: PR: EEL 3306. P.N. Junctions, Bipolar Transistor Analysis, Metal Semiconductor contacts, MOS Systems MOSFET Analysis and Limitations.

EEL 4436C

Microwaves: PR: EEL 3470. Microwave devices and systems and measurement techniques. **FEL 4440** EN 3(3.0)

Optical Engineering: PR: EEL 3470, EEL 3552C or C.I. Lens systems, aberrations, sources, radiometry, detectors, physical optics, interferometric devices, applications to engineering design problems. EN 4(3.3)

EEL 4512C

Communication Systems: PR: STA 3032, EEL 3552C and EEL 3307C. Information transmission, modulation, and noise; design and comparison systems in the presence of noise.

EEL 4612

Introduction to Modern and Robust Control: PR: EEL 3657. Classical control theory including differential equations and Laplace transform techniques, stability analysis, and classical frequency domain design.

EN 3(3,0)

EN 4(3.3)

EN 4(3,3)

EN 3(3,0)

EN 3(2.3)

EN 4(3.3)

EN 4(3.3)

EN 4(3.3)

EN 3(3.0)

EN 4(3.3)

EN 3(3.0)

EN 3(2.3)

EN 3(3,0)

EN 4(2,4)

EEL 4635C

Computer Control Systems: PR: EEL 3657. Discrete-time systems, the z-transform, and single loop computer control systems. Digital simulation in the analysis and design of processes with embedded computers. No graduate credit for both EEL 5630 and this course.

EEL 4750

Digital Signal Processing Fundamentals: PR: EEL 3122C. Study of discrete-time signals and systems, Z-transform, DFT introduction to digital filter design.

EEL 4765C

Embedded Computer Systems: PR: EEL 4768C, EEL 4851, EEL 4635, Computer Applications in Systems role, sensor and actuator interfacing. Design projects, including problem statements and specifications, design methodology, implementation, testing, and documentation.

EEL 4767C

Computer System Design I: PR: EEL 3342C and EEL 3801C. Basic computer organization and design. Computer performance metrics, introduction to processor, memory and I/O organization and design. Assembly language programming and microprocessor based design.

EEL 4768C

Computer System Design II: PR: EEL 4767C, EEL 4884. Continuation of EEL 4767C. Control and datapath design using a hardware description language, microprogrammed architectures, instruction and arithmetic pipelines, cache and virtual memory and RISC.

EEL 4781

Computer Communication Networks: PR: EEL 4767C and STA 3032. Network models. Media access protocols. Data link control. Routing and flow control. Internetworking. Current architectures and protocols: OSI, ethernet, token, ring, FDDI, HSLC, X.25, etc.

EEL 4783C

Computer-Aided Engineering Design: PR: ECM 4884 and EEL 4768C or C.I. Review of currently available CAE tools for digital hardware and software design applications.

EEL 4801L

Introduction to Computer Engineering: PR: EGN 3420. Introduction to the field of computer engineering, including the use of "C" programming for engineering applications.

EEL 4811

Parallel Processing and Artificial Neural Networks: PR: EEL 4767C and EEL 3801C. Overall of parallel processing approaches and architectures with emphasis towards concurrent neural network simulation.

EEL 4832

Engineering Applications of Computer Methods: PR: MAP 3302, STA 3032, EEL 4884, Engineering applications of numerical methods, including solution of differential equations, simulation, optimization, and multidimensional root-finding, integration and series approximations.

EEL 4851C

Engineering Data Structures: PR: EEL 3xxxC. Design of data structures and algorithms, with emphasis on performance analysis, memory organization, stacks, queues, linked lists, trees, graphs, searches, and sorts. Introduction to object-oriented structures.

EEL 4872

Engineering Applications of Intelligent Systems: PR: EEL 4851. Intelligent models, computer vision, natural language understanding, pattern analysis, knowledge-based systems, symbolic programming, and advanced architectures.

EEL 4882

Engineering Systems Software: PR: EEL 4851 and EEL 3342. Introduction to operating systems concepts and facilities for engineering applications, including multiprogramming, resource allocation and management, systems utilities, and operating system implementation.

EEL 4884C

Engineering Software Design: PR: EEL 4882. Software systems development life cycle, function and object-oriented methodologies, CASE; Analysis, design, and development of a large software project.

EEL 5173

Signal and System Analysis: PR: EEL 3122C and EEL 3657. Continuous and discrete dynamic models; emphasis on state variable models. Laplace, Z-transform and time domain solutions of dynamic model behavior. Real-time digital simulation. Sampling theory.

FEL 5240C

Power Electronics: PR: EEL 4309. Principles of power electronics, power semiconductor devices, inverter topologies, switch-mode and resonant dc-to-dc converters, cyclo-converters, applications. EN 3(3.0)

EEL 5255

Power Systems Analysis and Electric Machinery: PR: EEL 4216 or C.I. System modeling, machinery, protection, load flow, stability.

EN 4(3.3)

EN 3(3,0)

EN 3(3,0)

EN 3(3,0)

EN 4(3,3)

EN 3(3,0)

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EEL 5352

Semiconductor Material and Device Characterization: PR: EEL 3306 or C.I. Semiconductor material characterization resistivity, mobility, doping carrier lifetime, device properties, threshold voltage, interface charage of MOS devices, optical and surface characterization of films.

EEL 5353

Semiconductor Device Modeling and Simulation: PR: EEL 3307, Large signal and small signal model development for semiconductor diodes, BJTs, and MOSFETs. Parameter extraction, numerical algorithm, and SPICE simulation are included.

FEL 5355C

Fabrication of Solid-State Devices: PR: EEL 3306. Fabrication of microelectronic devices, processing technology, ion implantation and diffusion, device design and layout. Laboratory includes device processing technology.

EEL 5370

Operational Amplifiers: PR: EEL 4309C. Ideal and non-ideal Op-Amps. Linear applications. Active RC and switched-capacitor filters. Non-linear and other functional circuits. Frequency stability and compensation of Op-Amps.

EEL 5434

Microwave Circuits and Devices: PR: EEL 4436 or EEL 5555. Planar transmission lines: passive microwave circuits; active circuit design using Gunn, IMPATT, FETS, RTDS, etc.: microwave integrated circuits.

EEL 5441

Introduction to Wave Optics: PR: EEL 4440 or PHY 4424 or C.I. Electromagnetic foundation of light waves as applied to reflection, diffraction, interference, polarization, coherence, and guided waves,

EEL 5446

Optical Systems Design: PR: C.I. Design principles of lens and mirror optical systems' evaluation of designs using computer techniques.

EEI 5450C

Thin Film Optics: PR: PHY 4424 or EEL 4440 and EEL 5441 or EEL 5451. Principles of thin film optics and its applications in optical, electro-optical, and laser systems.

EEL 5451L

Electro-Optics Laboratory: PR: EEL 4440 or EEL 5441 or C.I. Study of laboratory techniques for optical measurements and performance of measurements on electro-optic devices to determine operational characteristics.

EEL 5453

Geometrical Optics: PR: C.I. or G.S. Fundamentals of Geometrical Optics, Geometrical Theory of Image Formation, Optical System Layout.

FEI 5462C

Antenna Analysis and Design: PR: EEL 3470 or equivalent. Fundamentals of antennas; dipoles, loops, arrays, apertures, and horns. Analysis and design of various antennas.

EEL 5513

Digital Signal Processing Applications: PR: EEL 4750. The design and practical consideration for implementing Digital Signal Processing Algorithms including Fast Fourier Transform techniques, and some useful applications.

EEL 5517

Surface Acoustic Wave Devices and Systems: PR: EEL 3552C. Course discusses SAW technology which includes the physical phenomenon, transducer design and synthesis, filter design and performance parameters. Actual devices and communication systems are presented.

EEL 5542

Random Processes I: PR: EEL 3552C and STA 3032. Elements of probability theory, random variables, and stochastic processes.

FEL 5555C

RF Communications: PR: EEL 3552C. RF communication systems, 10 MHz to 1500 MHz. Scattering parameter noise, receiver design, system implementation, spread spectrum. RF network and spectrum analyzers, PC board layout.

EEL 5563

Fiber Optics Communication: PR: EEL 3552C, EEL 3470. Use of Fiber Optics as a communication channel. Principles of Fiber optics. Mode theory, transmitters, modulators, sensors detectors and demodulators.

EEL 5630

Digital Control Systems: PR: EEL 3657, Real-time digital control system analysis and design, Z-transforms, sampling and reconstruction, time and frequency response, stability analysis, digital controller design.

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EEL 5704

Computer Aided Logical Design: PR: EEL 3342C or C.I. Analysis and synthesis of sequential logic circuits and systems. Data path and controller design using VHDL, a hardware description language.

EEL 5708

High Performance Computer Architecture: PR: EEL 4767. Engineering of high performance computer systems. Memory, processor and control sub-systems design tradeoffs. Virtual and cache memory. Pipelining, vector computing.

EEL 5762

Performance Analysis of Computer and Communication Systems: PR: EEL 4767C, STA 3032. Stochastic modeling and discrete-event simulation; Markov chains; networks of gueues; SemiMarkov models; application to multiprocessor systems, switching and multi-user communications.

EEL 5771C

Engineering Applications of Computer Graphics: PR: EGN 3420 or C.I. Computer graphics in engineering applications. Laboratory assignments.

EEL 5820

Image Processing: PR: MAP 3302, EGN 3420, EEL 4750 or C.I. Two-dimensional signal processing techniques; pictorial image representation; spatial filtering; image enhancement and encoding; segmentation and feature extraction; introduction to image understanding techniques.

FEI 5825

Pattern Recognition: PR: MAP 3302, EGN 3420. Graph-theoretic and syntactic methods of pattern analysis. Decision functions; optimum decision criteria; training algorithms; feature extraction; unsupervised learning; data reduction and potential functions.

EEL 5874

Expert Systems and Knowledge Engineering: PR: EEL 4872 or C.I. Introduction to expert systems in engineering. Expert systems tools and interviewing techniques. This course is hands-on and project oriented.

EEL 5881

Software Engineering I: PR: EGN 3420, EEL 4851 or C.I. Design, implementation, and testing of computer software for Engineering applications.

EEL 5891

Continuous System Simulation I: PR: EEL 3657 or C.I. Use of state-space techniques, numerical integration, and CSSL programs. Laboratory assignments.

EES 4111C

Biological Process Control: PR: EES 4202C or C.I. and CR: ENV 4561. Engineering design, measurements and analysis of biological systems in environmental engineering for water management, bioenergy products, wastewater treatment, and others.

EES 4202C

Chemical Process Control: PR: EGN 3704. Engineering design, measurements, and analysis of chemical systems in environmental engineering to control treatment processes such as softening, coagulation, disinfection, scrubbing, neutralization, and others.

FES 4401C

Environmental Health: PR: EGN 3704. Topics and design examples in industrial hygiene, occupational and radiological health hazards, and pollution effects, such as those due to air noise, solid wastes, etc.

FES 5415C

EN 3(2,3) Potable Water Treatment: PR: EES 4202C and 4111C. Engineering application of potable water chemistry involving coagulation, softening, filtration, corrosion, disinfection quality and drinking water.

EET 3025C

Electrical Circuits: PR: DC Circuits or EET 3035, MAC 1104 and MAC 1114, or Cl. Frequency domain and steady state analysis of electric circuits: RCL circuits, timed circuits, resonance and "Q," filters, transformers, 3-phase circuits, power relationships.

EET 3085C

Electricity and Electronics: PR: MAC 1104 and MAC 1114. AC and DC circuits. Basic theorems and circuit analysis techniques. Instruments and measurements. Introduction to integrated circuits.

EET 3143C

Electronic Devices and Circuits: PR: DC & AC Circuits; MAC 1114. Theory, characteristics, operational parameters, circuits and applications of solid state electronic devices. Bipolar and field effect transistors, multistage amplifiers, power amplifiers.

EET 3716C

Network Analysis: PR: DC-AC circuits, CR: Calculus I. Circuit analysis using LaPlace Transforms and partial fraction expansions. Theorems, fourier series, frequency response and Bode plots.

EET 4518C

Linear Integrated Circuits: PR: EET 3716, or Consent of Coordinator. Applications of operational amplifiers, comparators, phase-locked loops, timers, regulators, other integrated circuits. Includes amplifiers, active filters, oscillators, differentiators and integrators.

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EET 4329C

Communications Systems: PR: EET 3716 and 4 hrs. Electronics Devices Principles and interrelationships of communication system components and circuits. Signals, noise, modulation, demodulation, bandwidth requirements. Transmitters and receivers.

FET 4339C

Antennas and Propagation: PR: EET 4329C. Transmission lines, impedance matching, use of Smith Chart, Antenna principles, Beamwidth, gain, directivity, effects of height, path-loss, System design, **EET 4349C** EN 3(2,2)

Electronic Communications II: PR: EET 4329C. Basic information theory, pulse and digital concepts. multiplexing, radar principles, TV systems, Technology of radiation and propagation, Fiber optics,

EET 4389C

Satellite Communication Systems: PR: EET 4329C. System analysis and design. Orbits. launching methods. Baseband signals and modulation. Link design, synchronization techniques. Interference, noise, access. Antennas, spectrum utilization.

EET 4548

Power Systems: PR: EET 3716, Analysis of electrical power transmission systems. Per unit quantities. circuit constants, symmetrical components. Power flow and fault calculations.

FFT 4732

Feedback Control Systems: PR: EET 3716. Analysis of networks and control systems. Stability and compensation considerations, using root locus, Nichols chart and Bode plots. Simulation techniques, system components.

EET 4915C

Senior Design Project: PR: Electronics Engineering Technology senior entering anticipated graduation semester or C.I. Individual or group project involving project definition planning, development, test and evaluation. Progress reports, final oral presentation and final written report required.

EEX 2010

Introduction to Special Education: Orientation to the education of children and adolescents with special needs in the schools. The course includes characteristics, trends, mainstreaming, and other issues.

ED 3(3,0) Parents as Educators: Develop parental awareness of their role in child development and school success. Attention given to social context of parenting and parents as advocates for children.

EEX 3102

Language Development and Communication Disorders: PR: Junior standing. Interdisciplinary approach to language development, identification and remediation of communication and language disorders.

EEX 3221

Assessment of Exceptional Students: Formal and informal assessment techniques for screening, placement, program planning, program evaluation, and monitoring of progress of exceptional students.

EEX 3241

Methods for Academic Skills for Exceptional Students: Teaching strategies, instructional materials, and monitoring techniques for children and adolescents with special needs. Must be taken with or before Internship I.

EEX 3243

Techniques for Exceptional Adolescents-Adults: CR: EEX 3241, A study of strategies, basic and functional content, career and vocational educational, and transition planning for adolescents and adults with special needs.

EEX 3450

Young Children With Special Needs: Provides an overview of the unique field of early childhood special education, its mission, and approaches to helping young children and their families.

EEX 4601

Introduction to Behavior Management: Study of management techniques based on applied behavioral analysis principles for modifying inappropriate behaviors and maintaining appropriate behaviors of exceptional students.

EEX 4753

Parent/professional Collaboration: The special educator's role in working with families, regular educators, and other professionals in a collaborative relationship.

EEX 5051

Exceptional Children in the Schools: PR: Senior standing or C.I. Characteristics, definitions, educational problems, and appropriate educational programs for the exceptional children in schools.

EEX 5702

Planning Curriculum for Prekindergarten Children with Disabilities: Focus on curriculum planning; developmentally appropriate practices and implementation of individualized instruction for prekindergarten children with disabilities.

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EEX 5750

Communication with Parents and Agencies: Presentation of methods of interacting with community agencies, supporting and collaborating with families, developing a case management system and facilitating program transition.

EGC 5036

Guiding Human Relationships: PR: Senior standing or basic teacher certificate. Human relationship skills which will enhance intra- and interpersonal relation skills in classrooms.

EGN 1006

Introduction to the Engineering Profession: Overview of academic and professional requirements in various engineering disciplines.

EGN 3210

Engineering Analysis and Computation: PR: MAC 3311. Engineering analysis and computation with structured constructs. Subscripted variables, subprograms, input/output. Batch processing and time sharing. Engineering applications will be emphasized.

EGN 3310

Engineering Analysis-Statics: PR: PHY 3048; CR: MAC 3312, Fundamental concepts of mechanics, including resultants of force systems, free-body diagrams, equilibrium of rigid bodies, and analyses of structures.

EGN 3321

Engineering Analysis-Dynamics: PR: EGN 3310; CR: MAC 3313. Kinematics and kinetics of particles and rigid bodies; mass and acceleration, work and energy impulse and momentum.

EGN 3331

Mechanics of Materials: PR: EGN 3310; CR: MAP 3302. Concepts of stress, strain, strength, deflection of axial force members, shafts in torsion, beams in flexure; combined stress; stability of columns, and design of simple elements.

EGN 3343

Thermodynamics: PR: EGN 3321 and MAP 3302. Work, heat, and energy transformations. Relation of properties. Laws, concepts, and modes of analysis common to all applications of thermodynamics in engineering.

EGN 3358

Thermo-Fluids-Heat Transfer: PR: EGN 3310, MAP 3302, Introduction to first and second laws of thermodynamics, continuum fluid mechanics, and heat transfer for electrical, industrial, and computer engineering majors.

EGN 3365C

Structure and Properties of Materials: PR: CHS 1440 and MAC 3312. Electrons and bonding, crystalline and non-crystalline solids, phase diagrams, phase transformations, plastic deformation, electrical and magnetic properties of materials.

EGN 3373

Principles of Electrical Engineering: PR: PHY 3049; CR: MAP 3302. Fundamental laws of electrical circuits and circuit analysis; fundamentals of electronics and power systems.

EGN 3375C

Electrical Devices and Systems: PR: EGN 3373. Continuation of EGN 3373. Electronic circuits, devices, and systems.

EGN 3420

Engineering Analysis: PR: High-level language or equivalent (FORTRAN preferred); MAC 3312. Engineering analysis and computation using FORTRAN; engineering applications of numerical methods including curve fitting, matrix operations, root finding, integration and plotting.

EGN 3613

Engineering Economic Analysis: PR: ECO 2013 and Sophomore standing. Economic evaluation of engineering alternatives and design. Time value of money and economic impact of taxes, risk, depreciation.

EGN 3704

Engineering and the Environment: PR: CHS 1440 and MAC 3312. Process engineering for air, energy, water, and land environment and the role of engineering in control of these environments.

EGN 4032

Professionalism, Practice and Ethics: PR: Junior or Senior standing. Study of the professional engineer's role, practice, and responsibility to act in the interests of public health, safety, and welfare.

EGN 4033

Technology and Social Change: PR: History/Humanities Sequence or C.I. Review of existing theories of social change, analysis of the role of technology as related to social change, and study of contemporary events in technology and their possible impact on society.

EGN 4624

Engineering Administration: PR: EGN 3613 and Senior standing. Engineering organization and administration; delegation of authority and responsibility; effective use of resources; project management; R and D planning; ethics in professional practice.

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EGN 4703

Systems Analysis and Control: PR: EGN 3343, 3353, 3373; MAP 3302, Analysis and design of process control systems, including first and second order systems and classical linear control theory.

EGN 4813

Science in History: Examination of the reciprocal relations of science and society from ancient to recent times.

EGN 4814

Technology in History: PR: History/Humanities sequence or C.I. Important developments in engineering and technology and their effect on society and our socio-economic processes. EN 1(1,0)

EGN 4816

Turning Points in Engineering: Seminar covering major historical developments in engineering. EN 3(3,0) **EGN 4818**

Technology in North America: PR: History/Humanities sequence or C.I. Periods of significant technological change in North America, with emphasis on 19th and early 20th-century developments.

EGN 4823

Topics in Urban Development: Production, distribution, and consumption of various commodities. Engineering relationships to distribution, internal structure, function of urban developments, interrelationships of engineering, social, economic, and cultural phenomena.

EGN 4824

Energy and Society: Investigation of available energy forms; energy resources versus requirements in an increasingly complex technological society; possible solutions and future predictions.

EGN 4825

Environment and Society: PR: C.I. Environmental factors of importance to people's interaction with the environment; engineering and non-engineering measures to insure improvement and maintenance of environmental quality. Not for engineering students.

EGN 4830

Telecommunications: Telecommunications and its role in contemporary local, national, and international society.

EGN 4832

Computers, Cybernetics and Society: The effects of computers and the cybernetic revolution of the individual and society. Effects of positive and negative feedback on biological, technological and social systems. Computers and their interactions with the human system.

EGN 4843

Systems Modeling: PR: CGS 1060 or equivalent. Representation of man/machine systems through analytic and computer-based models. Case studies in the analysis and improvement of systems in industry, education, and government.

EGN 4844

Man and Machine: The influence and interrelationship of invention and technical progress on the evolution of social forms and institutions.

EGN 5034

Engineering and Public Works: PR: C.I. The purposes, function, and role of engineering within public works.

EGN 5035

Topics in Technological Development: PR: C.I. Selected topics in the technological development of western civilization including the weight-driven clock, steam engine, electric light, etc.

EGN 5036

Engineering Codes and Standards: PR: C.I. Development, history, and function of engineering codes and standards and their use in protecting public health and safety.

EGN 5840

Small Rocket Applications for Teachers: PR: Admission to Martin Marietta/UCF Academy, Earth and space environments, rocket propulsion, meteorological and environmental measurements, payload launch procedures, orbits and trajectories, safety, model rocket experiments, field trips, student science experiments.

EGS 1111C

Engineering Computer Graphics: PR: Trigonometry. Spatial visualization, sketching and graphical presentation as a form of computerized engineering communication. Engineering drawing, descriptive geometry and graphical solution techniques using computer software.

EIN 3304

Introduction to Industrial Engineering and Management Systems: An overview of the issues important to the operation of an industrial or service facility.

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FIN 3314C

Work Measurement & Design: PR: EGN 3613, STA 3032, Management standards for evaluation and control of man and man/machine systems. Flow and operations analysis, work measurement, job evaluations. Laboratory assignments.

FIN 3354

Principles of Cost Engineering: PR: EGN 3613. This course is to provide engineers from all disciplines the background for the cost estimation of engineering systems throughout the product life cycle.

EIN 4116C

Information Systems Analysis and Design: PR: ESI 4312, Systems analysis methodology, information systems models, system requirement, specifications, systems design methodology and decision support. Cost benefit analysis and implementation planning.

EIN 4118C

Industrial Engineering Applications of Computers: PR: FORTRAN. Survey of microcomputer methods in industrial engineering practice. Topics include: spreadsheets, databases, expert systems, and project management. Lab exercises.

EIN 4214

Safety Engineering and Administration: Analysis of accidents in the industrial operating environment. Application of fault trees, OSHA requirements. Consideration of accident costs and organizational aspects of accident prevention.

EIN 4243C

Human Engineering: PR: EIN 3314C; Senior standing. Man/machine systems; design and conduct of human engineering studies.

EIN 4305C

Industrial Engineering Applications in The Service Industries. PR: EIN 3314C, ESI 4312, ESI 4254. Application of industrial engineering principles to improve the quality and productivity of service industries such as restaurants, banks, hotels, health care, etc.

EIN 4333C

Industrial Control Systems: PR: ESI 4312. Decision rules in industrial environment including Forecasting, Production Planning, Scheduling, Inventory Control, and Project Monitoring. Laboratory assignments.

EIN 4364C

Industrial Facilities Planning and Design: PR: EIN 4391C, EIN 4333C. Comprehensive design of industrial production systems, including interrelationships of plant location, process design, and materials handling. Laboratory assignments.

EIN 4391C

Manufacturing Engineering: PR: EIN 3314C, EGN 3365. Introduction to manufacturing engineering, with emphasis on current and emerging technologies in metalworking and electronics.

EIN 4411C

Computer-Aided-Manufacturing: PR: EIN 4391C, Computer-Aided-Manufacturing (CAM) including computer numerical control (CNC), robotics, parts classification (GT) and manufacturing resource planning (MRP).

EIN 4891C

Industrial Engineering Senior Design Project: PR: Senior standing. Capstone design course; application of IEMS techniques to real-world design applications.

EIN 5117

Management Information Systems I: PR: C.I. The design and implementation of computer-based Management Information Systems. Consideration is given to the organizational, managerial, and economic aspects of MIS.

EIN 5247

Experimental Design & Taguchi Methods: PR: STA 3032 or ESI 4234. Introduction to Taguchi Concepts and Methodologies, use of design of experiments for guality design and improvement.

EIN 5248C

Ergonomics: PR: C.I. Applications of anthropometry, functional anatomy, mechanics, and physiology of musculoskeletal system concepts in the engineering design of industrial tools, equipments, and workstations.

EIN 5255

Training Simulator Engineering: Introduction to significant topics relative to the development and use of simulators for knowledge transfer in the technical environment.

EIN 5356

Cost Engineering: Cost estimation and control of engineering systems throughout the product life cycle. **EIN 5368** EN 3(2,2)

Materials Handling: Material handling function in manufacturing environment; quantitative techniques for analysis, controls, storage and warehousing, automation and cost justification; lab focuses on plant trips and case studies.

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FIN 5381

Engineering Logistics: Study of the logistics life cycle involving planning, analysis and design, testing, production, distribution, and support.

FIN 5388

Forecasting: PR: STA 5156. Industrial applications of forecasting methods with emphasis on microcomputer-based packages.

EIN 5399

Concurrent Engineering: PR: EIN 4411. Elements of concurrent engineering and its applications. Topics include guality function deployment, design for manufacturability and design for assembly **EIN 5415**

Tool Engineering and Manufacturing Analysis: PR: EIN 4391 or C.I. Tool materials and design, tolerance technology, theory of metal cutting, and machineability.

EIN 5602C

Expert Systems in Industrial Engineering: Overview of basic concepts, architecture and construction of expert systems, in IE. Intelligent simulation training systems, case studies and problems. Laboratory exercises.

EIN 5937

ST: Taguchi's Quality by Design: Taguchi methods for design of experiments and quality improvement. FI D 4011 ED 3(3.0)

Intro to Specific Learning Disabilities: Nature and needs of students with learning disabilities to include history, theories, characteristics, definitions, assessments, issues, and application of effective teaching practices.

FLD 4242

Program Planning for Specific Learning Disabilities: PR: Senior standing. Development of highly specialized techniques, curriculum materials, to be used with students with special learning disabilities.

EMA 3000

Engineering Polymeric, Ceramic, and Composite Materials: PR: EGN 3363 OR C.I. Structure, properties, processing of engineering polymeric, ceramic, and composite materials.

EMA 3012C

Experimental Techniques in Materials Engineering: PR: EGN 3363C and C.I. Metallurgical specimen preparation, metallography, heat treatment x-ray diffraction, electron microscopy, mechanical testing, wear and corrosion testing.

EMA 4413

Electronic Properties of Materials: PR: EGN 3363C. Electronic processes in solids. Electrical, magnetic, and optical properties of solids. Electron energies in solids. Superconducting materials.

EMA 5056

Communication for Instructional Systems: Principles of written and oral communications for instructional technologists; development of assertiveness and interpersonal skills; conducting training programs for employees; creating hard copy materials.

EMA 5104

Intermediate Structure and Properties of Materials: PR: EGN 3365C. Fundamentals of dislocation theory, metallurgical thermodynamics and diffusion. Phase transformations, strengthening mechanisms and fracture. Introduction to engineering polymers, ceramics and composites.

EMA 5106

Metallurgical Thermodynamics: PR: EGN 3343, EGN 3365C, Laws of thermodynamics, phase equilibria, reactions between condensed and gaseous phases, reaction equilibria in condensed solution and phase diagrams.

EMA 5108

Surface Science: PR: PHY 3049 and C.I. Methods of chemical and physical analysis of surfaces, with emphasis on ultra-high vacuum spectroscopics utilizing electron, ion and photon probes.

EMA 5140

Introduction to Ceramic Materials: PR: EGN 3365C, Uses, structure, physical and chemical properties, and processing of ceramic materials. Discussions will include recent developments for high technology applications.

EMA 5163

Polymer Science & Engineering: PR: EGN 3365C. Molecular structure, physical and chemical properties, preparation and processing of macromolecular materials. Discussions will include recent developments for high technology applications.

EMA 5326

Corrosion Science and Engineering: PR: EGN 3363C. Electrochemical principles and applications to detecting and monitoring corrosion processes. Various forms of corrosion, their causes and control. Techniques of corrosion protection.

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EMA 5584

Biomaterials: PR: EGN 3365C, Properties of natural biological materials and their relation to microstructure, biocompatibility, specific applications in orthopedic, cardiovascular, visual, neural, and reconstruction implants.

EMA 5705

High Temperature Materials: PR: EMA 5104. Desired material properties for high temperature applications, physical metallurgy of such materials, corrosion, hot corrosion and oxidation properties, aero- and land-based gas turbine requirements.

EME 5051

Technologies of Instruction & Information Management: Theories and practices in utilizing instructional media and information technologies. Emphasis on new and emerging technologies and their effects on the school and media program.

EME 5054

Instructional Technology: A Survey of Applications: Applications of instructional technology in settings other than public schools. Survey of facilities, programs, and services in business, industry, religion, government, higher education, and medical settings.

EME 5057

Communication for Instructional Systems - Application: PR: EME 5056. Applications of technology, communications theory, platform skills, and instructional design to the effective presentation of training programs and instruction.

EME 5208

Production Techniques for Instructional Settings: Skills in producing instructional materials. Emphasis on graphic, audio, video, and photographic skills and the application of instructional and communication theories.

EME 5225

Media for Children and Young Adults: Survey of materials for children's and young adult informational and recreational needs; analysis, evaluation, and utilization of print and non-print materials.

EME 5408

Computer Applications in Instructional Technology. Techniques and skills for the use of computers for productivity and instruction by the instructional technologist.

EML 3001C

Machine Shop Practice: PR: EGS 1111 or C.I. Set up and operation of mill and lathe, cutting tools, holding devices, cutting speeds and feed rates. Measurement devices. Hands-on experience.

EML 3101

Thermodynamics of Mechanical Systems: PR: EGN 3343. Applied thermodynamics, availability analysis, thermodynamics of reactive and non-reactive mixtures, thermodynamic relations of properties. Thermodynamic design analysis of complete mechanical systems.

EML 3126H

Thermodynamics & Transport Phenomena I: PR: EGN 3321 and MAP 3302. Energy and its transformations; design of engineering devices to accomplish heat and work; includes fluids and radiation and conduction heat transfer.

EML 3127H

Thermodynamics & Transport Phenomena II: PR: EML 3401H. Energy and its transformations: design of engineering devices to accomplish heat and work; includes fluids, compressible flows, boundary layers, combustion.

EML 3234

Mechanical Properties of Materials: PR: EGN 3365C. Microscopic treatment of the mechanical behavior of engineering materials, strengthening mechanisms, fracture, fatigue, and creep.

EML 3236

Structure and Properties of Alloys: PR: EGN 3365C. Relation of properties to microstructure and applications of major ferrous and non-ferrous alloys.

EML 3262

Kinematics of Mechanisms: PR: EGN 3321. Graphical, mathematical, and computer-aided kinematics, analysis, and synthesis of basic mechanisms.

EML 3303

Measurement Systems: PR: EGN 3331, 3373. Application of systems design concepts to measurement. Fundamental theory of static and dynamic measurements. Transducer principles and validation of experimental data.

EML 3500

Machine Design and Analysis: PR: EGN 3331. Application of the principles of mechanics of materials to the design of mechanical elements.

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EMI 3701

Fluid Mechanics I: PR: MAP 3302: CR: EGN 3343. Basic principles of continuum fluid mechanics. Integral and differential forms of governing equations, fluid statics, dimensional analysis, measurements, internal flows.

EML 4142

Heat Transfer: PR: EGN 3353. Conduction, radiation, and convection heat transfer. Basic energy balances emphasized. Steady state and transient problems, analysis and design of simple heat exchangers.

EML 4220

Vibration Analysis: PR: EGN 3321, 3331, Undamped and damped vibration of single degree freedom systems. Forced vibration. Transient response. Multiple degree of freedom systems. Normal modes.

EML 4260

Dynamics of Machinery: PR: EML 3262, EML 4222. Critical speeds and response of flexible rotor systems, whirl, gyroscopic effects; balancing of rotating and reciprocating masses; cam dynamics.

EMI 4304C

Measurements Laboratory: PR: EGN 3373, EGN 3353, EGN 3331, Fundamental theory and practice of static and basic electrical dynamic measurements, transducer principles and data acquisition. Laboratory experiments conducted to reinforce thermal, fluid, and mechanical concepts.

EML 4312C

Feedback Control Design: PR: MAP 3302, EGN 3373. Mathematical Modeling of Dynamic Systems: Transient and Steady State Response; Root Locus Method, Frequency Response, Stability; Controller Design.

EML 4411

Mechanical Power Systems: PR: EML 3101. Analysis and design of large power generating systems and components, with emphasis on steam plants utilizing both chemical and nuclear fuels.

EML 4501C

Engineering Design I: CR: EML 4304C. Application of the design process in the team solution of a state-of-the-art problem. Aerospace, mechanical, thermo-fluid, or material problems are considered.

EML 4502C

Engineering Design II: PR: EML 4501C. Continuation of the design process in the team building and testing of a prototype. A test plan and a test report are completed.

EML 4535C

Computer Aided Design: PR: EML 3101, EML 3500, and EGN 3420 or equivalent, Introduction to computational methods in mechanical and thermal systems design.

EML 4545C

Experimental Design: PR: EML 4142 and EML 4220. Fundamentals of static and dynamic measurements, transducer principles, and validation of experimental data. Design of experimental projects in mechanical and thermal systems.

EMI 4600

HVAC Systems Engineering: PR: EML 3101 and EML 4142. Heating, ventilation, air-conditioning, and refrigeration principles and systems design. Phychrometrics, heating and cooling loads, equipment and components, and distribution systems.

EML 4703C

Fluid Mechanics II: PR: EGN 3343, EML 3xxx (Fluids I). Continuation of Fluids I. External flows, fluid machinery, one-dimensional compressible flows. Experimental measurements and design problems.

EML 5060

Mathematical Methods in Mechanical and Aerospace Engineering: PR: MAP 3302, Vector field theory, generalized coordinates, complex variables, contour integration and LaPlace and Fourier transforms and inversions, variable coefficient ODE's and solution of PDE's for governing equations of heat transfer, ideal fluid flow, and mechanics.

EML 5105

Gas Kinetics and Statistical Thermodynamics: PR: EAS 4134 or EML 4703C. Molecular and statistical viewpoint of gases and thermodynamics; Boltzmann collision integral, partition functions, non-equilibrium flows. Applications in thermo-fluid systems.

EML 5152

Intermediate Heat Transfer: PR: EML 4142, EML 5713, EML 5060. An intermediate-level course dealing with heat and mass diffusion, boundary layer problems, and radiation from real bodies. Emphasis on combined modes, numerical methods.

EML 5224

Acoustics: PR: EML 4220 CR: EML 5060. Elements of vibration theory and wave motion: radiation. reflection, absorption, and transmission of acoustic waves; architectural acoustics; control and abatement of environmental noise pollution; transducers.

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EML 5228C

Modal Analysis: PR: EML 4220, EML 4304C, EML 5060. Theoretical basis. Measurement techniques, excitation, transducers, data acquisition. Detailed data analysis, modal parameter extraction, curve-fitting procedures. Modelling.

EML 5237

Intermediate Mechanics of Materials: PR: EML 3500, CR: EML 5060, Elements of elasticity, Failure theories. Bending and torsion. Thin plates. Energy principles. Thick-walled cylinders. Applications to design.

EML 5245

Tribology: PR: EGN 3331, EGN 3353, EGN 3365C, or C.I. Principles of fluid film lubrication (liquid and gas, journal and thrust bearings), contact mechanics (rolling element bearings), design of bearings and load bearing surfaces, friction and wear of materials, tribotesting,

EML 5271

Intermediate Dynamics: Dynamics of particles, distributed mass systems, and rigid bodies from an advanced viewpoint. Virtual work. Lagrange's and Euler's equations. Hamilton's equations.

EML 5311

System Control: PR: EML 4312; CR: EML 5060. Modern control theory for linear and non-linear systems; controllability and observability. Linear state feedback and state estimators, compensator design.

EMI 5402

Turbomachinery: PR: EML 3101, EML 4703 or EAS 4134. Application of the principles of fluid mechanics, thermodynamics, and aerodynamics to the design and analysis of steam and gas turbines, compressors and pumps.

EML 5453

Energy Analysis: PR: C.I. Examination of energy demand and potencial supply, computer simulation of resource depletion, alternate energy resources, transportation systems, economic and environmental constraints.

EML 5532

Computer-Aided Design and Manufacture: PR: EGN 3331 and EML 3500 or C.I. Theory and application of computer algorithms for the synthesis, simulation, design and manufacture of mechanical and thermal systems.

EML 5533

Mathematical Methods in Mechanical & Aerospace Engineering: PR: MAP 3302, Applications of vector operations and theorems, line integrals and curvilinear coordinates to heat transfer and fluid mechanics problems. Solution of heat transfer and fluid mechanics problems by complex analysis and integral methods.

EML 5546

Engineering Design with Composite Materials: PR: EML 5237. Mechanics of structural components of composite materials under static, thermal, vibratory loads. Instability, Lamina and laminate theory, energy methods, failure theories, and structural joining methods.

EML 5572

Probabilistic Methods in Mechanical Design: PR: EML 3500, STA 3032. Uncertainty modelling in design. Use of probabilistic mathematics to assess strength, stiffness, toughness, and stability. Applications.

EML 5713

Intermediate Fluid Mechanics: PR: EML 4703, CR: EML 5060, Fluid Kinematics: Conservation Equations; Navier-Stokes equations; Boundary Layer Flow, Inviscid Flow, Circulation and Vorticity; Induced Drag; Low Reynolds Number Flow; Turbulence.

EMR 4011

Intro to Mental Retardation: Nature and needs of mentally handicapped students with emphasis on etiology, prevention, identification, and application of effective practices and recognition of trends and standards.

EMR 4372

Curriculum Method and Materials for Retarded Persons: PR: Senior standing. Development of highly specialized techniques, curriculum and materials to be used with students with mental retardation.

ENC 1101

Composition I: Expository writing with emphasis on effective communication and critical thinking. Emphasizing the writing process writing topics are based on selected readings and on student experiences.

ENC 1101H

AS 3(3,0) Honors Freshman Composition I: PR: Score of 60+ on TSWE of SAT or C.I. Same as ENC 1101, with honors-level content.

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EN 3(2.2)

EN 3(3.0)

EN 3(3.0)

ED 3(3.0)

AS 3(3.0)

ENC 1102

Composition II: PR: ENC 1101 with a grade of "C" or better. Extensive writing based on critical analysis of texts, library research, and/or field research. Further exploration of the writing process included, as well as potential for writing across the curriculum.

ENC 1102H

Honors Freshman Composition II: PR: ENC 1101H with a grade of "C" or better or C.I. Same as ENC 1102, with honors-level content. Note on Freshman English Program: ENC 1101 and 1102 must be taken before enrolling in any English course numbered above 1102.

ENC 2290

Careers in Writing: An examination of career opportunities in technical writing, emphasizing industrial, commercial, and governmental opportunities.

ENC 3210

Business Report Writing: PR: ENC 1102. Emphasis on clear expository writing of memoranda, reports, and articles in the student's particular field.

ENC 3211

Introduction to Technical Writing: Provides definition, history, thetorical bases of technical writing and its relationship to general English studies.

ENC 3241

Technical Report Writing: PR: ENC 1102. Instruction and practice in scientific writing, including preparation of scientific reports in the student's particular field.

ENC 3283

Science and the Lay Reader: PR: ENC 3310, ENC 3311 or ENC 3341 or C.I. Analysis of lay scientific magazine articles and practice in scientific writing for the lay audience.

ENC 3310

Magazine Writing I: PR: ENC 1102, Intensive practice in description narration, exposition and argumentation; control of tone, mood, viewpoint, and level of diction. Applicable to article, essay, and short story writing.

ENC 3311

Advanced Expository Writing: PR: ENC 1102. Practice of expository writing directed to general reader.

ENC 3942

Journal - Writing Practicum: An interdisciplinary practicum in journal writing as a literary genre and a means of self-expansion.

ENC 4215

Techniques of Technical Publications: PR: C.I. Study of new publishing technology, stressing composition and printing; word processing, automated text processing, methods of reproduction. Introduction of graphics; style, format, layout, and boardwork. Should be taken concurrently with ENC 4294.

ENC 4218

Graphics Capabilities for the Technical Writer: PR: ENC 4293; to be taken concurrently with ENC 4215. Study and preparation of visuals and graphics in technical writing and documentation; use of computer graphics; slides; transparencies; charts; graphs; drawings.

ENC 4280

Technical Writing Style: PR: C.I. Review of dictionaries and articles in various technical fields. Recognition of specialized vocabulary. Familiarity with reading level indexes and standards.

ENC 4293

Technical Documentation I: PR: ENC 3210 or 3341. Practice in translating highly technical information to organized documentation: hardware, software, military specifications. Theory of designing and organizing technical manuals. Preparation of proposals. Interview skills.

ENC 4294

Technical Documentation II: PR: ENC 4293. Practical application of editing theory to large ongoing projects from the student's particular field. Should be taken concurrently with ENC 4215.

ENC 4295

Technical Documentation III: PR: ENC 4294. Designing, writing, and illustrating manuals, e.g., repairs, maintenance or users. Project supervised by a member of a student's major department or technical editor of a corporation.

ENC 4341

Magazine Writing II: PR: ENC 3310 or C.I. Structure and organization of articles, essays, profiles, and reviews, market analysis; data gathering. May be repeated for credit.

ENC 5214

Production and Publication Methods: Theory and practice of production and publication methods for technical writers.

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ENC 5214 Production and Publication Methods: Theory and practice of production and publication r technical writers.	AS 3(3,0) nethods for
ENC 5214	AS 3(3.0)
Production and Publication Methods: Theory and practice of production and publication r technical writers.	
ENC 5219	AS 3(3,0)
Graphics in Technical Writing: A study of the creation and editing of graphics in technical do ENC 5344	
Proposal Writing: Theory and practice of writing proposals.	
ENG 3010 Practical Criticism: PR: ENC 1102. Student evaluation of selected fiction, poetry, and dram practical exercises in literary criticism.	AS 3(3,0) ma through
ENG 5009	AS 3(3,0)
Methods of Bibliography and Research: Bibliographical, library and systematic appresearch at the graduate level in language and literature.	roaches to
ENG 5018	AS 3(3,0)
Literary Criticism: PR: Graduate standing or C.I. Historical survey of major critics from clasuity to the modern era.	sical antiq-
ENL 3010	AS 3(3,0)
English Literature I: PR: ENC 1102. Beowulf to 1798.	
ENL 3051	AS 3(3,0)
English Literature II: PR: ENC 1102. From 1798 to 1914.	
ENL 3951H Orlando Shakespeare Festival Honors: PR: ENC 1102. Honors theory and practice of Sha art by performance-oriented study and participation in the Orlando Shakespeare Festival's activities and productions.	
ENL 3951	AS 3(3,0)
Orlando Shakespeare Festival: PR: ENC 1102. Involvement in theory and practice of Sha art by performance-oriented study and participation in the Orlando Shakespeare Festival's activities and productions.	kespeare's
ENL 4101 English Novel: PR: ENC 1102. Analysis of major English novelists.	AS 3(3,0)
ENL 4220 English Renaissance Poetry and Prose: The course will examine selected poetry and pros Surrey, Sidney, Spenser, Marlowe, Raleigh, Daniel, Shakespeare, Chapman, Lyly & others.	AS 3(3,0) e of Wyatt,
ENL 4241 English Romantic Writers: PR: ENC 1101, ENC 1102. Study of English poets and essay romantic period, including Wordsworth, Coleridge, Hazlitt, Lamb, Byron, Shelley & Keats.	AS 3(3,0) vists of the
ENL 4251 The Victorian Age: PR: ENC 1101, ENC 1102. Study of poets and essayists from 1837 to 19 ing Tennyson, the Brownings, Arnold Hopkins, Carlyle, Mill, Newman.	AS 3(3,0) 00, includ-
ENL 4311	AS 3(3,0)
Chaucer: PR: ENC 1102. The Canterbury Tales, Troilus and Criseyde, and other works.	121.74
ENL 4330 Shakespeare Studies: PR: ENC 1102. Reading, analysis, and discussion of Shakespeare's be repeated for credit.	AS 3(3,0) plays. May
ENL 4341 Milton and His Age: PR: ENC 1102. Paradise Lost, Paradise Regained, Samson Agonist poems and selected prose.	AS 3(3,0) es, shorter
ENL 4353 18th Century Studies: PR: ENC 1102. Reading, analysis, and discussion of literature in Eng 1880. May be repeated for credit.	AS 3(3,0) lish: 1660-
ENL 4373	AS 3(3,0)
Modern British Literature: PR: ENC 1102. Major writers of modern British literature.	10 0(0,0)
ENL 5176	AS 3(3,0)
Restoration and 18th Century English Drama. PR: Senior standing or C.I.	
ENL 5226 English Renaissance Poetry and Prose: PR: Senior standing or C.I. The course will examin poetry and prose of Wyatt, Surrey, Sidney, Spenser, Marlowe, Raleigh, Daniel, Shakespeare, Lyly, and others.	

AS 3(3.0) Studies in Shakespeare: PR: Senior standing or C.I. A selection of representative plays, with emphasis on Shakespeare's development as an artist: aesthetics of dramatic literature.

ENI 5347

ENI 5335

The Age of Milton: PR: Senior standing or C.I. Emphasis on the non-dramatic works of John Milton. Selections from the non-dramatic works of other 17th-century figures. AS 3(3,0)

ENL 5356

Eighteenth Century Studies: Reading, analysis, and discussion of literature in English: 1660-1880. **ENU 4103** EN 3(3.0)

Nuclear Engineering: PR: PHY 3101. Introduction to the principles of nuclear engineering, nuclear chain reactions, reactor systems and control, health physics, radiation shielding, and applications of nuclear energy.

ENV 4121C

Air Pollution: PR: EGN 3704, EGN 3353. Sources, causes, and effects of air pollution. Engineering design, analysis, and modeling for the control of air pollution.

ENV 4341

Solid Waste Management: PR: EGN 3704 or C.I. Engineering design, planning, and analysis problems associated with storage, collection, processing, and disposal of solid and hazardous wastes.

ENV 4433C

Water Resources Design: PR: CWR 4101C and CWR 4201C. Project course for the design of storm water and sewer transmission systems using local and state regulations. EN 4(4.0)

ENV 4561

Environmental Engineering - Process Design: PR: EGN 3704 and EGN 3353. Water treatment and wastewater treatment design considerations with effluent and sludge handling, treatment, and disposal. **ENV 4562C** EN 3(2,2)

Environmental Engineering Systems Design: PR: ENV 4561, CWR 4201C. Project course on design of water and wastewater treatment plants.

ENV 4563

Environmental Control Systems: PR: EGN 3343, 3373, CR: ENV 4561, Analysis and design of process control systems in environmental engineering applications including process dynamics, instrumentation, and control system configuration.

ENV 4800

Air & Waste Design: PR: ENV 4121C, ENV 4341, Project course on design of an air pollution control system and a municipal solid waste landfill.

ENV 5071

Environmental Analysis of Transportation Systems: PR: EGN 3704, ENV 4121C or C.I. The course deals with the environmental process needed for the successful planning of transportation projects. The analysis of noise, air quality, wetlands, and other environmental areas will be covered in addition to abatement measures.

ENV 5413

Outdoor Noise Control: PR: C.I. Community noise evaluation and control, legislative standards, instrumentation and measurement, abatement methods, and noise modeling.

ENV 5505

Sludge Management Operations in Environmental Engineering: PR: ENV 4561. Theory and design of sludge management operations and processes in environmental engineering, including stabilization dewatering and ultimate disposal.

ENV 5615

Environmental Impact Assessment: PR: C.I. Estimating, predicting, and evaluating the effects of projects, processes, and systems upon the environment and human society.

ENY 4004C

General Entomology: PR: ZOO 2010C, Introduction to insects: their identification, biology, and ecology. **EPH 5335** ED 3(3,0)

Physical and Sociological Implications of Handicapping Conditions: Overview of physical and sociological factors which may contribute to delayed learning or physical impairments in the exceptional populations. Physical interventions and first-aid practices are examined.

ESE 3940

Internship I - Secondary: PR: EDG 4321. Student teaching in a secondary school under the supervision of a certified classroom teacher.

ESE 4943

Internship II - Secondary: PR: ESE 3940 or EDE 3942. Student teaching in a secondary school under the direction of a certified classroom teacher. Scheduled concurrent seminars.

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AS 4(2,6)

ED 3-16(0.3-16)

ED 7-12(0,35)

AS 3(3.0)

EN 3(2.3)

EN 3(3.0)

EN 3(2.2)

ESE 5214

ED 3(3,0) Secondary School Curriculum Improvement I: PR: Regular Certificate or C.I. Secondary School self studies for curriculum projects, accreditation reports, or staff development.

ESI 4221

Empirical Methods for Industrial Engineering: PR: STA 3023, Application of empirical methods for industrial engineering problem solving.

ESI 4234

Quality Engineering: PR: STA 3032, Basic concepts and techniques of quality control: applications of statistics in industrial research; design of guality assurance systems; reliability engineering.

FSI 4312

Operations Research: PR: STA 3032, EIN 4118C. Introduction to linear, non-linear, and dynamic programming. Decision analysis, random processes, and queueing. Course covers theory through application and implementation of results.

FSI 4321C

Quantitative Techniques in Industrial Engineering: PR: EGN 4634 and STA 3032. Extension of EGN 4634 and STA 3032, with primary emphasis on O.R. and statistical applications to industrial engineering problems.

ESI 4523C

Systems Simulation: PR: STA 3032, EIN 4118C. Methods and procedures for simulating large-scale systems with digital computers. FORTRAN and simulation languages are used.

ESI 5170

Microcomputer Practicum: PR: Graduate standing or C.I. Survey of personal computer programming and use in decision support applications in engineering.

ESI 5236

Reliability Engineering: PR: ESI 4234, or equivalent or C.I. Reliability theory and modeling approaches. Topics include: failure data analysis, maintainability, reliability standards (DOD), software reliability, reliability in design, and electronic systems reliability.

FSI 5316

Operations Research: PR: STA 3032. Methods of operations research, including formulation for models and derivation of solutions; linear programming, network models queueing theory, simulation, and nonlinear optimization techniques.

ESI 5451

Network Based Project Planning, Scheduling and Control: PR: ESI 4312 or ESI 5316. Probabilistic and deterministic approaches for planning, scheduling, and controlling complex, large scale projects. PERT, CPM, resource leveling, risk analysis.

ESI 5531

Discrete Systems Simulation: PR: STA 3032, CGS 3422. Methods for performing discrete systems simulation, including network modeling will be treated.

EST 4502C

Metrology and Instrumentation: PR: ETG 3541 or equivalent: EET 3035C or equivalent: and MAC 3253 or equivalent. An introduction to the basic concepts and terminology of metrology and instrumentation. Theory, procedures and techniques essential to industrial measurement and laboratory practice are covered.

ETC 4241C

Construction Materials and Methods: CR: ETG 3541. Construction principles, details, materials and methods used as related to the construction of buildings.

ETC 4242

Construction Contracts and Specifications: PR: ENC 3241. The role of construction contracts, architectural specifications, product specifications, industry standards and building codes in the process of building construction.

ETC 4414C

Applied Structural Design I: PR: ETG 4530C. Introduction to indeterminate analysis. Design of steel members, components and connections. Current code and specification requirements.

ETC 4415C

Applied Structural Design II: PR: ETG 4530C. Strength design of reinforced concrete members, foundations, slabs, and walls. Current code and specification requirements.

ETD 3350C

Applied CADD: PR: Engineering Drawing and some CADD background. This course in computer-aided drafting/design provides the student with the opportunity to approach detailed and intricate drafting/design problems from a computer perspective.

ETG 3541

Applied Mechanics: PR: MAC 1104 and MAC 1114 and PHY 3053C or equivalent. Coplanar, parallel, concurrent, and non-current force systems. Centroids, CG's, moments of inertia. Principles of dynamics, rectilinear motion and rotation, work, energy, power, impulse, momentum, and impact.

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EN 3(3.0)

ETG 4530C

Strength of Materials: PR: ETG 3541. Relationship between external forces and action of members of a structure. Topics include stress, shear, moment, deflections, columns, connections, and Mohr's circle. **ETG 4950C** EN 3(1.4)

Senior Design Project: PR: ETG 3541, EST 4502C, ETG 4530C or C.I. Engineering Technology senior within 18 semester hours of graduation. Supervised individual or group projects involving project definition, planning, development, testing, and evaluation. Progress reports and a final oral presentation and formal written report are required.

FTI 3421

Materials and Processes: PR: MAC 1104 and MAC 1114 or equivalent: Chemistry, A study of fundamental properties of materials. Current industrial practices in founding, forming, joining and shaping processes.

ETI 3440

Product Design: Principles of Jayout and dimensions for production. Consideration of design factors, standards, specifications, and codes, with emphasis on productability.

ETI 3651C

Computer Applications: PR: COP 1200 or equivalent. Application of high-level program packages to solve problems in industrial practices.

ETI 3671

Technical Economic Analysis: PR: MAC 1104 or equivalent, Junior standing. Analysis of cost elements in technical operations. Basis for comparison of alternatives.

ETI 3690

Technical Sales: Application of technical knowledge to sales and service. Relationship of technical sales organization to production, customers, and competitors.

ETI 4110

Industrial Quality Control: PR: MAC 1104. Fundamentals of industrial quality control. Technical specifications, measurements standards, inspection, and gaging. Process control techniques,

ETI 4186

Applied Reliability: PR: ETI 4110. Practical application of reliability concepts and analysis applicable to the design, production and logistics phases of systems and system components.

ETI 4205

Applied Logistics: PR: ETI 4110 or C.I. Introduction to logistics. Emphasis on practical applications. Includes systems engineering, cost/systems effectiveness, reliability, mantainability, system functional analysis, logistic support analysis, life cycle cost analysis.

ETI 4522C

Applied Automated Systems: PR: CET 4131C. Fundamentals of automation in analysis and design of industrial control systems using microprocessors and minicomputers. Real-time industrial models.

FTI 4635

Technology Administration: PR: Junior standing. Techniques of applying management principles to professional positions held by Engineering Technologists. Management functions of planning, organizing, motivating, and controlling, production, sales, and service.

ETI 4640

Process Planning and Work Measurement: PR: MAC 1104 and COP 3200 or equivalent. Scheduling techniques (PERT), (CPM), are presented. Time Study Methods, Work Sampling and MTM are covered.

ETI 4661C

Applied Facilities Planning and Design: PR: Engineering drawing and senior standing. The design of manufacturing facilities and material handling systems.

FTI 4700

Occupational Safety: PR: Junior standing. Accident prevention and the operation of an industrial safety program. Basic requirements of the Occupational Safety and Health Act standards.

ETM 4220

Applied Energy Systems: PR: MAC 3253 or equivalent: Chemistry: College Physics. Introduction to energy, work, and thermal systems and processes. Applications of heat energy with emphasis on solar energy.

ETM 4232C

Applied Heat Transfer: PR: ETG 3541 or equivalent, MAC 3253 or equivalent. An introduction to the basic concepts and applications of conduction, convection and radiation heat transfer. Basic energy balances and their applications are emphasized. Study state and transient phenomena are evaluated, including numerical solutions.

ETM 4331C

Applied Fluid Mechanics: PR: MAC 3253 or equivalent; Physics 3053C or equivalent. An introduction to the basic concepts of hydrostatics and hydrodynamics covering fluid statics, flow of ideal fluids, continuity of mass, impulse and momentum principles, conservation of energy, flow of fluid in pipes, etc.

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FTM 4403C

cams ETM 4512C

EUH 3122 AS 3(3,0) Medieval Society and Civilization: PR: EUH 2000 and 2001 or C.I. FUH 3142 AS 3(3.0) Years' War. **EUH 3235** AS 3(3.0) culture, religious decline; Realpolitik, racism, imperialism, and militarism. EUH 3242 AS 3(3.0) Modern Europe and the First World War: A survey of the impact of the democratic institutions, education, transportation, housing, health, mass communications, entertainment, women, and warfare. **FUH 3281** AS 3(3.0) East Central Europe: Western reconstruction, and prosperity. **EUH 3411** AS 3(3.0) Ancient Rome: PR: EUH 2000 and 2001 or C.I. Romans and their contributions to Western Civilization. Covers traditions of Roman Republic, Carthaginian Wars, Imperial Period. **EUH 3651** AS 3(3.0) War and Society: Evolution of weapons, tactics, strategy; role, social status, recruitment of soldiers; influence of military on governments; and international efforts to preserve peace. FUH 4284 AS 3(3.0) cist movements in the non-totalitarian states. EUH 4465 AS 3(3.0) Hitler's Third Reich: PR: EUH 2000 and 2001 or C.I. German nationalism and militarism; World War I recovery. British History: 1815-Present: PR: EUH 2000 and 2001 or C.I. **EUH 4571** AS 3(3.0) History of Russia to 1801: PR: EUH 2000 and 2001 or C.I. Kievan State: Mongol Yoke: Development

stresses, and strength of materials. ETM 4755 Applied Air Conditioning: PR: ETM 4331. Analysis of body comfort, psychometrics, heating and

Applied Kinematics: PR: ETG 3541 and Engineering Drawing. Analysis and design of machine elements and mechanisms involving velocities and accelerations of components, linkages, gears, and

cooling load, specification of air conditioning systems, air distribution systems and system piping requirements. **EUH 2000** AS 3(3,0) Western Civilization I: A survey of western civilization from ancient to 1648.

EUH 2000H	AS 3(3,0)
Honors Western Civilization I: Same as EUH 2000 with honors-level conte	ent.
EUH 2001	AS 3(3,0)
Western Civilization II: PR: EUH 2000 or C.I. A survey of western civiliz	zation from 1648 to present.
May be taken before EUH 2000.	
EUH 2001H	AS 3(3,0)
Honors Western Civilization II: Same as EUH 2001 with honors-level cont	ent.

Renaissance and Reformation: PR: EUH 2000 and 2001 or C.I. Influence of Renaissance humanism on arts, letters, and politics; Luther and Protestantism; the Catholic Counter-Reformation and the Thirty

Romanticism and Realism: PR: EUH 2000 and 2001 or C.I. Napoleon and nationalism: new ideas: conservation; liberalism, romanticism, republicanism and socialism; urbanization, technology and mass

Second World War and Rebirth of Europe: PR: EUH 2000 and 2001 or C.I. Origins of World War II; Hitler's "New Order," and resistance movements; Cold War; de-Stalinization of Russia; Sovietization of

Fascism and the Totalitarian Dictatorships: PR: EUH 2000 and 2001 or C.I. Totalitarian ideologies. institutions, and practices in Lenin's and Stalin's Russia. Mussolini's Italy, and Hitler's Third Reich; fas-

and Versailles Treaty; the Weimar Republic and the rise of the Nazis; Second World War, division and

EUH 4500	AS 3(3,0)
English History to 1485: PR: EUH 2000 and 2001 or C.I.	
EUH 4501	AS 3(3,0)
English History: 1485-1815: PR: EUH 2000 and 2001 or C.I.	the second second second second second
EUH 4502	AS 3(3,0)
Bullish Illistered date Breezet DD FULLOROOD - LOROT - OL	

of Musocovite Expansionism and Absolutism; Time of Troubles; Westernization of Russia under Peter I and Catherine; Role of Orthodox Church.

EN 3(2.2) Applied Design of Machine Elements: PR: ETG 3541, ETG 4530C, and Engineering Drawing. Design of basic machine elements, including cams, gears, bearings, and coupling, taking into account loads,

EN 3(2.2)

EN 4(4.0)

EUH 4574

History of Russia: 1801-1917: PR: EUH 2000 and 2001 or C.I. Alexander I: Napoleonic Invasion, Revolutionary Movement: Russian Policy toward Central Asia and China: Great Reforms: Russo-Japanese War; Revolution of 1905; Constitutional Period; Triple Entente.

EUH 4576

History of the Soviet Union: 1917-Present: PR: EUH 2000 and 2001 or C.I. First War: 1917 Revolutions: Civil War; New Economic Policy: Stalin-Trotsky Struggle; Collectivization; Stalinist Purges; Second War: Post-Stalin Russia: Khrushchev; Sino-Soviet Relations.

EUH 4620

European Great Powers: 1815-1914: PR: EUH 2000 and 2001 or C.I. Congress of Vienna, Metternich's system Crimean War, unifications of Italy & Germany, the Bismarckian era, the alliance systems, and the outbreak of World War I.

EUH 4621

War and International Politics in Europe, 1914 to Present: PR: EUH 2000 and 2001 or C.I. The relationship of the European Great Power from the outbreak of WW I to the present.

EUH 5247

Colloquium in Europe, 1919-1939: PR: Senior standing or C.I. Selected topics in the historical literature of Europe from the Paris Peace Conference to the outbreak of the Second World War.

FUH 5517

Colloquium in Tudor-Stuart England: PR: Senior standing or C.I. Intensive reading and class discussion on selected topics during the Tudor-Stuart era.

EUH 5579

Colloquium in Soviet Russia: PR: Senior standing or C.I. Reading and class discussion of the literature on selected topics in Russian history, 1911-present.

FUH 5595

Colloquium in Czarist Russia: PR: Senior standing or graduate status. Selected topics on the literature of Russia under the Czars prior to 1917.

EUH 5608

Colloquium European Intellectual History: PR: Senior standing or C.I. Reading and class discussion of the literature on selected topics of European intellectual history.

EVS 4795

Air Pollution Control: Fundamental techniques applicable to analyzing composition and sources of pollutants, measuring concentrations, and controlling emissions. Air pollution control programs, laws, rules, and regulations.

EVT 3062

Professional Role of the Vocational Teacher: PR: EVT 3371 or C.I.

EVT 3312

Course Construction in Health Occupations Education: PR: EVT 3365 or C.I. Planning and preparation of materials, managing the laboratory and involvement in appropriate Vocational Student Organizations. Clinical instruction related to vocational education and industry training.

EVT 3365

General Methods/Testing Evaluation in Vocational Education: General teaching methods, testing and evaluation. Techniques specific to Vocational Education and Industry Training.

EVT 3367

Evaluation of Vocational Instruction: PR: EVT 3371 or C.I. Study, practice, and achievement of competency in assessing student cognitive, affective, and psychomotor performance in vocational education. EVT 3371 ED 4(4,0)

Course Construction in Industrial Education: PR: EVT 3365 or C.I. Planning and preparing instructional materials, organizing and managing the Industrial Education laboratory, and involvement in VICA. ED 4(4,0)

EVT 3502

Special Needs of Vocational Students: PR: EVT 3365 or C.I. Achievement of teacher competency in meeting the special needs of the handicapped, culturally different, slower learner, those with basic skill deficiencies, and those in non-traditional programs. ED 3(3,0)

EVT 3815

Management of the Vocational Classroom and Laboratory: PR: EVT 3371 or C.I. Organization and management of school facilities for instructional purposes and skill in providing for student health and safety.

EVT 4065

Principles and Practices of Vocational Education: PR: EVT 3365 or C.I. Study of the history, structure, and current status of vocational education. Achievement of competency in applying principles of vocational education to vocational student organizations, advisory committees, and economic development.

ED 4(4,0)

ED 3(3,0)

ED 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

EN 3(2,2)

ED 4(4,0)

ED 4(4.0)

AS 3(3,0)

EVT 4169

Curriculum Development Techniques for Industry Training: The practical application of fundamental knowledge, important skills, alternative analysis methods, and the critical elements of the trainers analysis tasks.

EVT 4368

Advanced Teaching Techniques for Vocational Education: PR: EVT 3365 or C.I. Study, practice, and achievement of techniques including cooperative learning, simulation, instructional modeling and evaluation of instructional effectiveness.

EVT 5260

Cooperative Programs in Vocational Education: PR: Regular Certificate or C.I. Study of cooperative vocational programs and achievement of competencies needed to establish, manage, and coordinate co-op program activities in all vocational areas.

EVT 5315

Applied Clinical Teaching Techniques in Vocational Education: PR: Regular Certificate or C.I. Study and practice of clinical teaching methods, development of student performance assessment instruments, planning clinical learning experiences and record keeping.

EVT 5316

Clinical Coordination for the Health Occupations Teacher: PR: Regular Certificate or C.I. Development of clinical guidelines, resources, student schedules, and risk-management programs. Includes negotiating clinical contractual agreements and planning field supervision.

EVT 5561

Student Guidance in the Vocational Program: PR: Regular Certificate or C.I. Achievement of skills used by teachers as they gather student data, confer with students, and help students plan for employment or further education.

EVT 5564

Student Vocational Organizations: PR: Regular Certificate or C.I. Competencies needed by vocational teachers as they establish and supervise student vocational organizations in secondary and postsecondary schools.

EVT 5817

Management of Vocational Programs: PR: Rank III Certificate or C.I. Study and achievement of selected competencies needed by vocational teachers, supervisors, and local administrators in the management of vocational education programs in the schools.

EXP 3204C

Perception: PR: PSY 2013. PSY 3214. Consideration of physical and psychological variables in perceptual phenomena. Lecture/Lab.

EXP 3304

Motivation: PR: PSY 2013. Psychological and physiological aspects of human motivation.

EXP 3404

Basic Learning Processes: PR: PSY 2013 and PSY 3214. Theories and research findings from basic laboratory investigation of learning phenomena. Lecture/Lab.

EXP 3513C

Cognitive Psychology: PR: PSY 2013. Theory and research on attention, memory, complex human learning, and problem solving.

EXP 5208

Sensation & Perception: PR: C.I. A study involving the human information processing with regard to physical and psychological variables in sensory and perceptual phenomena.

EXP 5255

Human Performance: PR: C.I. Human performance dimensions and concepts of assessment of human capabilities; performance acquisition, information processing and decision-making; applications of principles to understanding of stress and performance effectiveness.

EXP 5256

Human Factors I: Survey of human factors literature. Introduction to topics including human capabilities and human interfaces with human-machine systems.

EXP 5445

Psychology of Learning and Motivation: PR: DEP 5057 or C.I. Examination of theories and research concerning the acquisition and retention of behavior, as well as motivational factors which influence learning and behavior.

EXP 5506

Human Cognition and Learning: PR: EXP 3404 and EXP 3513. Research and theory relating to attention, memory, problem solving, and reasoning.

FIL 3100

Introduction to Scriptwriting: PR: Admission to Film program. Rudiments of scriptwriting, including visual storytelling, story structure, character, dialogue, and introduction to scriptwriting software.

ED 2-3(2-3,0)

ED 2-4(2-4,0)

AS 4(2,2)

AS 3(3,0)

AS 4(2,2)

AS 4(2.2)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

ED 3(3.0)

ED 3(3,0)

ED 2-4(2-4.0)

ED 2-3(2-3,0)

ED 2-3(2-3.0)

ED 2-3 (2-3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(2.3)

AS 3(2.2) FII 3400 AS 3(3.0) FII 3410 AS 3(3.1) Film Theory: PR: Major status only. A historical survey of the major film theories, Munsterberg through Metz FII 3521 AS 3(3.0) French Film: The study of French cinema as an art form and the key role of the director. Films are anawith French literature. Taught in English. FII 3522 in relation to other aspects of culture and to sociopolitical structures at the time. FIL 3922 AS 1(1.1) FIL 4102 Intermediate Scriptwriting: PR: FIL 3100. Writing workshop, examination of mythic storytelling, and **FIL 4103** AS 3(2.3) Advanced Scriptwriting: PR: FIL 3100. Advanced writing workshops, principles and methods of adap-

AS 3(3.0) German Film: PR: C.I. Exploration of the form and context of German film during different time periods

Film Colloquium: PR: Admission to the film program. A series of lectures, films and forums designed for students in the film program. The class is team taught by film faculty and guest speakers from the film industry. S/U Grade ONLY. Course may be repeated.

ethics of scriptwriting.

tation and reader's coverage.

FII 4104

Scriptwriting Workshop: PR: FIL 3100. Writing workshop for experienced scriptwriters, cold readings, preparing calling card script, marketing scripts and funding sources.

FIL 4201

Intermediate Film Production: PR: FIL 3200. Advanced exploration of the aesthetic and technical facets of filmmaking.

FIL 4202

Advanced Film Production: PR: FIL 3200, 4201. Intensive tutorial guidance, instruction and evaluation of final film projects from initial concept through production.

FII 4203

Film Production Workshop: PR: FIL 3200, 4201. Intensive tutorial guidance, instruction and evaluation of final film projects from post-production through release print.

FII 4208

Film Directing: PR: FIL 4201. Principles and practice in directing narrative and documentary motion pictures.

FIL 4210

Cinematography: PR: FIL 3200. Advanced principles and practices of cinematography.

FIL 4220

Art Direction for Film: PR: FIL 3200, FIL 4201, Analysis of visual structure of film. Specific problems in art direction.

FII 3200

FIL 3231

Introduction to Film Production: Introduction to production utilizing film equipment. Basic technical and aesthetic aspects of production.

AS 3(2,4) Introduction to Computer Animation: PR: FIL 3242. Introductory computer graphic techniques utilizing microcomputer systems. Techniques include basic paint systems, color cycling and 2D animation.

FII 3232

AS 3(2,4) Intermediate Computer Animation: PR: Intro To Computer Animation. Focus on 3D computer modeling and animation systems. Hands-on exercise on the type of high-end animation systems used in the film industry.

FIL 3242

Introduction to Cel Animation: PR: Major status. Introduction to traditional cel animation. Drawing skills required. AS 3(3,0)

FII 3300

Film Documentary: The uses and analysis of the non-fiction film.

History of Motion Pictures: The history of motion pictures as art and industry: from 1895 to the present.

History of Animated Films: Survey from early animators to the development of the cartoon industry. Television animation included.

FII 3503

lyzed from structural, social, economical, and historical perspectives with attention to their relationship

AS 3(2,3)

AS 3(2.4)

AS 3(2,4)

AS 3(2,4)

AS 3(3,0)

AS 3(3.0)

AS 3(2,3)

AS (2,4)

AS 3(2.4)

AS 3(2.3)

FIL 4230

Intermediate Cell Animation: PR: Major status-FIL 3242. Production from storyboard to composite print.

FIL 4233

Advanced Computer Animation: PR: FIL 3231 and FIL 3232. Advanced 3D modeling and animation techniques. Working in small production teams, students will create short animated segments using a high-end 3D animation system.

FIL 4234

Computer Animation Workshop: PR: FIL 3231, FIL 3232, FIL 4233, or C.I. A production level course in computer animation that emphasizes all phases of the commercial production process, including storyboard, budgets, client relations, and post-production.

EII 4250

Post-Production Workshop: PR: FIL 4201. This class will provide students with a thorough understanding of the process of producing in film and posting on state of the art equipment.

FII 4293

Advanced Cel Animation: PR: Major status, FIL 4230, Production from storyboard to composite print from pre-recorded sound track.

FIL 4294

Cel Animation Workshop: PR: Major status, FIL 4293, Production from storyboard to composite print from pre-recorded sound track.

FIL 4504

Motion Picture Genre/Aethetics: PR: FIL 3503, Analysis and evaluation of films: major genres, directors, styles, or periods considered in depth.

FIL 4600

The Film Producer: PR: FIL 4208. The role of the producer is examined in the context of theatrical film. **FIL 4601**

Production Management: PR: FIL 3200, Reproduction, budgeting, script breakdown, construction of production boards, scheduling, location scouting, and crew procurement.

FIL 4942

Animation Workshop: PR: FIL 4230, FIL 4231. An intensive study of various film animation techniques under the tutelage of professional animators.

FIN 3100

Personal Finance and Investments: PR: Junior standing. Fundamentals of managing and investing one's money and acquiring, safeguarding, and disposing of one's assets. Not usable for credit by Finance majors.

FIN 3303

Financial Markets: PR: FIN 3403. The role of short and long-term financial markets and financial institutions in capital formation and allocation. Theories and mathematics of interest rates.

FIN 3403

Business Finance: PR: ACG 2021, ACG 2071, (or ACG 2023), ECO 2013 and ECO 2023. With the balance sheet as a reference point, this course provides an introduction and overview of the acquisition. financing, and management of business assets.

FIN 3404

Intermediate Corporate Finance: PR: FIN 3403. In-depth study of the principles of corporate finance. Investment, financing, and capital decisions are examined.

FIN 3453

Financial Models: PR: FIN 3403, PR or CR: FIN 3404, Mathematical models applied specifically to financial problems, including those models suitable for representation and solution on computers. **FIN 3504** BA 3(3.0)

Investment Analysis: PR: FIN 3403. A survey of investments, including security markets, investment vehicles, and environment. Principles of asset valuation in efficient markets.

FIN 4127

Employee Benefits and Retirement Planning: PR: FIN 3403. This course considers the process of establishing specific financial objectives at various stages of life and how those objectives can be reached.

FIN 4324

Management of Financial Institutions: PR: FIN 3303 and FIN 3403. Analysis of management policies of financial institutions, including asset, liability, and capital management. The economic and regulatory influence on competition is considered.

FIN 4424

Advanced Topics in Financial Management: PR: FIN 3404 and FIN 3453. Advanced study in financial management. Topics include capital budgeting, financial structure, and capital decisions. Case studies used extensively.

BA 3(3.0)

BA 3(3.0)

AS 3(2.4)

AS 3(2,4)

AS 3(1.3)

AS 3(2.4)

AS 3(2.4)

AS 3(3,0)

AS 3(2.2)

AS 3(3.0)

AS 3(2,3)

BA 3(3.0)

BA 3(3,0)

BA 3(3.0)

BA 3(3.0)

BA 3(3.0) BA 3(3,0)

AS 3(2,4)

FIN 4503

Speculative Financial Markets: PR: FIN 3303 and FIN 3504. Study of options, futures, forward, and other speculative markets. Investments traded in these markets are examined analytically. Pricing and hedging models are considered.

EIN 4514

Portfolio Analysis and Management: PR: FIN 3303 and FIN 3504. Portfolio and capital market theory in the determination of rational investment policies. Risk analysis, portfolio analysis, and evaluation techniques.

FIN 4604

International Financial Management: PR: FIN 3303, FIN 3404 and FIN 3504, Analysis of the foreign financial methods and investment, currency futures market, capital budgeting, cash management, examination of Eurocurrency market and international bond markets.

FIN 5405

Financial Concepts: PR: Acceptance into the graduate program, ACG 5005 and ECO 5005 and ECO 5415 or equivalents. Effects of financial decisions upon the firm, interrelationships of these effects and alternatives available to financial managers in making these financial decisions.

FL F 3063

Foreign Language as Human Behavior: PR: Or CR: LIN 3010 or C.I. Nature of language, language learning, and teaching basic skills. Weekly laboratory.

FLE 4360

Foreign Language Instructional Programs: EDG 4321. Objectives for curriculum and methods and materials for teaching foreign language in middle grades and high school.

FOL 3730

Romance Philology: The study of the major Romance Languages and their origins as they developed from Classical and Medieval Latin to their linguistic influences such as Arabic and Provencial.

FRE 1005

French Diction: This course is especially designed for music and voice students, with an emphasis on musical terms, French songs, and opera libretti.

FRE 1120

Elementary French Language and Civilization I: Designed to initiate the student to the major language skills. Open only to students with no previous experience with this language.

FRE 1121

Elementary French Language and Civilization II: PR: FRE 1115, FRE 1120 or experience with this language. Continuation of FRE 1120.

FRE 2200

Intermediate French Language and Civilization I: PR: FRE 1121 or equivalent. Development of language skills and cultural knowledge at the intermediate level.

FRE 2201

Intermediate French Language and Civilization II: PR: FRE 2200 or equivalent. Continuation of FRE 2200 with emphasis on French civilization.

FRF 2240

Intensive French Conversation: PR: One year of French or equivalent. Practical use of the language, leading toward fluency and correctness in speaking.

FRE 2270

Intermediate French Study Abroad: PR: Elementary French. Intermediate French language and civilization taught in the native environment.

FRE 3244

French Conversation: PR: FRE 2201 or equivalent. Development of skills in conversation and comprehension. This course may be repeated for credit. When repeated, credit will apply to general electives only.

FRE 3420

French Composition: PR: FRE 2201 or equivalent. Development of skills in composition. This course may be repeated for credit. When repeated, credit will apply to general electives only.

FRE 3440

Business French I: PR: Three semesters of French language. Introduces vocabulary and terminology in various French business activities, as well as standards, procedures, and practices of the French business world.

FRE 4421

Advanced French Conversation: PR: FRE 3244. Advanced conversation on directed topics from various disciplines. Literature, art, psychology, philosophy, music, business, and the sciences.

FRE 4422

Advanced French Composition: PR: FRE 3420. Readings and written limitations of modern literary styles in the form of themes, sketches, poems, and original stories.

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.1)

BA 3(3.0)

BA 3(3.0)

BA 3(3 0)

BA 3(3.0)

ED 2(2.1)

ED 4(3,2)

AS 2(2,0)

AS 1(1.0)

AS 4(4.1)

AS 4(4.1)

AS 3(3,1)

AS 3(3.1)

AS 3(3.0)

AS 8(16.10)

Survey of French Literature I: PR: FRE 2201 or equivalent. Main literary currents and works from the Middle Ages through the 18th century. AS 3(3.0) Survey of French Literature II: PR: FRE 2201 or equivalent. Main literary currents and works of the AS 3(3.0) AS 3(3.0) The French Literature of Canada: PR: FRE 2201 or equivalent. A survey of the French literature of AS 3(3.0) AS 3(3.0) AS 3(3.0) AS 3(3.0) AS 3(3,0) AS 3(3,0) AS 3(3.0) BA 3(1.3) BA 3(3,0) BA 3(1.3) BA 3(1.3) BA 3(1,3) BA 3(3.0)

FRW 3100

FRF 4500

FRF 4780

phonic groupings.

FRW 3101

19th and 20th centuries.

elements of French life; its historical, artistic, intellectual, scientific, spiritual contributions to the world via

French Phonetics and Diction: PR: FRE 3244 or equivalent. French phonology, with emphasis on

FRW 3370

Short Stories of 18th, 19th and 20th Centuries: PR: FRE 2201 or equivalent. Selected readings designed to increase reading speed and develop analytical abilities. Authors include: Voltaire, Maupassant, Flaubert, Camus, and others,

FRW 3740

Canada from the late 19th century to the presents, with particular emphasis on the novel and short story. **FRW 4281**

Twentieth Century French Literature: PR: FRW 3101, Contemporary French novel.

readings, lectures, films, and other media. Conducted in French.

FRW 4310

Seventeenth Century French Theatre: PR: FRW 3100. Corneille, Racine, and Moliere. A study of the lives and principal works of the authors.

FRW 4324

20th Century French Literature: PR: FRW 3101. Contemporary French drama. Authors: A. Jarry, Jules Romains, J. Giraudoux, J.P. Sartre, A. Camus, E. Ionesco, Samual Beckett.

FRW 4440

French Literature of the Eighteenth Century: PR: FRW 3100. The philosophical movement: Montesquieu, Vauvenarques, Voltaire, Diderot, Buffon,

FRW 4532

French Romanticism: PR: FRW 3100. Great poets and dramatists of the Romantic Movement: Hugo, Lamartine, Vigny, Musset, and others.

FRW 4552

Nineteenth Century French Literature: PR: FRW 3101. Realism and naturalism.

FBW 4820

Stylistics: PR: FRE 3420 or equivalent. An intense study of textual criticism. An examination of the relationship between language and literature; explications and linguistic analysis of literary texts.

FSS 2202C

Food Production Techniques: PR: HFT 1000. Basic principles of menu planning, food and beverage preparation and service. Laboratory work.

FSS 3120

Quantity Food Purchasing: PR: Junior standing, HFT 3540 or C.I., FSS 2202C. The purchasing procedures, specifications, and controls of food products in the hospitality industry.

FSS 3232

Quantity Food Management: PR: Junior standing, HFT 3540 or C.I., FSS 2202C. Management of food production in institutions, quality control, recipe standardization, portion and cost control, menu planning. **FSS 3232C**

Intermediate Techniques of Food Production: PR: HFT 3540 or C.I., FSS 2202C. An advanced food production course which provides the student the opportunity to develop skills in pantry, garde manager, garnishing, and convenience foods and services. Laboratory class.

FSS 3241C

Classical Cuisine/Volume Feeding: PR: HFT 3540 or C.I., FSS 3223. Provides the student with production and managerial experience in the area of world renowned traditional dishes, lecture, demonstration, and actual preparation of menu items.

ESS 3301

Nutrition Concepts and Issues in the Foodservice Industry: PR: HFT 3540 or C.I., FSS 3232. Introduces basic nutrition concepts. Discusses nutrition concepts and concerns in relation to food preparation and service in the hospitality industry.

FSS 4226

Sanitation in the Food Service Industry: PR: HFT 3540 or C.I., FSS 3223. The causes and prevention of food spoilage and food-borne illnesses. Certification through NIFI and ETS are both USDA approved.

AS 3(3.0) French Civilization and Culture: PR: FRE 3244 or FRE 3420. A survey analyzing development of key

AS 3(3.0)

AS 3(3.0)

BA 3(3.0)

EN 3(3.0) BA 3(3.0) BA 6(6.0) BA 3(3,0) Business in the International Environment: PR: FIN 3403, MAR 3023, MAN 3025, Provides an over-EN 3(3,0) EN 1(0.2) Physical Geography Laboratory: CR: GEO 1200, Analysis of climatic and meterology methods topo-EN 3(3,0) EN 3(3.0) AS 3(3.0) EN 3(2.2) AS 1(0,1) AS 4(4,1) AS 4(4.1) **GER 2200** AS 3(3,1) Intermediate German Language and Civilization I: PR: GER 1121 or equivalent. Development of lan-AS 3(3,1) Intermediate German Language and Civilization II: PR: GER 2200 or equivalent. Continuation of AS 3(3,0) AS 3(3,0) GER 3420 AS 3(3,0) Intensive German Composition: PR: GER 2201 or equivalent. Development of skills in composition. **GER 3440** AS 3(3.0) Business German I: PR: GER 2200. Introduction into German business language and practices. **GER 3441** AS 3(3,0)

Business German II: PR: GER 3440. Continuation of Business German I.

FSS 4284C

BA 3(1.3) Catering and Banquet Organization: PR: HFT 3540, FSS 2202C. Methods and procedures for successful on and off premise catering functions. Emphasis on food and beverage preparation, menu planning, service and sales techniques. Laboratory class.

GEA 4206

Physical Geography of North America: Analysis of the North American landscape as affected by climate, vegetation, and geomorphology.

GEB 3004

Management: PR: Junior standing. The interdisciplinary application of the managerial functions of planning, organizing, leading, and controlling. For Non-Business Major ONLY.

GEB 3031

The Cornerstone Course: An orientation to opportunities and challenges facing managers in contemporary business organizations. Introduces competencies of team work, communication, creative thinking, and adapting to change.

GEB 4361

all understanding of the nature, magnitude, and importance of the international business sector.

GEO 1200

Physical Geography: Basic physical elements of geography, including climate, landforms, soils, natural vegetation, minerals, and their integrated patterns of world distribution.

GEO 1200L

graphic and geological maps, landforms, and landscape interpretation.

GEO 3370

Resources Geography: Analysis of basic principles and problems associated with development, use, conservation, and management of natural resources, with special emphasis on the United States.

GEO 3370H

Resources Geography (Honors): Analysis of human management of global resources and the resulting impact on the world's environment.

GEO 3470

World Political Geography: Analysis of factors which affect power relations among nations, including area, location, political styles, ethnic divisions, and the politics of energy.

GEO 4140C

Remote Sensing of the Environment: PR: GEO 1200 or C.I. Interpretation and application of remote sensor imagery to physical, economic, and urban analysis.

GER 1005

German Diction: This course is especially designed for music and voice students, with an emphasis on musical terms. German songs, and opera libretti.

GER 1120

Elementary German Language and Civilization I: Designed to initiate the student to the major language skills, Open only to students with no previous experience with this language.

GER 1121

Elementary German Language and Civilization II: PR: GER 1115, GER 1120 or experience with this language. Continuation of GER 1120.

guage skills and cultural knowledge at the intermediate level.

GER 2201

GER 2200 with emphasis on German civilization.

GER 2210

Beginning German Conversation: PR: One year of German or equivalent, Practical use of the language, leading toward fluency and correctness in speaking.

GER 3240

Intermediate German Conversation: PR: GER 2201 or equivalent. Development of skills in conversation and comprehension through practice.

GER 4510

Life and Culture in Nazi Germany: PR: C.I. Confrontation with the development of national socialist ideas and their realization in everyday life and culture. Given in German.

GER 4520

Modern Germany: An introduction to the history of postwar Germany - from the two Germanies to unification and today's Germany. Given in German.

GEW 3100 AS 3(3,0) Survey of German Literature I: PR: GER 2201 or equivalent. Main literary currents and works from the Middle Ages through the 19th Century Romanticism.

GEW 3101

Survey of German Literature II: PR: GER 2201 or equivalent. Main literary currents and works from 19th Century Realism to the present.

GEW 3370

Short Story: PR: GER 2201 or equivalent. German short prose works of the 19th and 20th centuries. GEW 3480

German Post-War Literature: PR: GER 2201. This course examines the work of German, Austrian and Swiss writers after World War II.

GEW 4482

German Children's Literature: PR: GER 2200. A look into the history of German children's literature with a concentration on work after World War II.

GEW 4531

The Age of Goethe and Schiller: PR: GER 2201, Selected texts of Goethe and Schiller are examined. with particular attention to their relationship to both German classicism and German romanticism.

GLY 1030

Geology and its Applications: Geologic principles, applications, and hazards including: gemstones, rock cycle, moving continents, mountain building, metal ores, fossil fuels, groundwater, sinkholes, beach erosion, landslides, earthquakes, tidal waves, volcanism.

HBR 1120

Elementary Modern Hebrew Language and Culture I: Designed to initiate the student to the major language skills; listening, speaking, reading and writing, as well as to constitute an introduction to Israeli culture

HBR 1121

Elementary Modern Hebrew Language and Culture II: PR: HBR 1120 or equivalent. Continuation of HBR 1120.

HBR 2200

Intermediate Modern Hebrew I: PR: HBR 1121 or equivalent. Designed to continue the study of Modern Hebrew; increase proficiency in conversation, reading and writing skills, and further expose students to Israeli culture.

HBR 2201

Intermediate Modern Hebrew II: PR: HBR 2200, Continuation of HBR 2200,

HBT 3220

The Israeli Short Story in Translation: Israeli experience as reflected in contemporary stories read in translation. Selected stories by Agnon, Hazaz, Yizhar, Appelfeld, and others will be read and analyzed.

HFT 1000

Introduction to the Hospitality and Tourism Industry: An orientation to the hotel, restaurant, and travel industry, and its history, structure, and operating procedures.

HFT 2252

Rooms Division Management: PR: HFT 1000. Practices and systems utilized in the operational management of the front office, reservation, and housekeeping in hotels/motels.

HFT 2750

Fundamentals of Conventions and Conferences: PR: HFT 1000. An orientation to convention management field. Designed to illustrate the importance of conventions, meeting, and trade shows to the hospitality industry.

HFT 3313

Hospitality Physical Plant Managment: PR: HFT 3540 or C.I. Analysis of operational problems related to the physical plant and structure of enterprises in the hospitality industry.

HFT 3444

Management Information Systems: PR: HFT 3540 or C.I. Analysis, design and implementation of specialized information systems for lodging, food service and travel operations. Special emphasis is placed on implications for management organization, planning, and control of such systems in the hospitality environment.

AS 3(3.0)

AS 4(4.0)

AS 3(3,0)

AS 3(3,0)

BA 3(3.0)

BA 3(3,0)

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HET 3540

Guest Services Management: CR: Junior standing, MAN 3025, MAR 3023. The study of making decisions from the quest's point of view in the hospitality industry.

HET 3600

Legal Environment in the Hospitality and Tourism Industry: PR: HFT 3540 or C.I. Principles of law as related to the Hospitality/Tourism Industry.

HET 3700

Travel and Tourism Administration: PR: HFT 3540 or C.I. Foreign and domestic tourism supply and demand, economic impacts, organization of tourism, social and cultural aspects.

HFT 3751

Convention and Conference Operations: PR: HFT 3540 or C.I. HFT 2750 (Fundamentals of Conventions and Conferences) provides an in-depth understanding of the multiple facets of on-site operations associated with effective convention and conference planning and management.

HFT 3931

Hospitality Guest Lectures: PR: HFT 3540 or C.I. A series of 14 lectures by prominent hospitality practitioners intended to expose students to various aspects of the Hospitality/Tourism industry.

HFT 3949

Cooperative Education: Provides paid, pre-professional work experience related to the students' major while they continue to attend school. Requires achievement of major-related learning objectives.

HET 4210

Hospitality Human Resources Development: PR: HFT 3540 or C.I. Proven training systems and personnel development methods for hospitality industry employees are presented. Specific applications of alternative methodologies are identified.

HET 4250

Hotel-Motel Management and Operations: PR: HFT 3540 or C.I. A study of the organization and operations of hotel/motels and their various departments with emphasis on techniques and tools of management in the industry.

HFT 4343

Hospitality Facilities Planning and Design: PR: HFT 3540 or C.L. HFT 3313. Principles of facility planning layout and design that maximize efficiency in hospitality operations.

HFT 4420

Profit Planning and Decision-Making in the Hospitality, Industry: PR: HFT 3540 or C.I. Emphasizes the use of financial statement data in the decision-making process relative to short long-term financial goals in the hospitality industry environment.

HET 4473

Hotel Development Analysis: PR: HFT 3540 or C.I., HFT 4420. Review of methodological operation, financial, and marketing aspects of analyses for hotel development projects.

HET 4503

Hospitality and Tourism Marketing: PR: HFT 3540 or C.I., MAR 3023. The application of marketing concepts to the Hospitality and Tourism Industry. Special emphasis on marketing planning and strategic marketing.

HFT 4717

Tourism Planning and Developent: PR: HFT 3540 or C.I., HFT 3700. Analysis and review of physical, economic, social, and environmental planning techniques used in tourism destination development.

HFT 4722

Travel Agency Management: PR: HFT 3540 or C.I., HFT 3700. The trends operation management procedures and practices of travel agents. Emphasis on tools utilized in agency operations.

HET 4735

Tourism Geography: PR: HFT 3540 or C.I., HFT 3700. A seminar discussing the main geographical tourism destinations in U.S. and the World.

HET 4752

Convention Promotion and Public Relations: PR: HFT 3540 or C.I. Introduces specific concepts related to marketing conventions and meetings. Also considers destination marketing and telemarketing concepts in relation to convention management.

HFT 4753

Convention and Conference Services: PR: HFT 3540 or C.I. Provides an in-depth understanding of the acquisition and management of services (food and beverage, audio visual, transportation, etc.) integral to effective convention and conference operations.

HFT 4754

Exhibit and Trade Show Operations: PR: HFT 3540 or C.I. Provides an in-depth study of exhibit and trade show operations. Focuses on both supply and demand pertaining to exhibits and trade shows.

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BA 1(1.0)

BA 1-5(0,1-5)

consultation with a directing professor. **HLP 4722** ED 3(2.1) Teaching Elementary School Health and Physical Education: PR: Admission to Phase II or C.I. Organization, practice, and conduct of health (including drug abuse) and physical education programs in the elementary school. Includes field experience. HMW 3200 AS 3(3.0) Readings in Modern Hebrew Literature: PR: 2 years of Hebrew or equivalent. HSA 3122 HPA 3(3,0) U.S. Health Care Systems: PR: Major or minor in College of Health or C.I. A survey of the economics, social, and political aspects of the health care system in the United States. **HSA 3170** HPA 3(3.0) Health Care Finance: Budgeting; resources for funding current and long-term assets; cost and cost behavior: prospective payment: DRGs as reimbursement base. HSA 3210 HPA 3(3.0) Long Term Care Administration: Current financing mechanisms and proposed solution, and the impact of government regulation or the operation of long-term care facilities. HSA 4120 HPA 3(3.0) Community and Public Health Sciences: History and philosophy of public health, interphase of governmental, voluntary, and private health agencies; current community health problems, issues, and needs; social and economic factors.

Beverage Management: PR: HFT 3540 or C.I. The origin production, storing, marketing, and control of

while they continue to attend school. Requires achievement of major-related learning objectives.

HSA 4121

History and Future of Health Care: Health care institutions: purposes of health agencies, organizations and allied health professionals; new trends in health care delivery. Designed for non-majors,

HSA 4180

HET 4860

HFT 4949

HIS 3462

HIS 4970

Modern Times. HIS 4150

repeated once for credit.

beverages in the hospitality industry.

Organization and Management for Health Agencies: PR: STA 2014 and Major or Minor in College of Health or C.I. Organization and management of health agency organizations and management procedures.

HSA 4193

Health Care Automation: Analysis and design of computerized systems for health data and health administration

HSA 4220

Long Term Patient Management: Concepts and process of patient care planning and management in a long term care facility; individual and team roles of medicine, paramedical and supportive personnel, patient and family consideration; long term care facility coordinating.

HSA 4502

Risk Management Systems: PR: C.I. Health Safety laws/rules; community inter-relationships; liability insurance types/contracts; malpractice.

HSA 4700

Health Sciences Research Methods: Introduction to research design in the Health Sciences, including design, literature review, testing, analysis and conclusions.

HSA 5198

Information Systems and Computer Applications in Medicine: PR: Graduate standing or C.I. Overview of health information systems, with an emphasis on computer applications. Discussion of software and hardware requirements.

HSC 2000

Introduction to the Allied Health Professions: A survey of allied health professions with regard to duties, responsibilities, education and training, ethics, and relationships with other health professionals. Satisfactory/Unsatisfactory grade.

HPA 3(3.0)

HPA 4(4.0)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 2(2.0)

BA 1-5(0.1-5) Cooperative Education: Provides paid, pre-professional work experience related to the students' major

BA 3(3.0)

AS 3(3.0) History of Scientific Thought: PR: EUH 2000 and 2001 or C.I. History of science from the Greeks to

AS 3(3.0) History and Historians: PR: C.I. A study of European and/or American historiography. May be

AS 3 Senior Thesis: Original research paper available to advanced history majors, topics to be selected in

HSC 3110C

Medical Self Assessment: Development of clinical skills and understanding of one's health to encourage active participation of individuals in their own health care.

HSC 3402C

CPR & First Aid: To train individuals to accepted and recognized medical standards in emergency first aid and CPR to include medical, environmental and trauma related emergencies.

HSC 3531

Medical Terminology: A study of the language of medicine and allied health specialties, including work construction, definitions, and application of terms.

HSC 3640

Health Law: Principles of law as applied to the health field, with special reference to health practices. **HSC 3593C** HPA 3(2.2)

HIV Disease: A Human Concern: Analysis of the spectrum of HIV disease. Topics include: epidemiology & immunology; basic facts, prevention; legal, economic, and ethical issues; psychosocial aspects; substance abuse: sexuality and decision-making.

HSC 4008

Professional Development in Health Professions: PR: RET 3026 or C.I. Career development planning, professional leadership approaches to problem solving, regulatory and professional requirements. and the impact of disease and technology on the health care industry.

HSC 4243

Analysis of Instruction in Health Professions: Development of teaching aids, audiovisuals, learning packets. Course development, guestioning strategies, evaluation of didactic and clinical performance. HSC 4500 HPA 3(3.0)

Epidemiology: A study of the distribution and determination of diseases and injuries in human population.

HSC 4550

Pathophysiologic Mechanisms: PR: ZOO 3733C and PCB 3703C, or C.I. A study of pathologic lesions and pathophysiologic mechanisms in causation and evolution of the various disease state.

HSC 4564

Health Care Needs of the Elderly: Overview of the physical and emotional needs of the elderly, including the institutional health care available.

HSC 4651

Health Care Ethics: A study of ethical issues in health care, including life-saving measures, rights to die, transplants, surrogate parenthood, privacy and confidentiality, and decision-making.

HSC 5595

AIDS: A Human Concern: Focus on epidemiology, transmission, prevention, legal and health care issues, economic impact, psychosocial aspects, sexuality, substance abuse, ethics, hotlines, referral services and the decision making process.

HUM 2211

Western Humanities I: Examples of the philosophy, religion, literature, music, and visual arts, from Ancient Greece through the Middle Ages; ideas that shaped our world.

HUM 2211H

Honors Western Humanities I: Same as HUM 2211 with honors-level content. HUM 2230

Western Humanities II: PR: HUM 2211 or C.I. Continuation of HUM 2211, from the Renaissance through the Modern World.

HUM 2230H

Honors Western Humanities II: PR: HUM 2211 or C.I. Same as HUM 2230 with honors-level content. AS 3(3,0) HUM 3025

Critical Evaluation of the Arts: An inter-disciplinary study of contemporary theory and practice in the criticism and interpretation of the arts.

HUM 3250

Contemporary Humanities: Current trends in the arts and related developments in philosophy, science, and technology, focusing on the transition from modern to postmodern culture.

HUM 3401

Asian Humanities: An interdisciplinary survey of the cultures of India, China, and Japan, concentrating on their traditional art, literature, religion, philosophy, and music.

HUM 3417

AS 3(3,0) Hindu Thought and Culture: A survey of the development of Hindu thought and culture from vedic times to the modern age, with emphasis on religion, literature, philosophy, art and music.

HUM 3418

Islamic Thought and Culture: A survey of the develoment of Islamic thought and culture, concentrating on religion, jurisprudence, philosophy, science and art.

HPA 3(2.3)

HPA 3(2.2)

HPA 3(3.0)

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HUM 3431

Ancient World: Greece: History and culture of Greece from the Minoan-Mycenaean to the Hellenistic age, with emphasis on contributions in art, literature, and philosophy. AS 3(3.0)

HUM 3432

Ancient World: Rome: History and culture of Rome from the Etruscan Period to the dissolution of the empire, with emphasis on contributions in architecture, law, and literature.

HUM 3553

Moses, Jesus and Muhammad: Deals with the main themes of Judaism. Christianity, and Islam as found in the teachings of Moses, Jesus, and Muhammad.

HUM 4301

The Classical Ideal: PR: HUM 2211 and HUM 2230 or C.I. The search for order and form in the arts of various times and cultures. Concerns reason, structure, objectivity, harmony. Open to all Juniors and Seniors

HUM 4302

The Romantic Ideal: PR: HUM 2211 and HUM 2230 or C.I. The Romantic quest for identity with nature and the sublime in the arts of various times. Concerns feeling, imagination, subjectivity, creativity, Open to all Juniors and Seniors.

HUM 4303

The Spiritual Ideal: PR: HUM 2211 and HUM 2230 or C.I. Concerns works of art reflecting spiritual insight or the spiritual quest; mystical impulses contrasted to ethos and pathos.

HUN 2002

Modern Concepts in Nutrition: An examination of the eating patterns of today's American people. Topics include: nutrients in our diets, consumer demand in the food industry; fast food outlets, food trends and hunger.

HUN 3011

Human Nutrition: Essentials of nutrition related to the life cycle, including the physiological, psychosocial, and cultural aspects of nutrition and the inter-relationship with disease are emphasized.

IDH 1921

Honors Symposium I: Readings, lectures and discussions covering aspects of scholarship, artistic, and other creative efforts.

IDH 1922

Honors Symposium II: Continuation of Honors Symposium I. Emphasis on understanding scholarly and creative efforts.

INP 3004

Industrial Psychology: PR: PSY 3204. Analysis of the psychological principles underlying human behavior and performance in an industrial setting. Topics include selection, training, performance appraisal, job design, and employee motivation.

INP 3102

Psychology Applied to Business and Industry: PR: PSY 2013. Applications of principles of psychology to business and industrial settings. Designed for non-majors.

INP 3803

Principles of Human Factors Psychology: PR: PSY 2013. The study of human performance in human-machine-environment systems. Topics will include human factors psychology in the design of displays and controls, human information processing, and the effects of some environmental variables on human performance.

INP 3951

Industrial/Organizational Field Work: PR: C.I. This course is offered as an opportunity for advanced undergraduate psychology majors to become involved in the application of I/O psychology to local organizations.

INP 4313

Organizational Psychology: PR: INP 3004. Analysis of the psychological principles underlying individual and group behavior in an organizational setting. Topics include group dynamics, leadership and participation, intergroup behavior, and organization development.

INP 3002

International Relations-Theory and Practice: Analysis of the fundamental principles and factors affecting interstate relations and their application to contemporary global developments.

INR 4035

International Political Economy: The international politics of regional and global economic interdependence, with emphasis upon North-South relations, the New International Economic Order, OPEC, and multinational corporations.

INR 4102

American Foreign Policy: Development of American foreign policy, with emphasis on the role and policies of the United States in the contemporary world.

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including consideration of the social and political costs involved and means of control. INR 4115 AS 3(3.0) Strategic Weapons and Arms Control: Control of strategic weapons and their impact. Technological and policy aspects, including nuclear proliferation. INR 4224 AS 3(3.0) Contemporary International Politics of Asia: Examinations of the foreign policies of major and secondary powers in Asia, with particular attention to China and Japan. INR 4225 AS 3(3.0) The Vietnam War: Background of events leading to America's involvement in Indochina, the course of the Vietnam War, and the lessons which that war imparts. **INR 4243** AS 3(3.0) International Politics of Latin America: Study of contemporary U.S.-Latin American relations, interAmerican politics and organization, and the role of Latin America in the world. **INR 4335** AS 3(3.0) Coercion in International Politics: Examination of the role of coercive techniques among states in a nuclear age, ranging from nuclear strategy and deterrance to wars of national liberations and coups. AS 3(3,0) **INR 4401** International Law I: Introduction to the nature, evolution, and sources of international law and such subareas as recognition of states and governments, expropriation, nationality, and aliens. **INR 4402** AS 3(3.0) International Law II: PR: INR 4401 or C.I. Examination of various subareas of international law, including maritime law, laws of the sea and seabed, air law, outerspace, neutrality, and laws of war. **INR 4404** AS 3(3.0) Space Law: Examination of the legal regime of outer space from both international and national perspectives, and the legal problems arising from human activity in space. **INR 4502** AS 3(3,0) International Organizations: The study of the structure and workings of international organizations of cooperation, including the UN, its affiliates, and various regional organizations. **ISM 3011** BA 3(3.0) Management Information Systems: PR: MAN 3025. An introduction to the management and use of information technology in organizations. ISM 3005 BA 3(3.0) MIS Techniques: Introduction to computer use required of users and developers of management information systems. **ISM 4090** BA 3(3.0) Seminar in Management Information Systems: PR: ISM 4212. Course designed to address new developments in management information systems in a business environment, e.g. artificial intelligence. decision support systems, expert systems, and telecommunications. **ISM 4113** BA 3(3,0) Information Systems Analysis and Design: PR: ISM 3011, ISM 4212. Structured approaches to the development of computer-based information systems in business. **ISM 4130** BS 3(3.0) Information Systems Implementation: PR: ISM 4113. Management of information systems development in business. BA 3(3,0) **ISM 4212** Database Management Systems: PR: ISM 3011 or consent of instructor. Design and implementation of relational database in organizations. ISM 4220 BA 3(3,0) Distributed Information Systems: PR: ISM 4212. Computer networking and communications. Managerial and technical dimensions of client/server and other modes of distributed and decentralized computing in business. Distributed database design and implementation. **ISM 5021** BA 3(3.0)

American Defense Policy: Study of the evolution of American defense policy since World War II,

Introduction to Management Systems: PR: Acceptance into the graduate program. Designed to provide the student with the fundamentals of business data processing and management information systems used by organizations in a modern society.

ISS 4155

INR 4114

Science Fiction and the Social Sciences: A multi-media examination of note-worthy science fiction from the Social Science perspective.

ITA 1005

Italian Diction: This course is especially designed for music and voice students, with an emphasis on musical terms. Italian songs, and opera libretti.

AS 3(3.0)

AS 3(3.0)

ITA 1120

Elementary Italian Language and Civilization I: Designed to initiate the student to the major language skills: listening, speaking, reading, and writing, in addition to an introduction to Italian culture.

ITA 1121

Elementary Italian Language and Civilization II: PR: ITA 1120 or equivalent. Continuation of ITA 1120.

ITA 2200

Intermediate Italian Language and Civilization I: PR: ITA 1121 or equivalent. Designed to continue development of language skills at intermediate level, plus a review of grammar, study of syntax, idiomatic expression, extensive readings, and further study of Italian culture.

ITA 2201

Intermediate Italian Language and Civilization II: PR: ITA 2200 or equivalent. Designed to continue development of language skills at intermediate level, plus a review of grammar and study of syntax, with emphasis on Italian civilization.

ITA 2210

Intensive Italian Conversation: PR: One year of Italian or equivalent. Practical use of the language leading toward fluency and correctness in speaking.

ITA 3240

Italian Conversation: PR: ITA 2201 or equivalent. Development of skills in conversation and comprehension with an introduction to Italian culture.

ITA 3420

Italian Composition: PR: ITA 2201 or equivalent. Development of skills in composition, with an introduction to Italian culture.

ITA 3520

Italian Film: This course attempts to stimulate and/or increase the interest of students in Italian cinema as an art form with the director playing the key role. Films by most outstanding Italian movie directors will be analyzed from a social, economic, and historical point of view.

ITA 4500

Italian Civilization: PR: ITA 2201, A historical approach to Italian civilization, with particular emphasis on art history.

ITW 3100

Survey of Italian Literature I: PR: ITA 2201. Main current and writers in Italian literature from the 12th through the 15th centuries.

ITW 3101

Survey of Italian Literature II: PR: ITA 2201. Main currents and writers in Italian literature from the 15th century to the present.

ITW 3373

The Modern Italian Short Story: PR: ITA 2201. A study of the most representative modern Italian short stories.

JOU 3004

History of American Journalism: Development of mass media, leading innovators, and the medias role in the nation's history.

JOU 3100

News Reporting: PR: Grammar Proficiency Examination and department typing exam. Development of skills in newsgathering and writing for the mass media. Students must have minimum ability to type and pass the department language proficiency exam.

JOU 3101

Advanced Reporting: PR: Grammar Proficiency Examination and departmental typing examination and JOU 3100. Advanced information-gathering and development of newswriting skills.

JOU 3201

Editing I: PR: Grammar Proficiency Examination and JOU 3100. Editing copy, writing headlines, managing newsroom operations.

JOU 3202

Editing II: PR: Grammar Proficiency Examination and JOU 3200. Practical aspects of editing. Principles of design. Practice in editing and layout.

JOU 4104

Public Affairs Reporting: PR: Minimum grade of C in JOU 3100. Grammar Proficiency Examination, departmental typing exam, JOU 3101. Reporting on city, county and state government. JOU 4300 AS 3(3.0)

Feature Writing: PR: Grammar Proficiency Examination, Typing Examination, and a minimum grade of C in JOU 3100 or PUR 3100. Writing feature articles for newspapers and magazines.

AS 3(3.0)

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AS 3(3.0)

AS 3(3.0)

AS 4(4.1)

AS 4(4.1)

AS 3(3.0)

JOU 4302

Editorial and Column Writing: PR: Grammar Proficiency Examination, departmental typing exam, and a minimum grade of C in JOU 3100. Building the editorial page, background and interpreting the news. AS 3(1,2)

JOU 4306

Critical Writing: PR: Grammar Proficiency Examination, departmental typing exam, and a minimum grade of C in JOU 3100. Writing reviews of movies, plays, television programs, concerts, books, and other cultural works.

JOU 4310

Freelance Writing: PR: Grammar Proficiency Examination, departmental typing exam, and evidence of satisfactory writing skills. A study of the techniques and procedures of freelance writing, including the preparation of several manuscripts.

JPN 1120

Elementary Japanese Language and Civilization I: The course aims at the acquisition of four basic skills: speaking, listening, reading and writing. The emphasis is on accurate communication in Japanese appropriate to given contexts. The culture of Japan will also be studied.

JPN 1121

Elementary Japanese Language and Civilization II: PR: JPN 1120 or experience with the language. Continuation of JPN 1120.

JPN 2200

Intermediate Japanese Language and Civilization I: PR: JPN 1121 or equivalent. This course aims to aid in acquiring and refining the acquisition of the four skills in modern Japanese: speaking, listening, reading, and writing. The emphasis is on accurate communication in Japanese. The culture of Japan will also be studied.

JPN 2201

Intermediate Japanese Language and Civilization II: PR: JPN 2200 or equivalent. Continuation of JPN 2200 with emphasis on Japanese civilization.

JST 3100

The Hebrew Creative Mind: Survey of Hebrew Literature in Translation. A survey of the creative expressions of Hebrew civilization as found in the Hebrew Bible, Apocrypha and Pseudepigrapha, the Mishnah, and the Talmud, Medieval Hebrew Poetry and Prose.

The Jewish People I: Introduction survey of the history and culture of the Jewish people from the beginnings of Judaism in the biblical era through the Graeco-Roman and rabbinic periods.

JST 3402

The Jewish People II: The life and history of the Jews in the medieval and modern worlds.

JST 3550

Introduction of Modernism into Judaism: The transition from traditional Judaism to modern Judaism in the 18th century, as epitomized by Moses Mendelssohn and writers of the Jewish Enlightenment (in translation).

JST 3751

Literature of the Holocaust: A study of the traumatic experience of the Holocaust in Europe as expressed and depicted in contemporary Jewish and Hebrew Literature.

JST 3810

The Jewish National Movement and Roots of Zionism: Roots of Zionism and Jewish nationalism and their relationship to modern anti-semitism, through analysis of European Jewish history and society.

JST 3820

Modern Hebrew Culture: The Development of the State of Israel: Political and ideological struggle for the establishment of the State of Israel, with emphasis on forces which shaped contemporary Israeli society and politics.

LAE 3414

Literature for Children: PR: Phase I or C.I. General survey of books and materials; criteria for analysis and evaluation; types of books available considered in terms of interests, needs, and abilities of children. ED 3(3.0)

Language Acquisition: Examines development of oral language (birth - third grade) and the beginnings of literacy acquisition (birth - age three). Addresses common communicative disorders and intervention methods.

LAE 4314

Language Arts in the Elementary School: PR: Phase I or C.I. Content, principles, materials, and techniques involved in teaching, speaking, listening, writing, and spelling in the elementary school; organizing for instruction.

LAE 4342

Teaching Language and Composition: PR: EDG 4321, Techniques and methods in teaching of dialects, semantics, the various grammars. A survey of composition and rhetorical methods of selected authors.

AS 3(3.0)

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ED 3(3,0)

ED 3(3.0)

ED 3(3,0)

AS 3(1.2)

AS 3(3.0)

AS 4(4.1)

AS 3(3.1)

AS 4(4.1)

AS 3(3,0)

Writing Workshop I: PR: C.I. Students will engage in exploration and practice of effective writing LAE 5319 I AE 5367 AS 3(3.0) English Composition and Literature for Teachers of Advanced Placement: PR: Graduate standing LAE 5372 LAE 5415 ED 3(3.0) LAE 5495 ED 3(3,0) including holistic scoring, primary trait scoring, and portfolio assessment. LAH 3130 AS 3(3.0) Latin American History I: PR: EUH 2000 and 2001 or C.I. The Colonial period. LAH 3200 AS 3(3,0) Latin American History II: PR: EUH 2000 and 2001 or C.I. The National period. LAH 3400 LAH 3470 LAH 5713 AS 3(3.0) LAT 1120 Elementary Latin Languages and Civilization I: Designed to develop Latin language skills at the ele-AS 4(4,1) LAT 1121 AS 4(4,1) LAT 1121H

Survey of Adolescent Literature: This course is designed to explore adolescent literature from both an educational and an historical perspective. ED 3(3.0)

ods and materials which have special application for teaching English at the middle grades and high

LAE 5195

LAE 4360

school. LAE 4464

CFWP Teacher Consultant: PR: C.I. This course is designed for Fellows of the CFWP Summer Institute who will plan, practice, and present writing inservice components to public schools. ED 1-3(1-3,0)

I AE 5295

strategies. May include teaching small groups of students. May be repeated for credit. 1-3 credits. ED 3(3.0)

Methods of Elementary School Language Arts: Principles, procedures, organization and current practices in reading, writing, listening and talking.

and C.I. A two-week summer institute for secondary school teachers preparing to teach Advanced Placement courses.

Theory and Practice in Composition: PR: Senior standing or C.I. Intensive study of theories of composition, with practical experience in the writing laboratory and in composition classes.

Children's Literature in Elementary Education: Survey of children's literature: criteria for selection according to literary elements and child development needs. Methods for presenting to children; integrating literature with elementary curricula.

Assessing Writing: PR: C.I. Students will explore a variety of strategies for assessing students' writing

History of Mexico and Central America: PR: EUH 2000 and 2001 or C.I. A survey of Mexican and Central American history from Pre-Columbian times to the present.

History of the Caribbean: PR: EUH 2000 and 2001 or C.I. History of Cuba, Puerto Rico, Dominican Republic, and Haiti from Pre-Columbian times to the present.

Colloquium in U.S.-Latin American Relations: PR: Senior Standing and C.I. The course will analyze U.S.-Latin American relations from an historical perspective. It will be presented through readings and discussion of selected materials.

mentary level: listening, speaking, reading, and writing, in addition to an introduction to Roman culture.

LAT 1120H

Honors Elementary Latin & Civilization I: Same as LAT 1120 with honors-level content.

Elementary Latin Language and Civilization II: PR: LAT 1120 or equivalent. Continuation of Lat 1120. AS 4(4.1)

Honors Elementary Latin & Civilization II: PR: LAT 1120H or equivalent. Same at LAT 1121 with honors-level content.

LIN 2404

Vocabulary and the English Language: Includes study of new words and their etymology and usage, the history and evolution of English, and skills and techniques for building vocabulary. AS 3(3,0)

LIN 3010

Principles of Linguistics: PR: ENC 1102. An overview of the modern linguist's approach to language. Analytic methods of phonology, morphology, syntax. Brief systematic survey of dialectology, language acquisition, and semantics.

ED 4(3,2) English Instructional Analysis: PR: EDG 4321. Course objectives for a school curriculum and meth-

ED 3(3.0)

AS 3(2.1)

AS 3(3,0)

AS 3(3,0)

AS 4(4.1)

AS 3(3.0)

LIN 3640

Psychology of Oral Communication: Psychological principles involved in the communicative process. with application to individuals and groups.

LIN 4100

History of the English Language: PR: ENC 1102 and Sophomore standing. Study of the English language and its development from Anglo-Saxon to Modern.

LIN 4440

Sounds and Forms of Language: This course examines the sound systems (phonology) and word structure (morphology) of natural languages as two basic areas of linguistics.

LIN 4612

African American English: PR: ENC 1102 and Sophomore standing. A study of the phonology, morphology, and syntax of African American English. Provides an understanding of the implications of African American English in contemporary society.

LIN 4660

Linguistics and Literature: PR: LIN 3010. Investigation of language study as an aid to understanding literature. Topics include analysis of figurative language, languages as characterization, cohesion, sentence and discourse structure.

LIN 4680

Modern English Grammar: PR: ENC 1102 and Sophomore standing. Emphasis upon the analysis and comparison of traditional, structural, and transformational grammar.

LIN 4710

Foundations of Language: This course is designed to explore contributions to language from disciplines of Biology, Neurology, Psychology, and Sociology.

LIN 4710L

Foundations of Language: Students will have practical experience in analyzing children's language samples.

LIN 4801

Language and Meaning: PR: ENC 1102 and Sophomore standing. A linguistic study of the nature of language, meaning, and the ways in which man uses language in various social, cultural, institutional, and professional settings.

LIN 5137

Linguistics: PR: Senior or graduate standing or C.I. Modern linguistic theories and studies focusing on language acquisition and development, contemporary American English, semantics, and paralinguistics.

LIS 4301

Production of Materials for Media Center: PR: LIS 4428, Skill in producing teacher and student-made materials. Emphasizes graphic, photographic, and audio techniques for schools. Lab TBA.

LIT 2110

World Literature I: PR: ENC 1102. Poetry, prose, and drama selected from ancient Hebrew, Greek, and Oriental literature and from that of Renaissance Europe.

LIT 2120

World Literature II: PR: ENC 1102. Readings from Moliere, Voltaire, Goethe, Pushkin, Balzac, Tolstoy, Ibsen, Mann, Kafka, Camus, and others.

LIT 2120H

World Literature II - Honors: Same as LIT 2120, with honors-level content.

LIT 3000

Introduction to Literary Interpretation: PR: ENC 1102. Interpretation of fiction, drama, verse: conflict, characterization, point of view, rhetorical and poetic devices, figurative language, verse forms; application of critical approaches to selected works.

LIT 3082

Continental European Fiction Since 1900: PR: ENC 1102. A selection of significant works of fiction written in various languages during the present century, read in translation.

LIT 3188

Canadian and Commonwealth Literature: Fiction, poetry, and drama written in English in Canada and other Commonwealth nations including Australia and Carribean and African nations with an Englishspeaking tradition.

LIT 3313

Science Fiction: PR: ENC 1102. An investigation of science fiction as a literary form, together with selected readings.

LIT 3383

Women in Literature: PR: ENC 1102. Fiction, poetry, drama and non-fiction by selected women writers, such as Emily Dickinson, Jane Austen, George Eliot, Kate Chopin, Zora Neale Hurston, Toni Morrison, Adrienne Rich, Gwendolyn Brooks.

AS 3(3.0)

HPA 3(3.0)

HPA 1(0.2)

AS 3(3.0)

ED 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

HPA 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3,0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

LIT 3911H AS 1(1,0) Research Methods — Honors: PR: Honors Student Status or consent of Honors coordinator. Introduction to scholarship and practical research in literature and writing.
LIT 4094 AS 3(3,0) Modern Drama As Literature: A study of important plays, playwrights, themes, movements, and styles in modern American, British, and European drama.
LIT 4303 AS 3(3,0) Post-World War II Fiction: PR: ENC 1102. An investigation of various modes of reality in the works of significant postmodernist world authors, crossing cultural boundaries.
LIT 4312 AS 3(3,0) Fantasy: PR: ENC 1102. A survey of the literature of fantasy, with emphasis on such figures as C.S. Lewis.
LIT 4354 AS 3(3,0) Ethnic Literature in America: Contributions of linguistic and ethnic groups of non-English origin to the literature of the United States.
LIT 4374 AS 3(3,0) Literature of the Bible: PR: ENC 1102 or LIT 3000 or C.I. Literary forms in the Bible — narrative, poetic, and dramatic — and their reflection in modern literature.
LIT 4433 AS 3(3,0) Survey of Technical and Scientific Literature: PR: ENC 4293 or C.I. An analysis of the historical development of technical and scientific writing from the Renaissance to the present.
LIT 4937H AS 3(3,0) English Honors Seminar: PR: Honors Student Status or consent of Honors coordinator. In-depth study of language and/or literature with an emphasis on creative and critical abilities.
LIT 5039 AS 3(3,0) Studies in Contemporary Poetry: English language poetry from 1945 to the present. Emphasis will be on American poets, but others such as English or Australian will be included.
LIT 5097 AS 3(3,0) Studies in Contemporary Fiction: PR: Senior standing or C.I. Fiction in the last 20 years in the United States and Britain.
LIT 5309 AS 3(3,0) Media and Popular Literature: PR: Senior standing or C.I. Study of the literary content of contemporary media and of popular fiction. Application to classroom teaching.
LIT 5366 AS 3(3,0) The Romantic Revolt (19th Century Literature): PR: Senior standing or C.I. The romantic revolt in poetry and prose; English, American and Continental literature from 1798 to 1832.
LIT 5367 AS 3(3,0) The Victorian Age: PR: Senior standing or C.I. Study of poets and essayists from 1837 to 1900, includ- ing Tennyson, the Brownings, Arnold, Hopkins, Carlyle, Mill; emphasizing Dickens, George Eliot, the Brontes, and Hardy.
MAA 4226 AS 4(4,0) Advanced Calculus I: PR: MHF 2300 and MAC 3313 or C.I. Limits, sequences, and continuity differen- tiation and integration. Derivations of integrals. Infinite series and convergence. The BalzanoWeierstrass Theorem and the Heine-Borel Theorem. Extensions in Euclidian n-space.
MAA 4227 AS 3(3,0) Advanced Calculus II: PR: MAA 4226 or C.I. Continuation of MAA 4226.
MAA 5210 AS 4(4,0) Topics in Advanced Calculus: PR: MAC 3313 or C.I. Selected topics in multivariable calculus, includ- ing limits, continuity, Euler's theorem, the Jacobian, and double series; extension of single variable con- cepts, including uniform convergence and improper integrals.
MAA 5405 AS 3(3,0) Complex Variables: PR: MAC 3313 or C.I. Analytic functions. Integration in the complex plane. Laurent series and residue calculus. Inversion of Laplace transformations. Conformal mappings. Applications in engineering and the physical sciences.
MAA 5416 AS 3(3,0)

Foundations of Analysis: PR: MAA 4226. Topological spaces, compactness results, connectedness, analytical and differentiable manifolds, topological groups, Lie groups, representation theory for classical groups, Green, Stoke and Gauss' theorems.

MAC 1104

College Algebra: PR: Intermediate algebra or 2 years of high school algebra or C.I. Inequalities. High degree polynomials. Graphs, rational, logarithmic, and exponential functions. Systems of equations, matrices, determinants, induction. This course prepares students for higher-level mathematics courses.

AS 3(3,0)

MAC 1114

College Trigonometry: PR: MAC 1102 or 2 years of high school algebra or C.I. The circle arc length, circular functions, identities, inverse functions, applications to simple harmonic motion, function of angles, complete development of triangle solving.

MAC 3233

Concepts of Calculus: PR: MAC 1104 or C.I. The differential and integral calculus of rational, exponential and logarithmic functions, with applications to business analysis. Not open to students with credit in MAC 3253 or MAC 3311.

MAC 3253

Applied Calculus I: PR: MAC 1104 and MAC 1114 or C.I. Differential and integral calculus. An introduction to differential equations and Laplace Transforms. Applications to engineering technology. Not open to students with credit in MAC 3233 or MAC 3311.

MAC 3254

Applied Calculus II: PR: MAC 3253 or C.I. Continuation of MAC 3253.

MAC 3311

Calculus with Analytic Geometry I: PR: MAC 1104 and MAC 1114 (College Algebra and Trigonometry) or equivalent or C.I. The differential and integral calculus of algebraic and elementary transcendental functions with geometric and physical applications. Topics from analytic geometry include coordinate systems, vectors, lines, conic sections, transformations of coordinates, and polar coordinates. During the 2nd and 3rd semesters the topics also include sequences and series, Taylor series, and the differential and integral calculus for functions of several variables.

MAC 3311H

Calculus with Analytic Geometry I (Honors): Differential and integral calculus, emphasizing understanding basic concepts and their applications. Students will complete projects on their own. For honors students from all disciplines.

MAC 3312

Calculus with Analytic Geometry II: PR: MAC 3311 or C.I. Continuation of MAC 3311.	
MAC 3312H	AS 4(4,0)
Calculus with Analytic Geometry II (Honors): Continuation of MAC 3311H.	
MAC 3313	AS 4(4,0)
Calculus with Analytic Geometry III: PR: MAC 3312 or C.I. Continuation of MAC 3312.	
MAC 3313H	AS 4(4,0)

Calculus with Analytic Geometry III (Honors): Continuation of MAC 3312H. **MAD 4203**

Combinatorics and Graph Theory: PR: MAC 3312 and STA 3023. Counting principles, inclusion/exclusion principle, recurrence relations, generating functions, properties of graphs and diagraphs, trees, path problems, coloring planarity, connectiveness matchings and coverings, applications.

MAD 5205

Combinatorics and Graph Theory II: PR: MAD 4203. Polyas theory of counting, Latin squares and rectangles, block designs, coding theory, networks, invariants and extremal graph theory, Ramsey theory, probabalistic methods, hypergraphs, applications.

MAE 2801

Elementary School Mathematics: PR: MAC 1104 or MGF 120. Mathematics appropriate for the elementary school including the six basic sets of numbers, concepts, learning sequences, algorithms, problem-solving techniques, error patterns, number systems, and geometry.

MAE 4300

Exploring Mathematics: Provides students with the knowledge and skills to design, implement, and facilitate the development of mathematics concepts and skill through an integrated developmentally appropriate curriculum.

MAE 4326

How Children Learn Mathematics: PR: MAE 2801; or C.I.; and admission to Phase II. Instructional strategies, learning activities, the use of manipulatives, lesson planning, evaluation of mathematical learning, and diagnostic techniques.

MAE 4360

Mathematics Instructional Analysis: PR: EDG 4321. Study of course objectives for the middle grades and high school curriculum and survey of methods and materials which have special application for teaching mathematics.

MAE 4634

Programs in Teaching of Mathematics: PR: C.I. A consideration of special programs, strategies, and materials. Emphasis on individual needs of students.

MAE 5318

Current Methods in Elementary School Mathematics: PR: Regular Certificate or C.I. Strategies of instruction of computation and concepts of number, geometry, and measurement; instructional materials. (Meets Elementary Education certification requirements.)

ED 3(3,0)

ED 4(3,1)

ED 4(3,1)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3,0)

AS 4(4,0)

AS 4(4,0)

AS 4(4,0)

AS 3(3.0)

ED 4(3.2)

ED 3(2,1)

ED 3(3,0)

AS 4(4.0)

MAE 5325

Teaching Mathematics in the Middle/Junior High School: PR: 12 s.h. of mathematics, including at least College Algebra. Consideration of the curriculum and instructional techniques appropriate for students in Middle/Junior High School.

MAE 5356

Teaching General Mathematics in the Secondary School: PR: MAE 3330 or C.I. This course addresses specific techniques for developing general mathematics skills and concepts beginning in grade 6. Problem solving, motivation, and innovative methods are explored.

MAE 5637

Laboratory Programs in Mathematics: PR: Regular Certificate or C.I. Design and development of special materials and projects for mathematics independent study. Emphasis on teaching and applying the metric system, (Meets certification requirements for secondary mathematics.)

MAN 3025

Management of Organizations: PR: Junior standing, ACG 2071 or 2023, ECO 2023, ECO 2013. Introduction to the theory and practice of managing formal organizations, including planning, organization theory, human behavior and control.

MAN 3301

Personnel Management: PR: Junior standing, MAN 3025 or C.I. Systematics analysis of personnel functions in organizations.

MAN 3504

Quality & Productivity Management: PR: GEB 3031 and MAN 3025. An examination of the principles and theories of quality and operations management in manufacturing and service organizations.

MAN 4029 BA 3(3,0) Service Organization Management: PR: MAN 3025 and MAN 3504. Study of the special characteristics, problems, and methods for managing service-oriented organizations.

MAN 4101

Human Relations in Management: PR: MAN 3025. The study of individual, interpersonal, group, and intergroup problems in business organizations through the use of cases and experimental exercises.

MAN 4129

Managerial Skills in Organizations: PR: MAN 4240. The transference of management theories into practice. This course requires active student involvement in the development and practice of skills necessary to be a successful manager.

MAN 4240

Organizations: Theory and Behavior: PR: MAN 3025. A course providing a micro/macro approach to the study of organizations by integrating organizational theory and organizational behavioral science concepts.

MAN 4310

Personnel Management Issues: PR: Junior standing, MAN 3301. An application-oriented course to give students in the area experiences generally reserved for practitioners in the field of personnel and labor relations.

MAN 4350

Training and Development: PR: MAN 3301. This course focuses on training and development activities as performed by organizational specialists. Theory, issues, practices and problems are discussed.

MAN 4401

Labor Relations Management: PR: Junior standing, MAN 3301. The impact of employee organizations on labor relations, current problems, conflicts and trends; the development of managerial approaches to achieve labor-management cooperation.

MAN 4521

Production Planning and Control: PR: MAN 3504. In depth study on long-range, intermediate-range and short-range planning and control methods as applied to a manufacturing organization.

MAN 4540

Management Science & Decision Support: PR: ISM 3011. Computer-based quantitative models and expert systems in organizations.

MAN 4572

Procurement Management: PR: MAN 3025 and MAN 3504. An elective course in procurement management. Designed to provide the student with fundamental concepts and processes involved in the procurement of goods and services required by modern society.

MAN 4595

Computer-Based Operations Management: PR: ISM 3011, Application of production planning and control theories and Management Informations Systems concepts to an integrated, computerized, realworld production environment.

MAN 4600

International Management: PR: GEB 4361. The course examines issues involved in multinational management of business firms, with special emphasis on comparative management.

ED 3(2.1)

ED 3(3.0)

ED 3(3.0)

BA 3(3,0)

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BA 3(3.0)

MAN 4701

Business Ethics and Society: PR: MAN 3025. This course applies the ethics dimension to business decisions in today's complex political, social, economic and technological environment.

MAN 4720

Strategic Management: PR: Completion of Core Curriculum. Students assume a strategic view of organizations and integrate and apply material learned in their business courses to modern organizational problems and opportunities.

MAN 5050

Management Concepts: PR: Acceptance in MBA program. Theory and practice of managing organizations to include planning, organizational theory, human behavior, and control.

MAN 5501

Introduction to Production/Operations Management: PR: Acceptance into the graduate program and ECO 5415 or equivalent. Introduction to the fundamental concepts, processes, and institutions involved in the production of goods and services required by modern society.

MAP 3302

Differential Equations: PR: MAC 3313 or C.I. Methods of solution for first order equations. Linear equations. Laplace transforms. Series solutions. Selected applications.

MAP 3401

Problem Analysis: PR: MAC 3253 and COP 1200 or equivalent. Application of numerical methods techniques to selected problems in Engineering Technology.

MAP 4103

Mathematical Modeling I: An overview of model construction. Model fitting, optimization models, empirical construction and modeling dynamic behavior. Calculus and ordinary differential equations required.

MAP 4153

Vector and Tensor Analysis: PR: MAC 3313 or C.I. Vector calculus. The theorems of Green, Gauss and Stokes. Introduction to tensors, Application in engineering and physical sciences.

MAP 4307

Applications of Complex Variables (Advanced Engineering Math Series): PR: MAP 3302, analytic functions and complex integration. Residue integration, Taylor and Laurent series, conformal mapping and the application of complex analysis to Potential Theory.

MAP 4308

Fourier Methods (Advanced Engineering Math Series): PR: MAP 3302, Fourier series, integrals and transforms. Partial differential equations or vibrating membranes and heat flow. No credit for mathematics majors.

MAP 4363

Applied Boundary Value Problems I: PR: MAP 3302 or C.I. Systems of linear equations, Fourier series. The eigenvalue problem of Sturm-Liouville. The method of Green's functions.

MAP 4364

Applied Boundary Value Problems II: PR: MAP 4363 or C.I. Legendre polynomials and Bessel functions. The theory of Sturm-Liouville. Separation of variables. Applications involving the wave equation, heat equation and equation of Laplace.

MAP 5385

Applied Numerical Mathematics: PR: MAP 3301 or C.I. Classical topics or numerical analysis and their applications, Romberg integration. Richardson extrapolation, Gaussian quadrature schemes.

MAP 5385

AS 3(3,0) Applied Numerical Mathematics: PR: MAP 3301 or C.I. Classical topics or numerical analysis and their applications, Romberg integration. Richardson extrapolation, Gaussian quadrature schemes.

MAP 5385

AS 3(3,0) Applied Numerical Mathematics: PR: MAP 3301 or C.I. Classical topics or numerical analysis and their applications, Romberg integration. Richardson extrapolation, Gaussian quadrature schemes.

MAP 5387

Applied Numerical Mathematics: PR: MAP 3302 or C.I. Classical topics of numerical analysis and their applications, Romberg integration, Richardson extrapolation, Gaussian guadrature schemes.

MAP 5396

Splines and Data Fitting: PR: MAS 3103, MAS 3113, MAP 3302, or C.I. Univariate splines and their application to data fitting. Applications to regression analysis, differential and integral equations. Algorithms to use different types of splines in computation.

MAP 5407

Applied Mathematics I: PR: MAP 3302 or C.I. Fourier series, calculus of variations. Hamilton's principle, eigenvalues and stationary points, Rayleigh-Ritz method, partial differential equations, and approximation methods. (May be taken after Applied Math II).

AS 3(3.0) EN 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3,0)

AS 3(3,0)

AS 3(3,0)

AS 3(3,0)

AS 3(3,0)

BA 3(3,0) BA 3(3,0)

BA 2(2.0)

BA 2(2.0)

MAP 5426

Special Functions: PR: MAP 3302 or C.I. Series and integral representations, generating functions, recurrence relations and orthogonality properties of the special functions. Emphasis on Bessel, Legendre and hypergeometric functions.

MAR 3023

Marketing: PR: Junior standing. Study of functions, institutions, and basic problems in marketing of goods and services in our domestic economy and abroad.

MAR 3323

Advertising and Sales Promotion Management: PR: MAR 3023, Analysis of the selection, use, and evaluation of advertising and sales promotion strategies and techniques directed at consumers, businesses, and channels of distribution.

MAR 3403

Sales Management: PR: MAR 3023. An overview of the sales management process. Emphasis on sales program formulation and implementation.

MAR 3503

Consumer Behavior: PR: MAR 3023. Analysis of the buying process, the psychological, social, and economic influences affecting consumer choice.

MAR 3613

Marketing Research: PR: MAR 3023, ECO 3411, Study of research procedures and techniques for problem solving in marketing. Concepts are explored, and the incorporation of information resources into the management function is demonstrated.

MAR 3823

Marketing Management: PR: MAR 3023 and any one additional MAR course or C.I. Operational framework exploring the analysis, planning, and control activities of marketing.

MAR 4071

Contemporary Marketing Issues: PR: Senior standing, marketing major, C.I. Cultural, social, political, economic, and competitive developments and their effects upon marketing activities.

MAR 4156

International Marketing: PR: MAR 3023, GEB 4361, or C.I. Investigates strategy, policy and the variables in international marketing decisions.

MAR 4203

Marketing Channel Systems: PR: MAR 3023. Marketing functions and relationships within marketing channel systems, with primary focus on the needs for interorganizational cooperation and coordination between channel organizations.

MAR 4231

Retailing Management: PR: MAR 3023. Analysis of the field of retailing. Emphasis on planning for profit through management, inventory control, etc.

MAR 4453

Industrial Marketing: PR: MAR 3023. Marketing of goods and services between organizations, including commercial, governmental, institutional, and not-for-profit. Emphasis on the development, pricing, promotion, and distribution of industrial products.

MAR 4803

Marketing Strategy: PR: Senior standing and marketing courses completed or C.I. Marketing problems are explored, with emphasis on strategy formulation and integrative marketing decision-making.

MAR 4831

Product Management: PR: MAR 3023. Components of product management, including analysis, strategy formulation and implementation are examined.

MAR 4841

Services Marketing: PR: MAR 3023. Examination of marketing in services industries, with particular emphasis on unique aspects of services marketing, the service marketing mix, and the implementation of services strategies.

MAR 4941

Internship: PR: Permission of Dept. Chair. Provides qualified undergraduate marketing majors with educational experience not gained in class setting.

MAR 5055

Marketing Concepts: PR: Acceptance into the graduate program. Study of functions, institutions, and basic marketing of goods in the U.S. economy.

MAR 5941

Small Business Consulting: PR: ACG 2021, 2071, ECO 2023, 2013, MAN 3025, MAR 3023, or graduate status. Provides students opportunity to apply knowledge learned in classroom to real business situations. Open to undergraduate majors in the College of Business Administration with approval of the department chair.

AS 3(3 0)

BA 3(3.0)

BA 3(3.0)

BA 3(3.0)

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BA 3(3,0)

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BA 3(3.0)

BA 3(3,0)

BA 3-6(3-6.0)

BA 3(3.0)

BA 3(3.0)

MAS 3105

Elementary Linear and Matrix Algebra: PR: MAC 3312 or C.I. Matrices, determinants, vector spaces in Rn, linear independence, basis, solutions of systems, range of linear transformations, eigenvectors, Jordon Form, matrix functions, guadratic forms.

MAS 3106

Linear Algebra: PR: MHF 2300 and MAS 3105 or C.I. Abstract vector spaces, linear transformations, isomorphisms, projections, innerproducts, the spectral theorem, Jordon Canonical Form. (Only offered spring semester).

MAS 3203

Introduction to Number Theory: PR: MHF 2300 or C.I. The course will include the following topics: inductive reasoning, factorization, the division algorithm and congruences.

MAS 4146

Linear Systems (Advanced Engineering Math Series): PR: MAP 3302, systems, eigenvalue problems and diagonalization. Vector calculus, line/surface integrals and integral theorems. No credit for mathematics majors.

MAS 4301

Algebraic Structures: PR: MHF 2300 or C.I. An introduction to groups, rings and fields.

MCB 3013C

General Microbiology: PR: A college course in chemistry and in basic biological sciences. Fundamentals of microbiology, including microbial structure and function, metabolism, growth, genetics, virology environmental control, ecology, pathogenicity; and laboratory techniques.

MCB 3203

Pathogenic Microbiology: PR: MCB 3013C or C.I. Microorganisms producing disease in man and other animals; means of transmission; protection against disease.

MCB 32031

Pathogenic Microbiology: CR: MCB 3203. Laboratory investigation of pathogenic microorganisms. with emphasis on isolation and identification of pathogenic microorganisms.

MCB 4114C

Microbial Systematics and Diagnosis: PR: MCB 3013C, MCB 3203, Microbial classification, rules of taxonomy, and nomenclature. Techniques for identifying non-pathogens and bacteria pathogenic to man.

MCB 4414

Microbial Metabolism: PR: MCB 3013C and BCH 4054. Interrelationship between cellular structure function and genetic traits in microorganisms. The interaction between microorganisms and their nutritional environment.

MCB 4603C

Environmental Microbiology: PR: PCB 3043 and MCB 3013C. Interrelationships between the biological activities of microorganisms and their terrestrial and aquatic environments.

MCB 5205

Infectious Process: PR: MCB 3013C or C.I. Discussion of current theories of the infectious process and the response of host cells and tissue to infection.

MCB 5505C

Virology: PR: MCB 3013C and BCH 4054. Nature of viruses and Rickettsiae, including their structure, propagation, isolation, and identification.

MCB 5654

Applied Microbiology: PR: MCB 3013C or C.I. Microbial biochemistry of industrial processes including: economics, screening, scale up, quality control and applied genetics.

MET 3101

Fundamentals of Meteorology and Climatology: PR: MAC 1104 or C.I. Studies of the physical processes that determine the climate of a region. The methods of measurement and use of meteorological parameters.

MGF 1203

Finite Mathematics: PR: Intermediate algebra or 2 years of high school algebra or C.I. Introduction to logical structure, sets, probability, arrays, games. This course is intended for students who are not planning to take further courses in mathematics.

MHF 2300

Logic and Proof in Mathematics: PR: Two years of high school algebra and one year of geometry or C.I. Basic mathematical logic. Methods of proof in mathematics. Application of proofs to elementary mathematical structures.

MHF 4404

AS 3(3,0) History of Mathematics: PR: MAC 3312 or C.I. A chronological study of the evolution of mathematical thought from primitive counting through modern ideas of the 20th century. Recommended for prospective teachers in mathematics.

HPA 3(3.0)

HPA 3(2.3)

AS 3(3.0)

EN 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 4(4 0)

AS 4(4.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0) HPA 5(3,4)

HPA 3(3,0)

HPA 1(0.3) HPA 4(3,3)

HPA 3(3.0)

HPA 3(3.0)

MHS 5005

Introduction to Guidance and Human Services: PR: Completion of Phase II of Educ. Prof. Prep. or Certificate or C.I. A basic course presenting an overview of the philosophy, organization, administration and operation of guidance and human services.

MIS 1031

Basic Military Science: Organization of the Army and ROTC. Career opportunities, significance of military courtesy, discipline, customs, and traditions. Analysis of weapons and equipment of the U.S. Army.

MIS 1400

Fundamentals of Leadership Development: Development of leadership abilities, including squad movement techniques. Fundamentals of Land Nav will be discussed.

MIS 2120

Leadership Development - I: Development of leadership abilities through practical exercises. Includes platoon leadership assessment program, role of the NCO, land navigation, and conduct of briefings.

MIS 2300

Leadership Development - II: Development of leadership abilities. Includes first aid training, communications, the threat, offensive/defensive operations, patrolling, and troop leading procedures.

MIS 3301

The Small Unit Leader: Analysis of the leader's role in directing and coordinating efforts of small units in tactical operations, Includes land navigation, weapon systems, communications, defensive/offensive operations and patrolling.

MIS 3410

Leadership Responsibilities: A description of the role and responsibility of the small unit leader. Includes principles of war, military instruction, land navigation, patrolling and offensive/defensive operations.

MIS 4421

Military Law: A study of military law, the Army's maintenance management system, and a study of the obligations and responsibilities of a newly-commissioned officer.

MIS 4430

Advanced Military Science: Study of the decision-making process; staff organization, estimating process, training, scheduling, and staff studies. Analysis of administration, personnel and Army supply system.

MLS 3220C

Techniques in Clinical Microscopy: PR: Admission to the professional phase of the MLS program or C.I. Analysis of human urine and other body specimens, chemically and microscopically; interpretation of abnormal results and their correlation to disease included.

MI S 3305

Hematology: PR: Admission to the professional phase of the MLS program or C.I. Diagnostic procedures and morphologic interpretation; correlation of this data to disease.

MI S 3705

Concepts in Education/Management: PR: Admission to professional phase of the MLS Program or C.I. Introduction to laboratory management, health delivery systems, and educational practices in clinical settings.

MLS 4334C

Hemostasis: PR: Admission to the professional phase of the MLS program or C.I. Study of the hemostasis mechanisms; diagnostic procedures and correlation of data to pathological conditions.

MLS 4420C

Clinical Mycology: PR: Admission to the professional phase of the MLS program with C.I. Instruction and laboratory practice in the isolation and identification of fungi associated with mycotic infections of man.

MLS 4430C

Clinical Parasitology: PR: Admission to the professional phase of the MLS program or C.I. Instruction and laboratory practice in the examination and study of clinical material for the detection and identification of animal parasites.

MLS 4460

Clinical Pathogenic Microbiology: PR: or CR: MCB 3203 and admission to the professional phase of the MLS program. Isolation and pathogenic bacteria and serological methods; interpretation of abnormal results, with correlation to disease.

MLS 4506C

Immunodiagnostics: PR: PCB 3233. Theory and application of clinical serologic and immunologic diagnostic testing, stressing the utilization of monoclonal technology.

MLS 4550

Clinical Immunohematology: PR: Admission to the professional phase of the MLS program or C.I. Investigation of incompatible crossmatches; antibody identification, leukocyte antigens and identification procedures, problem solving.

EN 4(4,1)

HPA 4(2,6)

HPA 3(3.0)

HPA 2(1,3)

HPA 1(1.2)

HPA 2(1,3)

HPA 2(2,6)

HPA 2(1,3)

HPA 4(2.6)

EN 2(2,1) EN 2(2,1)

ED 3(3.0)

EN 2(2,1)

EN 2(2.1)

EN 4(4.1)

EN 4(4,1)

HPA 2(1,3)

EN 4(4,1)

MLS 4620

Concepts and Applications in Clinical Chemistry: Overview of clinical chemistry theory and principles for the practicing technologists to include instrumentation, protein chemistry, enzymology, and organ system physiology.

MLS 4625C

Advanced Clinical Chemistry I: PR: Admission to the professional phase of the MLS program or C.I. Theory and practice in clinical chemistry techniques: carbohydrates, protein, electrophoresis, enzymes, instrumentation, and guality control.

MI S 4630C

Advanced Clinical Chemistry II: PR: MLS 4625 and admission to professional phase of MLS or C.I. Theory and practice in clinical chemistry techniques; liver function testing, lipids, hormones, toxicology, and drug monitoring.

MI S 4830c

Clinical Practice I: PR: Admission to the professional phase of MLS program or rotation in one or more of the following areas: Hematology, Chemistry, Microbiology, Blood Bank, Serology-Coagulation, Clinical Microscopy, Nuclear Medicine.

MLS 4831C

Clinical Practice II: PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4830C.

MLS 4832C

Clinical Practice III: PR: Admission to the professional phase of the MLS program or C.I. Continuation of MI S 4831C

MLS 4833C

Clinical Practice IV: PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4832C.

MLS 4834C

Clinical Practice V: PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4833C.

MLS 5512

Clinical Immunology: PR: PCB 3233, MLS 4511 or C.I. Advanced theory and application of immunologic diagnostic testing, stressing the utilization of monoclonal technology.

MMC 4200

Mass Communication Law: The legal rights and responsibilities of the mass media.

MMC 4602

Contemporary Media Issues: PR: JOU 3100, PUR 3100 or RTV 3300, Relationship between the mass media and society; examination of social and ethical issues and responsibilities of the media's relationship with government.

MMC 4700

Mass Media and Popular Culture: An impact of mass media upon American culture past to present. **MRE 3000** HPA 4(3.2)

Introduction to Health Information Management (HIM): PR: Acceptance into upper-division limited access HIM program. Introduction to profession: POMR; release of information; record analysis

MRE 3110

Health Record Organization and Management: PR: MRE 3000, Nomenclature/classification systems; health/vital statistics: computer abstracting: Health information manager's role in hospital/medical staff organization; accrediting/approving agencies; policy procedure manuals; job descriptions; indexing.

MRE 3800

Directed Practice I: PR: Acceptance into upper-division limited access HIM program. Interdepartmental experience and introduction to health information departments in selected health care facilities. **MRE 3810**

Directed Practice II: PR: MRE 3800, HSC 3640, HSC 3531. Quantitative and qualitative analysis; MPI; release of information; filing, admission/discharge processing performed in a health care facility.

MRE 4202

Coding Procedures: PR: MRE 3432, HSC 3531, or C.I. Principles and mechanics of coding systems for health information retrieval. DRGs.

MRE 4203C

Coding Procedures II: PR: MRE 4202 or C.I. Continuation of MRE 4202; HCPCS-CPT. **MRE 4218**

HPA 3(2,2) Health Information Management Systems: PR: HSA 4193, MRE 4202. Designed to introduce information systems utilized in management and patient care in the health care industry.

MRE 4304

Health Information Department Management: PR: MRE 4500. Analysis of management functions in health care setting; in-service education; equipment demonstrations; problem-solving techniques.

HPA 4(3.3)

HPA 4(4.0)

HPA 4(3.3)

HPA 4(0.13)

HPA 4(0.13)

HPA 4(0.13)

HPA 4(0,13)

HPA 4(0.13)

HPA 3(3.0) AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

HPA 5(5.0)

HPA 2(2.0)

HPA 5(3,4)

HPA 3(3,0)

HPA 3(3.0)

HPA 2(0,4)

MRE 4312

Analysis of Medical Record Department Operations: PR: MRE 3110; MAN 3025; MAN 3301. Personnel administration; budgeting; forms analysis, design and control; work distribution and simplification; other evaluation techniques. Principles of word processing and medical transcription.

MRE 4400

Health Records and Standards: PR: MRE 3110. Medical record standards and procedures for longterm care; ambulatory care; home health care; HMOs and psychiatric facilities. Principles of consulting. Labs and field trips.

MRE 4500

Quality Assessment: PR: MRE 3110. Utilization review; principles and mechanics of medical audit and quality assurance: risk management.

MRF 4830

Directed Practice III: PR: MRE 3110: MRE 4202; MRE 3810. Incomplete record control; coding; health/vital statistics: microfilm.

MRF 4832

Directed Practice IV: PR: MRE 3110; MRE 4312; MRE 4500; MRE 4830. Indexing abstracting; audit; quality assurance; U.R.; transcription; budget; management of activities in DP I. II. III: computer applications. Assignment to hospital and other health care facilities.

MRE 4835

Management Affiliation: PR: All other required courses. Assignment to a selected health care facility serving in an administrative capacity under the direction of a Registered Record Administrator; lab exercises; comprehensive exam.

MTG 4212

Modern Geometrics: PR: MAC 3311 or C.I. Sets of axioms and finite geometries, groups of transformations. Euclidean motions of 2-space and 3-space, convexity in 2-space and 3-space. Euclidean geometry of polygon and circle, constructible numbers, constructions and non-Euclidean geometry.

MTG 4302

Introduction to Topology: PR: MHF 2300 or C.I. Metric spaces, topological spaces, limit points, continuity, compactness, and connectedness.

MUC 1101

Composition I: Creative work in small forms. Open to qualified non-music majors with C.I. May be repeated for credit.

MUC 3104

Composition II: PR: C.I. or by audition. Creative work in large and small forms in the area of choral, instrumental, and keyboard media. May be repeated for credit.

MUC 3311

Digital Synthesis: An introduction to the world of digital technology and its musical applications. MUC 4441

Advanced Digital Synthesis: PR: MUC 3311, Work on individual projects utilizing sequencing and notational music software which uses several editing techniques.

MUE 1440

String Techniques: Class instruction in beginning string playing techniques.

MUE 2210

Early Childhood Music and Movement: An examination of the role of music and creative movement in the lives of young children.

MUE 3210

Music in the Elementary School: Fundamental procedures for teaching elementary school music, stressing appropriate music materials and activities for different age groups; selected experience in music

MUE 3450

Woodwind Techniques I: Class instruction in beginning woodwind playing techniques. **MUE 3451** AS 1(1,0) Woodwind Techniques II: PR: MUE 3450. Continuation of class instruction in woodwinds, especially double reeds. Not repeated.

MUE 3460

Brass Techniques: Class instruction in beginning brass playing techniques. May be repeated for credit. **MUE 3470** AS 1(0.2)

Percussion Techniques: Class instruction in beginning percussion playing techniques. **MUE 4311**

ED 2(2,0) Elementary School Music Instructional Analysis: PR: Junior standing. Organization and administration of instruction for comprehensive music education, K-6; instructional planning, techniques, and materials for elementary music education.

HPA 2(0.4)

HPE 5(0.15)

AS 4(4.0)

AS 3(3.0)

AS 1(1.1)

AS 1(1.0)

AS 2(2,0)

AS 2(2.0)

AS 1(0.2)

ED 3(3,0)

ED 3(2.1)

AS 1(1,0)

AS 1(0.2)

HPA 4(3.2)

HPA 4(3.3)

HPA 4(4,0)

HPA 2(0.4(

ED 3(3,0) Trends in Arts Education: PR: Initial Certification or CI. Investigation of current trends in arts education: development of strategies for utilizing understandings of arts education in the total curriculum of elementary students. MUG 3101 AS 2(1,1) Basic Conducting: Fundamental techniques and practice in conducting. MUG 3202 AS 2(1,2) Choral Conducting: PR: MUG 3101, Fundamental principles of choral conducting and rehearsal techniques. May be repeated for credit. MUG 3302 AS 2(1,1) Instrumental Conducting: PR: MUG 3101. Fundamental principles of instrumental conducting and rehearsal techniques. May be repeated for credit. **MUG 4103** AS 2(1.1) Advanced Conducting: PR: C.I. Study of advanced vocal or instrumental conducting techniques. Rehearsal procedures, selection of materials and program-building, interpretation of scores, study and performance of selected works. MUH 4211 AS 3(3,0) History and Literature I: PR: MUT 1112. In-depth study of the development of Western musical styles from antiquity to present. MUH 4212 AS 3(3,0) History and Literature II: PR: MUT 1112. Continuation of MUH 4211. **MUH 4218** AS 1(1.0) Review of Music History: PR: C.I. A review of music history from Ancient Greece to the present MUH 4341 AS 3(3.0) Seminar in Baroque Music: PR: Satisfactory music history placement examination. Study of selected music from Monteverdi through Bach and Handel. Emphasis on stylistic development and performance practice. MUL 2010 AS 3(2,1) Enjoyment of Music: Only non-music majors. Designed to develop an understanding of musical principles and techniques for listening to music. AS 2(1,1) MUL 3400 Piano Literature I: PR: Major in Music or C.I. Survey of stringed keyboard literature from the 16th century to the present, with emphasis on technical, formal and performance problems. MUL 3401 AS 2(1.1) Piano Literature II: PR: MUL 3400. Continuation of MUL 3400. MUL 3600 AS 1(1.0) Song Literature I: PR: Major in Music or C.I. Survey of the development of the art song from the Baroque to the present, with emphasis on technical, formal and performance problems. MUL 3601 AS 1(1,0) Song Literature II: PR: MUL 3600. Continuation of MUL 3600. MUN 3113 AS 2(0,8) Marching Band: PR: Admission by audition. Preparation for appearance at football games and special occasions. May be repeated for credit. MUN 3123 AS 1(0.3) Concert Band: Open to all students with audition. Study and performance of music for large ensembles. **MUN 3143** AS 1(0,4) Wind Ensemble: Open to all students by audition. Study and performance of music for wind ensemble **MUN 3283** AS 1(0,5)

Trends in Elementary School Music Education: PR: MUE 3210 or equivalent, or C.I. Advanced study of instructional strategies and materials; integration of music education experiences with classroom activities; personal musical skill development; current research and new curricula.

niques and materials in middle school, junior high and senior high classrooms; consideration of general

music education program; evaluation materials and procedures.

MUE 5695

MUE 4360

MUE 4480

MUE 5611

May be repeated for credit.

and band. May be repeated for credit.

Community Orchestra: PR: C.I. Open to all students. Audition for wind and percussion players required. Repertoire from symphonic literature. May be repeated for credit.

ED 2(2.0) Secondary School Music Instructional Analysis: PR: MUE 4311 or C.I. Instructional planning, tech-

AS 1(1.1) Marching Band Techniques: PR: C.I. Principles of organizing and training marching bands: Planning. charting football shows, rehearsal problems. Guided observations. May be repeated for credit. ED 3(3.0)

MUN 3313 AS 1(0,3)
University Choir: Open to all students by audition. Study and performance of large ensemble music. Possible tours. May be repeated for credit.
MUN 3343 AS 1(0,3)
Madrigal Singers: Open to all students by audition. Extra rehearsals and Madrigal Dinners required. Tours. May be repeated for credit.
MUN 3344 AS 1(0,3)
Chamber Chorus: Open to all students by audition. Study and performance of music for small ensembles. May be repeated for credit.
MUN 3383 AS 1(0,3)
Oratorio Choir: Open to all students, faculty, and members of the community for performance of large works. May be repeated for credit.
MUN 3423 AS 1(0,2)
Woodwind Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.
MUN 3433 AS 1(0,2)
Brass Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.
MUN 3442 AS 1(1,0)
Percussion/Mallet Ensemble: PR: C.I. Preparation and performance of music for percussion with mallets. May be repeated.
MUN 3443 AS 1(0,2)
Percussion Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.
MUN 3444 AS 1(1,0)
Mallet Ensemble: PR: C.I. Preparation and performance of music for mallet ensemble. May be repeated.
MUN 3453 AS 1(0,3)
Piano Ensemble: Open to Music Majors or C.I. Study and performance of music for small ensembles. May be repeated for credit.
MUN 3483 AS 1(0,2)
String Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.
MUN 3713 AS 1(0,4)
Jazz Lab: PR: C.I. Open to all students by audition. Study and performance of music for small ensembles. May be repeated for credit.
MUN 3174 AS 1(0,3)
Jazz/Pop Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.
MUN 4473 AS 1(0,2)
Early Music Ensemble: PR: C.I. Study and performance of pre-classical music. May be repeated for credit.
MUO 3503 AS 3(0.3)
Opera Workshop: PR: C.I. Study of expressive emotion in relation to musical theatre; staging and per- formance of prepared studies of popular music for vocal ensembles. May be repeated for credit.
MUS 1010 AS 0(9,2)
Music Forum: A series of special musical events required of music majors. Includes lectures and recitals by faculty, students, and guest artists.
MUS 2321 AS 8(6,6)
Sophomore Practicum in Recording Arts: Introduction to recording arts; recording engineering, and
MUS 3322 AS 10(8,8) Junior Practicum in Recording Arts: PR: MUS 2321. Sound reinforcement and concert lighting, tap- less studio and music video.
MUS 4323 AS 10(8,8)
Senior Practicum in Recording Arts: PR: MUS 3322. Music business, advanced recording and pro- duction, studio maintenance and troubleshooting.
MUS 4330 AS 2(1,1)
Recording Techniques for Classical Music: PR: MUS 2320 or C.I. Concert hall recording techniques for classical music.
MUS 4401 AS 2(1,1)
Studio Teaching: PR: C.I. Management of the music studio; responsibilities and techniques of private

Studio Teaching: PR: C.I. Management of the music studio; responsibilities and techniques of private instruction for the studio teacher, principles of psychology of music. May be repeated for credit.

MUS 4905 AS 1-4(0-4)
Directed Experience: PR: C.I. and Junior standing. Special topics of study and/or research as deter-
mined by student/faculty consultation. May be repeated for credit.
MUT 111 AS 2(2,1) Music Theory IA: Open to all students. Writing, performance, analysis of and music of various stylistic
periods.
MUT 1112 AS 2(2,1)
Music Theory IB: PR: MUT 1111. Continuation of MUT 1111.
MUT 1241 AS 1(0.2)
Ear Training and Sight Singing IA: Aural and visual/oral comprehension of elements of music -
rhythm, melody, harmony, form. Intended to be taken with MUT 1111.
MUT 1242 AS 1(0,2)
Ear Training and Sight Singing IB: PR: MUT 1241. Continuation of MUT 1241. Intended to be taken
with MUT 1112.
MUT 2116 AS 2(2,1)
Music Theory IIA: PR: MUT 1112. Continuation of MUT 1111-1112; writing, performance, and analysis
of music of various stylistic periods.
MUT 2117 AS 2(2,1)
Music Theory IIB: PR: MUT 2116. Continuation of MUT 2116.
MUT 2246 AS 1(0,2)
Ear Training and Sight Singing IIA: PR: MUT 1242. Continuation of MUT 1242. Intended to be taken with MUT 2116.
MUT 2247 AS 1(0,2) Ear Training and Sight Singing IIB: PR: MUT 2246. Continuation of MUT 2246. Intended to be taken
with MUT 2117.
MUT 3248 AS 1(0.2)
Ear Training and Sight Singing III: PR: MUT 2247. Continuation of MUT 2247. Intended to be taken
with MUT 3561.
MUT 3353 AS 1(0,2)
Jazz Skills I: PR: C.I. Elements of jazz improvisation. Emphasis on listening, harmony, basic arranging
and jazz forms.
MUT 3354 AS 1(0,2)
Jazz Skills II: PR: MUT 3353 or C.I. Continuation of Jazz Skills I.
MUT 3561 AS 2(2,1)
Music Theory III: PR: MUT 2117. Continuation of MUT 2116-2117; writing, performance, and analysis
of music of various stylistic periods.
MUT 4031 AS 1(1,0)
Review of Music Theory: PR: C.I. A comprehensive review of harmonic and analytic skills. May be
repeated for credit.
MUT 4344 AS 1(1,0) Seminar in Music Arranging: PR: MUT 3311. Scoring for choral and instrumental ensembles.
MUT 5381 AS 3(3,0) Arranging and Composing Music: PR: Satisfactory placement tests in theory, sight-singing, and ear
training. Arranging and composing music for instrumental and vocal ensembles. Some emphasis on
compositional techniques of the 20th century.
MVB 1211 AS 1(0,1)
Secondary Trumpet: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in
trumpet. Intended for non-music majors. May be repeated for credit.
MVB 1212 AS 1(0,1)
Secondary French Horn: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction
in French Horn. Intended for non-music majors. May be repeated for credit.
MVB 1213 AS 1(0,1)
Secondary Trombone: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in
trombone. Intended for non-music majors. May be repeated for credit.
MVB 1214 AS 1(0,1)
Secondary Baritone: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in baritone. Intended for non-music majors. May be repeated for credit
baritone. Intended for non-music majors. May be repeated for credit.
MVB 1215 AS 1(0,1) Secondary Tuba: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in tuba.
Intended for non-music majors. May be repeated for credit.
MBV 1411 AS 2(1,1)
Trumpet I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVB 1412 French Horn I: PR: Major in music or consent of chair; audition. May be repeated for credit.	AS 2(1,1)
MVB 1413 Trombone I: PR: Major in music or consent of chair; audition. May be repeated for credit.	AS 2(1,1)
MBV 1414	AS 2(1,1)
Baritone I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVB 1415	AS 2(1,1)
Tuba I: PR: Major in music or consent of chair; audition. May be repeated for credit.	one receip
MVB 2421 Trumpet II: PR: MVB 1411 and competence determined by faculty jury. Continuation of MVB be repeated for credit.	AS 2(1,1) 1411. May
MVB 2422	AS 2(1,1)
French Horn II: PR: MVB 1412 and competence determined by faculty jury. Continuation of May be repeated for credit.	
MVB 2423 Trombone II: PR: MVB 1413 and competence determined by faculty jury. Continuation of M May be repeated for credit.	AS 2(1,1) MVB 1413.
MVB 2424 Baritone II: PR: MVB 1414 and competence determined by faculty jury. Continuation of MVB be repeated for credit.	AS 2(1,1) 1414. May
MVB 2425 Tuba II: PR: MVB 1415 and competence determined by faculty jury. Continuation of MVB 141 repeated for credit.	AS 2(1,1) 15. May be
MVB 3431 Trumpet III: PR: MVB 2421 and competence determined by faculty jury. Continuation of M May be repeated for credit.	AS 2(1,1) MVB 2421.
MVB 3432 French Horn III: PR: MVB 2422 and competence determined by faculty jury. Continuation of May be repeated for credit.	AS 2(1,1) WVB 2422.
MVB 3433 Trombone III: PR: MVB 2423 and competence determined by faculty jury. Continuation of M May be repeated for credit.	AS 2(1,1) AVB 2423.
MVB 3434	AS 2(1,1)
Baritone III: PR: MVB 2424 and competence determined by faculty jury. Continuation of N May be repeated for credit.	AVB 2424.
MVB 3435 Tuba III: PR: MVB 2425 and competence determined by faculty jury. Continuation of MVB 242 repeated for credit.	AS 2(1,1) 25. May be
MVB 4441 Trumpet IV: PR: MVB 3431 and competence determined by faculty jury. Continuation of M May be repeated for credit.	AS 2(1,1) NVB 3431.
MVB 4442 French Horn IV: PR: MVB 3432 and competence determined by faculty jury. Continuation of May be repeated for credit.	AS 2(1,1) MVB 3432.
MVB 4443	AS 2(1,1)
Trombone IV: PR: MVB 3433 and competence determined by faculty jury. Continuation of N May be repeated for credit.	//VB 3433.
MVB 4444 Baritone IV: PR: MVB 3434 and competence determined by faculty jury. Continuation of M May be repeated for credit.	AS 2(1,1) NVB 3434.
MVB 4445	AS 2(1,1)
Tuba IV: PR: MVB 3435 and competence determined by faculty jury. Continuation of MVB 343 repeated for credit.	5. May be
MVB 5451 Trumpet V: PR: C.I.	AS 2(1,0)
MVB 5452 French Horn V: PR: C.I.	AS 2(1,0)
MVB 5453	AS 2(1,0)
Trombone V: PR: C.I. MVB 5454	AS 2(1,0)
Baritone V: PR: C.I.	

MVB 5455 AS 2(1,0) Tuba V: PR: C.I.
MVK 1111 AS 1(0,2) Class Piano I: Class instruction for beginning piano students. Not open to music majors whose major performing medium is piano.
MVK 1121 AS 1(0,2) Class Piano II: PR: MVK 1111 or C.I. Continuation of MVK 1111. Not open to music majors whose
major performing medium is piano. MVK 1131 AS 1(0,2) Class Piano III: PR: MVK 1121 or C.I. Continuation of MVK 1121.
MVK 1141 AS 1(0,2) Class Piano IV: PR: MVK 1131 or C.I. Continuation of MVK 1131. AS 1(0,2)
MVK 1211 AS 1(0,1) Secondary Plano: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in piano. Intended for non-music majors. May be repeated for credit.
MVK 1213 AS 1(1,1) Secondary Organ: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in organ. Intended for non-music majors. May be repeated for credit.
MVK 1411 AS 2(1,1) Piano I: PR: Major in music or consent of chairperson; audition. May be repeated for credit.
MVK 1413 AS 2(1,1) Organ I: PR: Major in music or consent of chairperson; audition. May be repeated for credit.
MVK 2421 AS 2(1,1) Piano II: PR: MVK 1411 and competence determined by faculty jury. Continuation of MVK 1411. May be repeated for credit.
MVK 2423 AS 2(1,1) Organ II: PR: MVK 1413 and competence determined by faculty jury. Continuation of MVK 1413. May be repeated for credit.
MVK 3431 Piano III: PR: MVK 2421 and competence determined by faculty jury. Continuation of MVK 2421. May be repeated for credit.
MVK 3433 AS 2(1,1) Organ III: PR: MVK 2423 and competence determined by faculty jury. Continuation of MVK 2423. May be repeated for credit.
MVK 4441 AS 2(1,1) Piano IV: PR: MVK 3431 and competence determined by faculty jury. Continuation of MVK 3431. May be repeated for credit.
MVK 4443 AS 2(1,1) Organ IV: PR: MVK 3433 and competence determined by faculty jury. Continuation of MVK 3433. May be repeated for credit.
MVK 4640 AS 1(1,0) Piano Pedagogy I: PR: C.I. Methods, materials for teaching individuals and classes of children and adults beginning to intermediate levels; demonstration and observation of procedures. May be repeated for credit.
MVK 4641 AS 1(1,0) Piano Pedagogy II: PR: C.I. Continuation of MVK 4640. Emphasis on intermediate through advanced levels. May be repeated for credit.
MVK 5451 AS 2(1,0) Piano V: PR: C.I.
MVK 5453 AS 2(1,0) Organ V: PR: C.I.
MVO 1214 AS 1(0,1) Secondary Recorder: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in recorder. Intended for non-music majors. May be repeated for credit.
MVO 3114 AS 3(2,1) Recorder I: Open to non-music majors. Class instruction in beginning recorder playing.
MVO 3124 AS 2(1,1) Recorder II: PR: C.I. Class instruction in advanced recorder solo and ensemble playing. Open to music students and non-music students who have taken MVO 3114.
MVO 5250 AS 1(1,0) Advanced Secondary Instruction: PR: Graduate standing and C.I. Advanced instructional techniques on a secondary instrument or in voice. May be repeated for credit.

MVP 1211	AS 1(0,1)
Secondary Percussion: PR: Consent of Music Chair. CR: Performing ensemble. Advanced in percussion. Intended for non-music majors. May be repeated for credit.	instruction
MVP 1411	AS 2(1,1)
Percussion I: PR: Major in music or consent of chair; audition. May be repeated for credit.	A0 2(1,1)
MVP 2421	AS 2(1,1)
Percussion II: PR: MVP 1411 and competence determined by faculty jury. Continuation of I	
May be repeated for credit.	
MVP 3431	AS 2(1,1)
Percussion III: PR: MVP 2421 and competence determined by faculty jury. Continuation of May be repeated for credit.	MVP 2421.
MVP 4441	AS 2(1,1)
Percussion IV: PR: MVP 3431 and competence determined by faculty jury. Continuation of	
May be repeated for credit.	
MVP 5451	AS 2(1,0)
Percussion V: PR: C.I.	Un unst.
MVS 1211	AS 1(0,1)
Secondary Violin: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruct lin. Intended for non-music majors. May be repeated for credit.	ction in vio-
MVS 1212	AS 1(0,1)
Secondary Viola: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instructi	
Intended for non-music majors. May be repeated for credit.	- Thomas
MVS 1213	AS 1(0,1)
Secondary Cello: PR: Consent of Music Chair: CR: Performing ensemble. Advanced ins	struction in
cello. Intended for non-music majors. May be repeated for credit.	- Aller
MVS 1214 Secondary Bass: PR: Consent of Music Chair. CR: Performing ensemble. Advanced ins	AS 1(0,1)
bass. Intended for non-music majors. May be repeated for credit.	
MVS 1215	AS 1(1,1)
Secondary Harp: Instruction in beginning harp playing.	and the state of
MVS 1216	AS 1(0,1)
Secondary Guitar: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruct	tion in gui-
tar. Intended for non-music majors. May be repeated for credit.	
MVS 1411 Violin I: PR: Major in music or consent of chair; audition. May be repeated for credit.	AS 2(1,1)
MVS 1412	AC 0/1 1)
Viola I: PR: Major in music or consent of chair; audition. May be repeated for credit.	AS 2(1,1)
MVS 1413	AS 2(1,1)
Cello I: PR: Major in music or consent of chair; audition. May be repeated for credit.	
MVS 1414	AS 2(1,1)
Bass I: PR: Major in music or consent of chair; audition. May be repeated for credit.	
MVS 1415	AS 2(1,1)
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit.	offer Vices
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416	AS 2(1,1) AS 2(1,1)
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit.	AS 2(1,1)
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876	offer Vices
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing.	AS 2(1,1) AS 1(0,1)
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421	AS 2(1,1) AS 1(0,1) AS 2(1,1)
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing.	AS 2(1,1) AS 1(0,1) AS 2(1,1)
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MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 141	AS 2(1,1) AS 1(0,1) AS 2(1,1) 11. May be AS 2(1,1)
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit.	AS 2(1,1) AS 1(0,1) AS 2(1,1) 11. May be AS 2(1,1) 12. May be
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit. MVS 2423	AS 2(1,1) AS 1(0,1) AS 2(1,1) 11. May be AS 2(1,1) 2. May be AS 2(1,1)
MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit.	AS 2(1,1) AS 1(0,1) AS 2(1,1) 11. May be AS 2(1,1) 2. May be AS 2(1,1)
 MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 141 repeated for credit. MVS 2423 Cello II: PR: MVS 1413 and competence determined by faculty jury. Continuation of MVS 1413 	AS 2(1,1) AS 1(0,1) AS 2(1,1) 11. May be AS 2(1,1) 2. May be AS 2(1,1)
 MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2423 Cello II: PR: MVS 1413 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2424 Bass II: PR: MVS 1414 and competence determined by faculty jury. Continuation of MVS 1417 	AS 2(1,1) AS 1(0,1) AS 2(1,1) 1. May be AS 2(1,1) 2. May be AS 2(1,1) 3. May be AS 2(1,1)
 MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2423 Cello II: PR: MVS 1413 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2424 Bass II: PR: MVS 1414 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. 	AS 2(1,1) AS 1(0,1) AS 2(1,1) 11. May be AS 2(1,1) 12. May be AS 2(1,1) 13. May be AS 2(1,1) 14. May be
 MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 1411 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 1411 repeated for credit. MVS 2423 Cello II: PR: MVS 1413 and competence determined by faculty jury. Continuation of MVS 1411 repeated for credit. MVS 2424 Bass II: PR: MVS 1414 and competence determined by faculty jury. Continuation of MVS 1411 repeated for credit. MVS 2424 Bass II: PR: MVS 1414 and competence determined by faculty jury. Continuation of MVS 1411 repeated for credit. MVS 2424 	AS 2(1,1) AS 1(0,1) AS 2(1,1) 11. May be AS 2(1,1) 12. May be AS 2(1,1) 4. May be AS 2(1,1) 4. May be AS 2(1,1)
 MVS 1415 Harp I: Major in music or consent of chair; audition. May be repeated for credit. MVS 1416 Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit. MVS 1876 Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing. MVS 2421 Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2422 Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2423 Cello II: PR: MVS 1413 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. MVS 2424 Bass II: PR: MVS 1414 and competence determined by faculty jury. Continuation of MVS 1417 repeated for credit. 	AS 2(1,1) AS 1(0,1) AS 2(1,1) 11. May be AS 2(1,1) 12. May be AS 2(1,1) 4. May be AS 2(1,1) 4. May be AS 2(1,1)

MVS 2426 AS 2(1,1) Guitar II: PR: MVS 1416 and competence determined by faculty jury. Continuation of MVS 1416. May
be repeated for credit.
MVS 2826 AS 1(0,1) Class Guitar II: Open to music students or non-music students who have taken Guitar I or C.I. Class instruction in advanced guitar solo and ensemble playing.
MVS 3431 AS 2(1,1)
Violin III: PR: MVS 2421 and competence determined by faculty jury. Continuation of MVS 2421. May be repeated for credit.
MVS 3432 AS 2(1,1)
Viola III: PR: MVS 2422 and competence determined by faculty jury. Continuation of MVS 2422. May be repeated for credit.
MVS 3433 AS 2(1,1) Cello III: PR: MVS 2423 and competence determined by faculty jury. Continuation of MVS 2423. May be
repeated for credit.
MVS 3434 AS 2(1,1)
Bass III: PR: MVS 2424 and competence determined by faculty jury. Continuation of MVS 2424. May be repeated for credit.
MVS 3435 AS 2(1,1)
Harp III: PR: MVS 2425 and competence determined by faculty jury. Continuation of MVS 2425. May be repeated for credit.
MVS 3436 AS 2(1,1)
Guitar III: PR: MVS 2426 and competence determined by faculty jury. Continuation of MVS 2426. May be repeated for credit.
MVS 4441 AS 2(1,1)
Violin IV: PR: MVS 3431 and competence determined by faculty jury. Continuation of MVS 3431. May
be repeated for credit.
MVS 4442 AS 2(1,1)
Viola IV: PR: MVS 3432 and competence determined by faculty jury. Continuation of MVS 3432. May be
repeated for credit.
MVS 4443 AS 2(1,1)
Cello IV: PR: MVS 3433 and competence determined by faculty jury. Continuation of MVS 3433. May be repeated for credit.
MVS 4444 AS 2(1,1)
Bass IV: PR: MVS 3434 and competence determined by faculty jury. Continuation of MVS 3434. May be repeated for credit.
MVS 4445 AS 2(1,1)
Harp IV: PR: MVS 3435 and competence determined by faculty jury. Continuation of MVS 3435. May be
repeated for credit.
MVS 4446 AS 2(1,1) Guitar IV: PR: MVS 3436 and competence determined by faculty jury. Continuation of MVS 3436. May
be repeated for credit. MVS 5451 AS 2(1.0)
MVS 5451 AS 2(1,0) Violin V: PR: C.I.
MVS 5452 AS 2(1,0)
Viola V: PR: C.I.
MVS 5453 AS 2(1,0) Cello V: PR: C.I.
MVS 5454 AS 2(1,0)
Bass V: PR: C.I.
MVS 5455 AS 2(1,0) Harp V: PR: C.I.
MVS 5456 AS 2(1,0)
Guitar V: PR: C.I. MVV 1111 AS 1(0.1)
MVV 1111 AS 1(0,1) Class Voice: Class instruction in beginning voice. May be repeated for credit.
MVV 1211 AS 1(0,1)
Secondary Voice: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in voice. Intended for non-music majors. May be repeated for credit.
MVV 1411 AS 2(1,1)
Voice I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVV 2421	AS 2(1,1)
Voice II: PR: MVV 1411 and competence determined by faculty jury. Continuation of MVV in music or consent of chair; audition. Private and class lessons. May be repeated for credit.	1411. Major
MVV 3431	AS 2(1,1)
Voice III: PR: MVV 2421 and competence determined by faculty jury. Continuation of MVV	
be repeated for credit.	obju/mini
MVV 4441	AS 2(1,1)
Voice IV: PR: MVV 3431 and competence determined by faculty jury. Continuation of MVV	/ 3431. May
be repeated for credit. MVV 4640	AC 1/1 0)
Voice Pedagogy I: PR: C.I. Methods, materials for vocalists; teachers, conductors; voice	AS 1(1,0)
diagnosis of problems and correction; demonstration and observation of teaching; beginning	
diate levels. May be repeated for credit.	
MVV 4641	AS 1(1,0)
Voice Pedagogy II: PR: C.I. Continuation of MVV 4640. Intermediate to advanced lever repeated for credit.	els. May be
MVV 5451	AS 2(1,0)
Voice V: PR: C.I.	
MVW 1211 Secondary Flute: PR: Consent of Music Chair. PR: Performing ensemble. Advanced instruct Intended for non-music majors. May be repeated for credit.	AS 1(0,1) ction in flute.
MVW 1212	AS 1(0,1)
Secondary Oboe: PR: Consent of Music Chair. CR: Performing ensemble. Advanced in	instruction in
oboe. Intended for non-music majors. May be repeated for credit.	
MVW 1213 Secondary Clarinet: PR: Consent of Music Chair. CR: Performing ensemble. Advanced in	AS 1(0,1)
clarinet. Intended for non-music majors. May be repeated for credit.	istraction in
MVW 1214	AS 1(0,1)
Secondary Bassoon: PR: Consent of Music Chair. CR: Performing ensemble. Advanced in	nstruction in
bassoon. Intended for non-music majors. May be repeated for credit.	Station and
MVW 1215 Secondary Saxophone: PR: Consent of Music Chair. CR: Performing ensemble. Advance	AS 1(0,1)
in saxophone. Intended for non-music majors. May be repeated for credit.	a monucion
MVW 1411	AS 2(1,1)
Flute I: PR: Major in music or consent of chair; audition. May be repeated for credit.	
MVW 1412	AS 2(1,1)
Oboe I: PR: Major in music or consent of chair; audition. May be repeated for credit.	AD 0/4 4)
MVW 1413 Clarinet I: PR: Major in music or consent of chair; audition. May be repeated for credit.	AS 2(1,1)
MVW 1414	AS 2(1,1)
Bassoon I: PR: Major in music or consent of chair; audition. May be repeated for credit.	
MVW 1415	AS 2(1,1)
Saxophone I: PR: Major in music or consent of chair; audition. May be repeated for credit.	
MVW 2421	AS 2(1,1)
Flute II: PR: MVW 1411 and competence determined by faculty jury. Continuation of MVW be repeated for credit.	1411. May
MVW 2422	AS 2(1,1)
Oboe II: PR: MVW 1412 and competence determined by faculty jury. Continuation of MVW	
be repeated for credit.	
MVW 2423 Claringt III, PP: MVW 1412 and competence determined by faculty juny. Continuation of J	AS 2(1,1)
Clarinet II: PR: MVW 1413 and competence determined by faculty jury. Continuation of I May be repeated for credit.	VIV VV 1413.
MVW 2424	AS 2(1,1)
Bassoon II: PR: MVW 1414 and competence determined by faculty jury. Continuation of	
May be repeated for credit.	72727154
MVW 2425	AS 2(1,1)
Saxophone II: PR: MVW 1415 and competence determined by faculty jury. Continuation of May be repeated for credit.	1415.
MVW 3431	AS 2(1,1)
Flute III: PR: MVW 2421 and competence determined by faculty jury. Continuation of MVW	
be repeated for credit.	

MVW 3432 AS 2(Oboe III: PR: MVW 2422 and competence determined by faculty jury. Continuation of MVW 2422. be repeated for credit.	
MVW 3433 AS 20	(1 1)
Clarinet III: PR: MVW 2423 and competence determined by faculty jury. Continuation of MVW 22 May be repeated for credit.	
MVW 3434 AS 20	(1.1)
Bassoon III: PR: MVW 2424 and competence determined by faculty jury. Continuation of MVW 24 May be repeated for credit.	
MVW 3435 AS 2((1,1)
Saxophone III: PR: MVW 2425 and competence determined by faculty jury. Continuation of MVW 24 May be repeated for credit.	
MVW 4441 AS 2((1,1)
Flute IV: PR: MVW 3431 and competence determined by faculty jury. Continuation of MVW 3431. be repeated for credit.	May
MVW 4442 AS 2((1,1)
Obce IV: PR: MVW 3432 and competence determined by faculty jury. Continuation of MVW 3432. I be repeated for credit.	May
MVW 4443 AS 2((1,1)
Clarinet IV: PR: MVW 3433 and competence determined by faculty jury. Continuation of MVW 34 May be repeated for credit.	
MVW 4444 AS 2(
Bassoon IV: PR: MVW 3434 and competence determined by faculty jury. Continuation of MVW 34 May be repeated for credit.	434.
MVW 4445 AS 20	
Saxophone IV: PR: MVW 3435 and competence determined by faculty jury. Continuation of MVW 34	435.
May be repeated for credit.	
MVW 5451 AS 2(1,0)
Flute V: PR: C.I.	
MVW 5452 AS 20 Oboe V: PR: C.I.	1,0)
MVW 5453 AS 2(Clarinet V: PR: C.I.	1,0)
MVW 5454 AS 2(Bassoon V: PR: C.I.	1,0)
MVW 5455 AS 2(Saxophone V: PR: C.I.	1,0)
NUR 3065 HPA 3(2.1)
Health Assessment: PR: PCB 3703C, ZOO 3733C or Florida RN License. Concepts of health assement of clients.	
NUR 3105 HPA 3(3,0)
Introduction to Baccalaureate Nursing: Overview of baccalaureate nursing philosophy, objective conceptual framework, scope of practice, history, legal and ethical issues.	
NUR 3165 HPA 3(3,0)
Critical Inquiry: PR: NUR 3809, NUR 3748C, 3105 and 3065, STA 2014 or 3023. A study approaches to problematic situations in nursing. Selected experiences in investigating, analyzing, interpreting nursing research.	
NUR 3217C HPA 6(4 2)
Scientific Theories of Nursing II: PR: NUR 3748C, 3119, 3066. CR: NUR 3749C, 3166. Theories practice related to individuals with long-term and chronic health care problems.	
NUR 3355C HPA 5(3.2)
Scientific Theories of Nursing IV: PR: NUR 3749C, 3795C, 3166. CR: NUR 3755C. Theories practice in the care of children and their families.	
NUR 3358C HPA 5(3,2)
Scientific Theories of Nursing III: PR: NUR 3749C, 3795C, 3166. CR: NUR 3796. Theories and p tice applicable to the nurse's role in the care of the family from conception through delivery. Focus is	rac-
family system.	-

 NUR 3748C
 HPA 6(3,3)

 Concepts Basic to Nursing Practice:
 PR: Admission to the nursing program and completion of prerequisites. Beginning principles and concepts of nursing theory and practice utilizing the nursing process in selected clinical settings.

NUR 3749C

Scientific Theories of Nursing I: PR: NUR 3748C and HSC 4550, NUR 3066 and 3119, CR: NUR 3795C and 3166. Theories and practice related to individuals with acute health problems.

NUR 3809

Transitional Concepts in Nursing I: PR: Florida RN status, Exploration of issues and theories related to professional nursing practice to facilitate transition of RN to baccalaureate level of nursing practice.

NUR 3826H

Bioethics: Value and Ethics in Everyday Life: Includes questions concerning human values and ethical questions arising in health care delivery, policy issues, and professional practice among licensed health care practitioners.

NUR 3905

Independent Study: Directed Study.

NUR 4084

Transitional Concepts in Nursing II: PR: NUR 3065, 3166, 3809. Enhancement of knowledge from basic Registered Nurse programs and continuation of study from NUR 3809. HPA 3(3.0)

NUR 4196

Crisis Intervention: Crisis theory and techniques: recognition and intervention in crisis events. Applicable to all areas of nursing and all helping professions.

NUR 4297

Introduction to Cardiovascular Nursing: Nursing management of cardiac disorders as they affect adaptation of individuals and family.

NUR 4535C

Scientific Theories of Nursing V: PR: NUR 3755C, 3796C or 3709. Theories and principles of psychiatric/mental health nursing. Clinical application in selected settings.

NUR 4635C

Scientific Theories of Nursing VI: PR: NUR 3755C, 3796C or 3709. Theories and principles of public health nursing. Clinical applications in selected settings.

NUR 4820C

Professional Development and Issues: PR: NUR 4756C and NUR 4758C or C.I. CR: NUR 4757C. Diagnosis of professional development and issues relating to the baccalaureate graduate entering professional nursing practice.

NUR 4827C

Scientific Theories of Nursing VII: PR: NUR 4756C, 4758C, CR: NUR 4941, 4196, Scientific theories and principles of leadership and management of patient care. Application of the decision-making process in selected clinical experiences.

NUR 4880

Introduction to Critical Care Nursing: PR: NUR 3749C and NUR 3795C or C.I. Theories and principles of comprehensive nursing care of individuals and families in critical care settings.

NUR 4905C

Nursing Independent Study: PR: NUR 4756C. An opportunity for in-depth study in an area of special interest to the student.

NUR 4906

Independent Study: Directed Study.

NUR 4941

Selected Nursing Practicum: PR: NUR 4756C and 4758C. An opportunity for an in-depth clinical study in an area of special interest to the student.

OST 4335

Business Correspondence: Originating written business correspondence to include letters, memoranda, and business forms. (Typewriting skill recommended.)

PAD 3003

Public Administration: An examination of the basic environment, culture, and organization of public administration in the United States.

The Administration of Public Policy: Problems of values, interests, and objectives and their impact on the administration of public programs, stressing the interplay between social values, policies and administration.

PAD 4104

Administrative Theory: A review of the behavioral aspects of the administrative process, its impact on organizational goal achievement and on supervisory strategies. Some social and structural pathologies affecting administrative practice.

HPA 3(3,0)

HPA 1-10

HPA 3(3.0)

HPA 3(3.0)

HPA 6(3.3)

HPA 6(6.0)

HPA 3(3,0)

HPA 3(3.0)

HPA 6(3,3)

HPA 3(3.0)

HPA 6(3.3)

HPA 6(3.9)

HPA 1-3(1-3,0) HPA 3(0,9)

ED 3(3,0)

HPA 3(3,0)

HPA 3(3,0)

HPA 1-3(1-3.0)

PAD 4110

Intergovernmental Administration: Various approaches to studying and explaining the American Intergovernmental system. Emphasis on interorganizational activities, i.e., negotiation, cooperation, and coordination within the legal setting.

PAD 4131

Public Sector Project Management: Various approaches to managing projects, including using scheduling techniques such as GANTT, CPM, and PERT, as well as team building, facilitating, and leadership skills.

PAD 4204

Fiscal Management: PR: C.I. Analysis of methods of securing public funds, the process of budgetmaking, and techniques of management used in managing public funds.

PAD 4351

Issues in Environmental Program Management: The study of environmental policymaking processes, programs, and problems through lectures, field study, and research projects.

PAD 4414

Public Personnel Administration: The history, operating components, structural characteristics, and increasing impact of laws and related sanctions on personnel practices of public agencies.

PAD 4720

Survey Research in Public Administration: Introduction to the concepts, design, methodology, computer applications, and data analysis in applied research in the public sector.

PAD 4803

Issues in Urban Administration: To provide students with an understanding of public policy and administrative responses to socioeconomic problems within the urban context.

PAD 4850

Grant and Contract Management: The study of government or public nonprofit agency grant and contract administration and management responding to funding assistance solicitations and grant and contract preparation, evaluation, and presentation.

PAD 4941

Public Administration Internship: PR: C.I. Internship in municipal, county, state, or federal government, including assignments in such fields as personnel, planning, budget, and fiscal, procurement, and public safety.

PAD 5041

Ethics and Values in Public Administration: Examination of ethics in the public sector. Public concerns, past patterns, and individual/social aspects of ethical behavior are explored.

PAD 5336

Introduction to Urban Planning: Issues or urbanization, regional development, land use and comprehensive planning, environmental planning, and social planning.

PAD 5337

Urban Design: Planning techniques such as planned unit developments, capital improvements planning, and growth management, and planning methods, including needs assessment and graphic design.

PAD 5338

Land Use and Planning Law: Review of national and local aspects of the legal underpinnings of urban planning aspects such as zoning, growth management, and environmental regulation.

PAD 5425

Dispute Resolution in the Public Sector: An examination of the skills needed to resolve disputes in the public sector through facilitation, mediation, and other alternative methods.

PAD 5427

Labor Relations in the Public Sector: Current trends and developments in employment relations in the public sector, especially employee organization, negotiations, and the collective bargaining process. HPA 3(3.0)

PAD 5806

Local Government Operations: Operational Functions of municipal and county governments and the role of the chief executive officer.

PAD 5807

Administrative Practice in the Public Sector: The application of various theoretical concepts to the "real world" of public administration. Policy formulation and execution are examined through the case study mode.

PCB 3023

Molecular Cell Biology: PR: One semester of Organic Chemistry. Molecular structure and function of eukaryotic organelles. Transcription: RNA processing translation and post translation targeting and modification of gene products.

PCB 3043

Principles of Ecology: 8 hours in biological sciences. Elements of ecosystems, biogeochemical cycling, environmental factor interactions, population dynamics, and community development.

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3-6(0,6)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

AS 3(3.0)

AS 3(3.0)

HPA 3(3.0)

HPA 3(3 0)

HPA 3(3.0)

HPA 3(3.0)

PCB 3043L

AS 3(3.0) PCB 3063 Genetics: PR: BSC 2010C. Basic principles of heredity as applied to prokaryotes and eukaryotes. PCB 3063L AS 1(0,3) Genetics Laboratory: CR: PCB 3063. Introduction to laboratory techniques of genetics. PCB 3233 HPA 3(3.0) Immunology: PR: BSC 2010C. Basic principles of immune reactions, antigen antibody interactions, cell mediated immunity, tumor immunology, and immuno therapy. HPA 1(0.3) PCB 32331 Immunology Laboratory: CR: PCB 3233. Introduction to laboratory techniques in immunology. PCB 3301C AS 4(3,4) Aquatic Biology: PR: C.I. An introduction to the plant and animal components of freshwater environments. PCB 3523 HPA 3(3,0) Molecular Biology I: PR: CHM 3211 and MCB 3013 or C.I. The general principles governing the structure and function of both procaryotic and eucaryotic genes. PCB 3703C HPA 4(3,3) Human Physiology: PR: BSC 2010C or equivalent. The physiology and interrelationships of organ systems of the human body. PCB 4302C AS 4(2,8) Limnology I: PR: PCB 3043 or C.I. Introduction to limnology and methods for freshwater ecology, with respect to physical, chemical and biological parameters. PCB 4303C Limnology II: PR: PCB 4302C or C.I. Primary and secondary productivity and interaction among factors such as nutrients, pollutants, temperature radiation, turbidity, and seasons. PCB 4524 HPA 3(3.0) Molecular Biology II: PR: PCB 3523. The processes regulating gene function in procaryotes and eucaryotes; specialized genetic aspects underlying multicellular existence, DNA evolution. PCB 4683 AS 4(4,0) Population Biology and Evolution: PR: PCB 3043 and PCB 3063 or equivalents. The demographic. and genetic structure of populations and their relationships to basic aspects of evolution and adaptation. PCB 4723 AS 4(4.0) Animal Physiology: PR: PCB 3023 or C.I. Functions of body processes occurring in animals, with emphasis on vertebrate physiology. **PCB 5326** Ecosystems of Florida: PR: PCB 3043, PCB 3043L or equivalent. Ecosystems of Florida will be discussed to include geography, geology, climate, energetics, nutrient cycling, community structure and conservation. PCB 5045C AS 4(3,2) Conservation Biology: PR: PCB 3043 and PCB 3063. Scientific basis of conversation; conservation of ecosystems, populations, exploited species, and endangered species. Weekend field trips are required. PCB 5046C Advanced Ecology: PR: Ecology, statistics and 2 years of biological science. Population and community ecology with emphasis on growth, regulation, species interactions, succession, and community classification. PCB 5235 HPA 3(3,0) Immunopathology: PR: PCB 3233. In-depth overview of diseases due to deficiencies or over-reactivity of the immune system. PCB 5675C AS 4(3,2) Evolutionary Biology: PR: PCB 3043 and PCB 3063 or C.I. Review of concepts in evolutionary biology. Emphasis on evolution at and below the species level; consideration of genetic and ecological factors in divergence and speciation. **PCB 5806** HPA 3(3,0) Endocrinology: PR: PCB 4723 and BCH 4053 or C.I. Mechanisms of action of hormones; interrelationship between the nervous and endocrine systems. PCO 4203 AS 4(3,2) Interviewing and Counseling: PR: PSY 2013, PPE 3003, CLP 3143 and C.I. A review of various interviewing and counseling theories and techniques used in Mental Health settings as well as practical experience in interviewing and counseling procedures. **PEL 2021** ED 2(2,1)

Principles of Ecology Laboratory: CR: PCB 3043. Field and laboratory investigations of natural

ecosystems, with emphasis on current methodology in ecology.

Racket Sports: Study of performance and application of advanced skills, rules, and etiquette of the sports of racquetball and badminton. Physiological and social values accruing from this lifetime sport.

AS 5(3,4)

AS 5(3.2)

AS 1(0.3)

AS 4(2.8)

ED 2(2,1)

S	ocial values accruing from this lifetime sport.		
	EL 2122	ED 2(2,1)	
	ntermediate Golf: PR: PEL 2121 or equivalent competency. A study of performance and ntermediate skills, rules, and etiquette. Physiological and social values accruing from this I		
P	EL 2011	ED 2(2,1)	
	Basic Volleyball and Softball: The analysis of offensive and defensive alignment, teo trategies.		
P	EL 2341	ED 2(2,1)	
	Beginning Tennis: Performance and application of basic skills, rules and etiquette. Phy ocial values accruing from this lifetime sport.	siological and	
P	EL 2342	ED 2(2,1)	
a	Advanced Tennis: PR: PEL 2341 or equivalent competency. A study of performance and dvanced skills, rules, and etiquette. Physiological and social values accruing from this lifet		
	EL 2640	ED 2(2,1)	
st	tasic Football and Basketball: The analysis of offensive and defensive alignment, teo trategies.	hniques, and	
	EM 2101	ED 2(2,1)	
re	lody Development: An in-depth study of individual physical (musculo-skeletal, neuromus espiratory) fitness. Emphasis on individual diagnosis, principles, procedures, and cond xercise programs.		
	EM 2104	ED 2(2,1)	
P	ersonal Fitness: Study of personal fitness concepts, with opportunities to develop indi- evel of fitness and an improved lifestyle through high-level wellness.		
P	EM 2131	ED 2(2,1)	
S	trength Resistance Training: Study of fitness and strength development through resistant	nce exercise.	
P	EM 2171	ED 2(2,1)	
	erobic Dancing: Appropriate rhythmical muscle toning movements that develop aerobic epts taught include warm-up, flexibility, stretching, cool down, and heart rate.		
P	EM 2351	ED 2(2,1)	
	Sycling: Study of the techniques and physiological benefits of the lifetime sport of cycling activity oriented and requires access to any model bicycle.	. This course	
	EM 3405 elf Defense for Women and Men: Designed to provide students with self defense skills.	ED 3(1,2)	
P	EN 1121	ED 2(2,1)	
	lementary Swimming: For non-swimmers and beginning swimmers. Development and a ique in the basic skills of water safety and swimming.	study of tech-	
P	EO 3005	ED 3(2,1)	
A	dvanced Sports Analysis: Advanced analysis of sports for the purpose of teaching and o	coaching.	
	EO 3011	ED 3(2,1)	
m	eam Sports: PR: This course is designed to develop skill proficiency and knowledge to tent and evaluate team sports as part of the Physical Education program.	plan, imple-	
	EO 3031	ED 3(2,1)	
kr	ndividual Sports and Leisure Activities: This course is designed to develop skill pro- nowledge to plan, implement and evaluate individual sports and leisure activities in physi rogram.		
	EO 3041	ED 2(1,1)	
G	ames for the Elementary School Physical Education Program: The understanding, d eaching of low-organizational game-activities for the elementary school child.		
	EO 3324	ED 3(2,1)	
C	oaching Volleyball: Theory and methods of coaching volleyball, including the analysis and defensive alignment techniques and strategies.		
P	EP 3205	ED 3(2,1)	
-	ymnastics: This course is designed to develop skill proficiency and instructional strategies i	n gymnastics.	
	EQ 3101	ED 2(1,1)	
In	structional Analysis in Aquatics: PR: Sophomore standing or C.I. Analysis of aquatic urposes of teaching and coaching. Includes techniques, conditioning, and strategy.		
	ET 3012	ED 1(1,0)	
PH	hysical Education Professional Development: (Insatisfactory/Satisfactory grading)	The develop-	

Physical Education Professional Development: (Unsatisfactory/Satisfactory grading). The development in the profession of physical education, and action participation in current activities.

social values accruing from this lifetime sport.

Beginning Golf: Performance and application of basic skills, rules, and etiquette. Physiological and

PEL

PEL 2121

PEL

Basi strate

PEM

PEM

Pers level

PEM

PEM

PEM

Elem nique

PEO

PEO

Gam

PEP

PET 3210

Sports Psychology: A review of principles of psychology related to the enhancement of satisfaction and performance in sports.

PET 3720C

Teaching Physical Education in the Elementary and Middle School (K-8): PR: Admission to Junior Block, or C.I. Curricular and instructional considerations for teaching elementary and middle school physical education.

PET 3740C

Teaching Physical Education in the Secondary and Middle School (6-12): PR: Admission to Junior Block, or C.I. Curricular and instructional considerations for teaching secondary and middle school physical education

PET 3760

Coaching Theory and Officiating: Theory and methods of coaching and officiating techniques.

PET 4002

Outdoor and Leisure Activities: Study of contemporary outdoor and leisure activities. Course will include but not be limited to the "adventure activity curriculum," camping, water activities, fishing, orienteering, hiking.

PET 4035C

Motor Development and Learning: PR: PE Junior standing. An analysis of the theories and factors influencing the motor development of children and the learning of gross and fine motor skills.

PET 4312

Biomechanics: PR: Anatomy, The comprehension and application of anatomical and mechanical principles involved in human movement.

PET 4351

Applied Exercise and Human Physiology: An in-depth study of metabolic, neuromuscular, respiratory and cardiovascular physiological concepts and principles with practical application to physical education and sport.

PET 4382

Fitness Assessment and Exercise Physiology: A study and acquisition of health related fitness, exercise strategies and related assessment techniques.

PET 4401

Administration and Evaluation in Physical Education: This course is designed to address administrative, measurement and evaluation considerations of physical education programs.

PET 4601

Motor Development: Habilitation and Remediation for Exceptional Students: The comparative study of motor development in typical and atypical children, evaluative processes, methods of enrichment, and prescriptive techniques.

PET 4603

Introduction to Sports Medicine: A comprehensive study of care of sports injuries, including instruction in attitudes, health and conditioning in sports participants.

PET 4604

Sports Medicine Field Application: Demonstration and application of the treatment for various sports injuries.

PET 4622

Human Injuries: PR: Biomechanics or C.I. The prevention, identification, care, and rehabilitation of human injuries.

PET 4623

Sports Medicine Field Application: Demonstration and application of the treatment for various sports injuries.

PET 4640

Adapted Physical Education: Principles and methods of adapting physical education activities and programs for exceptional children and adults; mainstreaming rationale and methods analyzed.

PET 4724

Development and History of Physical Education Curriculum: A study of the factors involved in curriculum development and historical and philosophical considerations of physical education programs.

PET 5355

Exercise Physiology and Health: In-depth study of adaptations of cardiovascular and respiratory systems during varying degrees of exercise.

PGY 3401C

Photography: PR: 18 credits of the art core requirement. Beginning photography, technical and aesthetic basis. Designed for upper division art majors with studio skills. Recommended for art majors.

ED 3(2.1)

ED 3(3.0)

ED 3(2.1)

ED 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

ED 3(2,1)

ED 3(3,0)

ED 3(3,0)

ED 3(3.0)

HPA 3(3,0)

AS 3(3,0)

AS 3(3.0)

ED 2(1,1)

ED 2(1,1)

ED 3(3,0)

ED 3(1,2)

ED 3(2,1)

ED 3(2,1)

PGY 3610

Photojournalism I: Introduction to visual communication. History, picture appreciation, layout and design, picture story development, basic camera operation, and ethics. Camera required. **PGY 3620** AS 3(1.2)

Photojournalism II: PR: PGY 3610. Newspaper Photojournalism. Black and white shooting and processing. Newspaper assignments. 35mm SLR camera required.

PGY 3630

Photojournalism III: PR: PGY 3620, Color photojournalism, Color shooting and processing for commercial and editorial purposes with electronic strobes in the studio and on location.

PGY 3640

Photojournalism IV: PR: PGY 3620. The Picture Story. Individual and group projects for extended documentary coverage.

PGY 3680

Photojournalism V: PR: PGY 3620, Photography Editing, Assignment selection, picture and copy editing, cropping, picture desk management, and ethics of photojournalism, and the new technological advances.

PGY 4420C

Advanced Photography: PR: ART 2201C, 2202C, and PGY 3401. Designed for upper division art majors with photography concentration. Developing advanced photographic image making skills.

PGY 4440C

Special Problems in Photography: PR: ART 2201C, 2202C, and PGY 3401C. Designed for upper division art majors with photography concentration. A series of directed photographic problems of a research nature.

PGY 4580C

Special Problems in Film Design: A series of exercises in craft, techniques, and design for film production, including animation.

PHH 3100

Ancient Philosophy: PR: PHI 2010 or C.I. Foundations of Western philosophy in ancient Greek thinking about human beings and nature, including the pre-Socratics, Socrates, Plato, Aristotle.

PHH 3400

Modern Continental Philosophy: Continental European philosophy from the 17th through the 19th century (Descartes to Neitzsche). Rationalism, Kant, and post-Kantian idealism, materialism, and the critique of reason.

PHH 3402

Modern British Philosophy: A study of the major British philosophers from approximately 1600 to 1900. Concentrates on Bacon, Hobbes, Locke, Berkeley, Hume, and Mill.

PHH 3601

Contemporary Continental Philosophy: Current trends in philosophy as represented by the phenomenologists, Frankfurt School, structuralists, ecophilosophers, and postmodern deconstructionists. Examples range from Husserl, Habermas to Foucault, Derrida.

PHH 3620

Contemporary Analytic Philosophy: Anglo-American philosophy oriented toward recent developments by Russell, Wittgenstein, and Kripke, including a study of positivism, ideal and ordinary language, and possible-worlds analysis.

PHH 3941

Medieval Philosophy: The influence of Greek philosophical thought in medieval Muslim, Jewish and Christian philosophy, as expressed in its main problems and representative thinkers.

PHI 3101

Critical Thinking: An examination of fallacies and other logical abuses in conjunction with an analysis of traditional modes in an attempt to encourage meaningful thought and usage.

PHI 2010

Introduction to Philosophy: Inquiry into the meaning and justification of fundamental ideas and beliefs concerning reality, knowledge, and values; application to relevant topics in ethics, religion, and politics.

PHI 2010H

Honors Introduction to Philosophy: Same as PHI 2010 with honors-level content.

PHI 3011

Philosophical Reasoning: A study of reasoning in philosophy: the role of inconsistency, infinite regress arguments, modeling, and system building, discovery procedures, diagonalization, and contract and paradigm case arguments.

PHI 3101

Critical Thinking: The logic of conversation, informal fallacies, and reasoning about human action; with applications to ethics in the professions.

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(2.1)

AS 3(1.2)

AS 3(3.0)

AS 3(3.0)

AS 3(2.3)

AS 3(2.3)

AS 4(3.2)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0) AS 3(3,0)

PHI 3130

Formal Logic I: A study of sentence and predicate logics, with introduction to modal, epistemic, deontic, multi-valued, and indeterminant logics.

PHI 3131

Formal Logic II: PR: PHI 3130. Systematic study of propositional and first-order predicate logic; logistic systems and axiomatic methods; problems of metatheory, including consistency, completeness, and decidability.

PHI 3320

Philosophy of Mind: Recent and contemporary attempts to understand the relation of mind to body, the relation of consciousness to personhood, and the relation of psychology to neurobiology. AS 3(3.0)

PHI 3400

Philosophy of Law: Study of the nature and justifications for, law and punishment. Examination of the concepts of legal personhood, rights and responsibilities.

PHI 3600

Ethics: An examination of the nature of moral problems, judgements and principles, with an emphasis on recent formulations in ethical theory.

PHI 3601

Practical Wisdom: A radio course in applied ethics which focuses on the human good, dealing with the relationship between means and ends and how they define one another.

PHI 3700

AS 3(3.0) Philosophy of Religion: An examination of basic ideas, beliefs, attitudes, and functions of religion, with emphasis upon questions of conceptual meaning and cognitive justification.

PHI 3800

Aesthetics: An investigation into the nature of human artistic experience, with special reference to questions of form, perception, and style.

PHI 3803

AS 3(3.0) Philosophy and Creativity: A companion course to PHI 3800, Aesthetics. Examines the empirical and metaphysical claims made for creativity; attempts to account for intuition, genius, and intelligence.

PHI 3941

AS 3(1,3) Philosophy Practicum: Mentor at-risk grade schoolers three hours weekly and participate in a two-hour class every other week evaluating such work-related concepts as justice and fairness.

PHI 4360

Theories of Knowledge: PR: Philosophy major or C.I. Classical and contemporary theories of knowledge. A critical examination of various forms of, and reasons for, skepticism, criteria for truth and justification for belief.

PHI 4400

Philosophy of Science: An examination of the conceptual foundations and methodology of modern science.

PHI 4420

Philosophy of Social Science: An examination of the objectives, methods and guiding norms of the social sciences and their role in the development of human knowledge.

PHI 4500

Metaphysics: PR: Philosophy major or C.I. Topics include appearance and reality, actions and events, necessity and possibility, identity, nature of persons, mind-body dualism, causality, and free will and determinism.

PHM 3100

Freedom and Justice: Philosophical analysis and evaluation of selected issues arising from the interaction of the individual, society, and the state; includes topics such as freedom, equality, and justice.

PHM 3350

Introduction to Marxism: A study of the basic principles of Marxism, formulated and developed by Marx and Engels.

PHM 4123

Feminist Theory: Study of the evolution of feminist thought and an examination of contemporary issues and perspectives in feminist theory and their relation to divergent feminist practices.

PHP 3786

Existentialism: Study of existentialist analysis and criticism of the human situation as found in the writings of such philosophers as Kierkegaard, Nietzsche, Heidegger, Sartre, and Camus.

PHT 3002C

Foundations of Physical Therapy I: The role of the therapist in the health care team. Professionalism, professional communication and care-giving skills and attitudes are emphasized.

PHT 3003C

Foundations of Physical Therapy II: A continuation of Foundations I. Focus will be on establishing effective helping relationships and interpersonal competence.

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 1(1.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3,0)

AS 3(3,0)

AS 3(3,0)

HPA 2(1,3)

HPA 2(1.3)

PHT 3069

Introduction to Physical Assessment in P.T.: Theory and practice in the examination of the patient. Incorporates a "systems" approach, utilizing upper and lower guarter screening examinations.

PHT 3110C

Clinical Gross Anatomy: An in-depth study of human morphology emphasizing musculoskeletal, neuromuscular, cardiovascular and respiratory systems. Regional cadaver dissection. Surface anatomy and developmental considerations will be integrated.

PHT 3120C

Clinical Kinesiology: A multidisciplinary consideration of normal and abnormal human movement. including recognition, measurement, evaluation and characterization from musculoskeletal, neurological and pathological perspectives.

PHT 3142C

Clinical Neuroscience: An integrated study of normal and disturbed neuromorphology and behavioral sequelae. Focus on motor and sensory functioning and related assessment skills.

PHT 3155C

Physiology of Therapeutic Exercise: PR: PCB 3703C, Principles of exercise physiology in conditioning and deconditioning integrated into assessment and treatment plans for healthy patients and those with cardiopulmonary musculoskeletal neurological or selected metabolic disease.

PHT 3200C

Introduction to Caring For Patients: Basic skills of patient care; evaluation, intervention strategies, gait training, massage, and medical terminology. Includes one week of supervised orientation in a clinical facility. CPR certification required.

PHT 3216C

Theory and Procedures of Physical Therapy I: Theory and practice in the use of electrotherapy and hydrotherapy in the evaluation and treatment of pain and dysfunction. Factors contributing to success of therapy.

PHT 3217C

Theory and Procedures of Physical Therapy II: Continuation of Theory and Procedures I. Focus on electrodiagnosis and electrophysiologic assessment and treatment of pain and broad spectrum of disabilities

PHT 3222C

Therapeutic Exercise I: Theory and practice in developing, implementing, and evaluating an exercise program for patients with musculoskeletal dysfunction.

PHY 3223C

Therapeutic Exercise II: Development of care plans for patients with special peripheral pathology. Management of cord injured patient. Acute care and home care. Team approach to long-term disability.

PHT 3350

Medical Science and Pharmacology I: Organized seminars on the pathophysiology and clinical manifestations of various medical conditions as they relate to medical management in physical therapy practice.

PHT 3600

Introduction to Clinical Research: PR: STA 3023, Methods of research applied to clinical environment of physical therapy. Coverage of the language, logic, design and analysis of clinical research.

PHT 3821

HPA 1(0,8) Clinical Education I: Three weeks of supervised education in clinical facilities. Application of objectives of courses previously completed.

PHT 4001

Professional Issues: Current issues on professionalism in physical therapy practice. Student presentations. **PHT 4004C** HPA 2(0,4)

Foundations in Physical Therapy III: Philosophical and theoretical bases of health and illness, health promotion and prevention, the role of physical therapy and the health care delivery system.

PHT 4232C

Therapeutic Exercise III: Development of care plans for patients with brain/brain stem pathology. Introduction to theoretical applications for Boboth, Brunnstrom, Rood and Voss.

PHT 4233C

Therapeutic Exercise IV: Application of prosthetic and orthotic components, alignment, fabrication and fitting, with emphasis on the lower extremity. Includes gait analysis and exercise programs.

PHT 4300

Medical Science and Pharmacology II: The impact on movement and posture of various orthopedic and neurological disorders; drugs used in their management. Relates neuropathology and orthopedic pathology to the study of movement.

PHT 4310C

Orthopedic Problems in Physical Therapy: Critical study of physical therapy examination, assessment and treatments for pain and stress management related to musculoskeletal system.

HPA 3(2,3)

HPA 2(1.3)

HPA 2(1.3)

HPA 2(1,3)

HPA 2(0,4)

HPA 2(2,0)

HPA 1(0,2)

HPA 2(1.3)

HPA 4(2,6)

HPA 4(3,3)

HPA 3(2.3)

HPA 3(2.3)

HPA 2(1.3)

HPA 2(1.2)

HPA 2(2,0)

HPA 2(1.3)

HPA 6(4.6)

PHT 4311C

Neurological Problems in Physical Therapy: Analysis of selected neuromotor theories and their clinical applications. Advanced evaluation and treatment procedures. The use of research to determine optimum regimen in treating neurological patients.

PHT 4320

Pedontogeny: PR: PSY 2013, PHT 3142C and PHT 3120. Examination of the psychosocial, gross morphological and neurodevelopmental sequences that provide the baseline for pediatric clinical assessment of individuals from birth to twenty one years of age.

PHT 4370C

Cardiopulmonary Problems in Physical Therapy: Evaluation, treatment and management of chronic and acute cardiopulmonary problems. Teaching patients strategies for preventing/managing dysfunction. **DHT 4372**

Gerontology in Physical Therapy Practice: Normal aging processes and the health status of older people. Assessment strategies, implications of altered functional health states, drug use, referral sources, plus legal/ethical considerations.

PHT 4410C

Teaching and Learning in Physical Therapy: Educating the patient and caregiver concerning the patient's disability, and treatment regimen and goals. The role of the patient and caregiver in the planning and implementation.

PHT 4510

Management of Physical Therapy Services: Planning, organizing, delivering and evaluating physical therapy services within a health care system, including guality assurance, third party payers, DRG's and legislative impact.

PHT 4610

Clinical Research Problems I: Exploration of the clinical problem-solving, decision making process. PHT 4620 HPA 1(0,2)

Clinical Research Problems II: Continuation of Clinical Problems I.

PHT 4822

Clinical Education II: Six weeks of supervised clinical education in a general hospital setting. All previous education objectives apply and are accumulative.

PHT 4823

Clinical Education III: Clinical practicum in a long-term care setting. Emphasis on gerontology. Supervised by a licensed physical therapist, the student will integrate and apply all previous coursework.

PHT 4831

Clinical Internship I: Full-time residence at selected facilities where, under supervision of a licensed therapist, the student may practice and integrate the skills and knowledge from his previous courses.

PHT 4832

Clinical Internship II: Continuation of Clinical Internship I.

PHY 3014C

Physics for Teachers I: PR: C.I. "Hands-on" lecture-laboratory course. Statics, simple machines, density, solar energy, heat, weather, waves, optical reflections, naked eve astronomy,

PHY 3048

Physics for Engineers and Scientists I: PR: MAC 3311, or equivalent. Mechanics, special relativity, fluids. **PHY 3048H** AS 1(0.3)

Honors Physics for Engineers and Scientists I: PR: MAC 3311 or equivalent. Same as PHY 3048 with honors-level content.

PHY 3048L

Physics Laboratory for Engineers and Scientists I: CR: PHY 3048. Laboratory experiments covering selected topics in physics related to PHY 3048.

PHY 3049

Physics for Engineers and Scientists II: PR: PHY 3048 or PHY 3048H. Electricity and magnetism. **PHY 3049H** AS 3(3,0)

Honors Physics for Engineers and Scientists II: PR: PHY 3048H, MAC 3312. Same as PHY 3049 with honors-level content.

PHY 30491

Physics Laboratory for Engineers and Scientists II: CR: PHY 3049. Laboratory experiments covering selected topics in physics related to PHY 3049.

PHY 3053C

AS 4(3,3) College Physics I: PR: MAC 1104 and MAC 1114 or equivalent or C.I. Mechanics, waves, thermodynamics.

PHY 3054C

College Physics II: PR: PHY 3053C. Fluids, electricity and magnetism, optics, x-rays, radioactivity.

HPA 2(1,2)

HPA 3(2.2)

HPA 2(0.4)

HPA 3(3.0)

HPA 3(3.0)

HPA 2(1.2)

HPA 1(0,2)

HPA 1(0.8)

HPA 2(0.16)

HPA 2(0.13)

HPA 3(0,40)

AS 3(2.2)

AS 3(3,0)

AS 1(0.3)

AS 3(3.0)

AS 1(0,3)

AS 4(3,3)

AS 4(3.3) Intermediate Physics Laboratory: PR: PHY 3101 or C.I. Laboratory work in basic measurements of AS 3(3.0) AS 3(3,0) Optics: PR: PHY 3101 and PHY 3323. Wave optics, absorption, stimulated emission, lasers, trans-AS 3(0,3) Optical Physics Laboratory: A laboratory course on geometric optics, interference, diffraction, materi-AS 3(3.0) WAve Mechanics I: PR: PHZ 3113. Postulates of Quantum Mechanics. Operators and Observables, AS 3(3.0) AS 3(1.5) Advanced Physics Laboratory: PR: PHY 3802L, Experiments in optics, electronics, nuclear and solid Practicum in Physics: PR: C.I. Physics laboratories and demonstrations, and the study of recent AS 3(2.2) AS 1(0.5,1.5) AS 1(1.0)

Mechanics I: PR: PHY 3048 or PHY 3048H, Particle dynamics, rigid bodies, Lagrangian formulation of mechanics. Hamilton's equations. **DHV 3323**

Physics for Engineers and Scientists III: PR: PHY 3049 or PHY 3049H. Thermodynamics, oscilla-

Electricity and Magnetism I: PR: PHY 3049, MAP 3302, Electrostatics, magnetostatics, Lorentz force current electricity, Maxwell's equations.

PHY 3503

PHY 3101

PHY 3221

tions, modern physics. **PHY 3110H**

with honors-level content.

Thermal and Statistical Physics: PR: PHY 3101 or PHY 3101H or C.I. Thermodynamics, kinetic theory, elements of statistical mechanics.

PHY 3722C

Physics Laboratory-Electronics: PR: PHY 3752C or C.I. State-of-the-art electronics, transducers, operational amplifiers, phase sensitive circuits, active filters.

PHY 3752C

Physics of Scientific Instruments: PR: PHY 3101 or C.I. Applications, functions and operation of electronic instruments.

PHY 3802L

physical constants; experiments in electronics, modern physics, nuclear physics, optics, and solid state physics. May be repeated for credit.

PHY 4222

Mechanics II: PR: PHY 3221. Hamiltonian dynamics, continuum mechanics, special relativity, special topics.

PHY 4324

Electricity and Magnetism II: PR: PHY 3323, Dielectrics, magnetic materials, electromagnetic waves, reflection, complex impedance, static solutions to Laplace's Equation, radiation from an accelerated charge and antennae, special relativity.

PHY 4424

forms, coherence, holography.

PHY 4424L

als and modern optics.

PHY 4604

Schroedinger equation with simple applications.

PHY 4605

Wave Mechanics II: PR: PHY 4604. Further applications of quantum mechanics, perturbation theory, scattering theory, identical particles.

PHY 48031

state physics. Emphasis on design, data, and scientific writing.

PHY 4942C

research on the learning of physics.

PHY 5015C

Physics for Teachers II: PR: C.I. "Hands-on" lecture-laboratory course. Dynamics, electricity, magnetism, optics, nuclear radiation.

PHY 5081C

Physics of Astronomy for Teachers: PR: C.I. Laws of motion, law of gravity, Kepler's Laws, two body orbits, light and spectroscopy. The doppler shift, blackbody radiation, gas laws and steller evolution.

PHY 5100

Topics in Contemporary Physics for Teachers: PR: C.I. The study of recent findings in a selected area such as particle physics, surface physics, planetary atmospheres, lasers, geophysics, etc. AS 1(0.5.1.5)

PHY 5200C

Newtonian Mechanics for Teachers: PR: C.I. A lab, lecture, demonstration course studying selected topics in classical mechanics.

AS 3(2.3)

AS 3(3.0) Honors Physics for Engineers and Scientists III: PR: PHY 3049 or PHY 3049H. Same as PHY 3101 AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(1.5)

AS 3(1.5)

AS 3(3.0)

PHY 5240

Advanced Mechanics: PR: PHY 4222 or C.I. Elements of continuum mechanics. Generalized coordinates, virtual work, Lagrange's equations, Hamilton's equation. Inertia tensors, stress tensors, Eulerian description of rigid body motion. Theory of small vibrations.

PHY 5300C

Electricity for Teachers: PR: C.I. Circuits, multimeters, oscilloscopes, circuit elements. **PHY 5302C**

Electromagnetism for Teachers: PR: C.I. Gauss' Law, Biot-Savart Law, Ampere's Law, Faraday's Law, Lenz's law, motors, generators, AC circuits and Maxwell's Equations.

PHY 5346

Electrodynamics I: PR: PHY 4324, MAP 3302, or C.I. Boundary value problems in electrostatics and magnetostatics. Maxwell equations. EM fields in matter, wave generation and propagation; wave guides, resonant cavities.

PHY 5401C

Optics for Teachers: PR: C.I. Geometrical and physical optics, spectrometers and lasers. **PHY 5431**

Optical Properties of Materials: PR: PHY 4324, MPA 3302, PHY 4424, Normal modes (dipole and Raman active); microscopic theory of absorption, dispersion, and refraction; wave propagation, crystal optics; scattering mechanisms; optical activity.

PHY 5446

PHY 5465C

Laser Principles: PR: PHY 3101, MAP 3302, PHY 4424. Classical introduction to the basic principles of laser gain media, properties of resonators and modes, description of specific laser systems.

Wave Motion for Teachers: PR: C.I. Water waves, waves on strings, sound and vibrations.

PHY 5500C

Thermal Physics for Teachers: PR: C.I. Engines, heat pumps, kinetic theory, phase changes, radiation, weather,

PHY 5524

Statistical Physics: PR: PHY 3503, STA 3032, or C.I. A study of physical concepts and methods appropriate for the description of systems involving many particles. Ensemble theory, partition functions. Maxwell Boltzmann, Bose-Einstein, Fermi-Dirac statistics.

PHY 5601

Quantum Physics for Teachers: PR: C.I. Hydrogen atom, diatonic molecules, heat capacity transition rates.

PHY 5606

Quantum Mechanics I: PR: PHY 4605 or C.I. Basic postulates of guantum mechanics, operators, eigenvalues, parity, potential wells, harmonic oscillator, time dependent and time independent Schrodinger equation, matrix formulation, time independent perturbation theory.

PHZ 3113

Introduction to Theoretical Methods of Physics: PR: MAP 3302. Analytical techniques to solve problems of physics.

PHZ 3151

Computer Methods in Physics: PR: PHY 3101. Nonanalytical problems in physics and astronomy solved by approximation with computer assistance.

PHZ 5150C

Computer Methods in Physics for Teachers: PR: C.I. Trajectories with air resistance, trajectories in rotating space colonies, refraction of waves in continuous media, luminosity patterns, temperature profiles.

PHZ 5301C

Nuclear Physics for Teachers: PR: C.I. The interaction of ionizing radiation with matter, alpha, beta, gamma decay, fission, fusion, neutron activation, half lives, and equilibrium.

PHZ 5304

Nuclear and Particle Physics: PR: PHY 4604 or equivalent. Particles and nuclei, symmetries and conservation laws, interactions, models.

PHZ 5405

Condensed Matter Physics: PR: PHY 4604. Crystal lattice cell structure, phonons, free electron model, band theory of solids, Fermi surface, solid state applications, and polymers.

PHZ 5505

Plasma Physics: PR: PHY 4324, or C.I. Introduction to theory and experimental basis of both weakly and highly ionized plasmas. Instabilities, plasma waves, nonlinear effects, controlled thermonuclear fusion.

PHZ 5600

AS 1(1,0) Special Relativity for Teachers: PR: C.I. Length contraction, time dialation, simultaneity, conservation of mass-energy, conservation of momentum, Compton scattering.

AS 1(0.5.1.5)

AS 1(0.5,1.5)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 1(0.5,1.5)

AS 1(0.5.1.5)

AS 3(3.0)

AS 1(0.5,1.5) AS 3(3.0)

AS 3(3.0)

AS 1(0.5,1.5)

AS 1(0.5.1.5)

AS 3(3.0)

AS 1(1.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

PLA 3013

Law and the Legal System: A survey course designed to familiarize the student with the American legal system, ethical considerations, terminology, legal reasoning, and the role of the legal assistant.

PLA 3105

Legal Research: PR: PLA 3013 or C.I. A study of the various research tools used in legal investigation and the methods used to conduct legal research.

PLA 3155

Legal Writing: PR: PLA 3105. A study of legal writing format and technique and the preparation of memoranda and other legal documents, using research skills learned in PLA 3105.

PLA 3203

Civil Practice and Procedure: PR: PLA 3013 or C.I. The student becomes familiar with the Florida civil procedure before trial and acquires the ability to prepare basic pleadings.

PLA 3273

The Law of Torts: PR: PLA 3013 or C.I. Theories governing liability for civil injuries not arising from contractual obligations: systems and procedures used in preparation, trial and appeal of Torts cases.

PLA 3304

Criminal Law: Basic concepts of substantive criminal law. The course includes examination of elements of major crimes, criminal responsibility, legal defenses, and parties to crime.

PLA 3308

Criminal Procedure: PR: PLA 3013 or CCJ 3020 or C.I. Rules of criminal procedure, with emphasis on Florida rules, including right to counsel, bail, search and seizure, arrest, identification, trial, and post-trial proceedings.

PLA 3504

Property and Real Estate Law: PR: PLA 3013. Study of the law of real and personal property; real estate transactions and conveyances; closing procedures and title problems.

PLA 3XXX

Criminal Law: Basic concepts of substantive criminal law. The course includes examination of elements of major crimes, criminal responsibility, legal defenses, and parties to crime.

PLA 4003

Careers in Legal Studies: PR: Major in Legal Studies or C.I. Applications of Legal Studies. Students will explore options in legal studies, professional development, and ethics.

PLA 4020

Law and Society: Examination of the relationship between law and American society including the impact on the legal system and legal profession of major social movements.

PLA 4263

Evidence: PR: PLA 3013 and 3203 or C.I. An examination of statutes and cases that define rules of evidence for trial courts. Primary emphasis is on the Florida Evidence Code.

PLA 4408

The Law of Contracts: Study of the basic law of contracts as developed in Anglo-American law and as changed by modern statutes, including the Uniform Commercial Code. Florida contract law will be emphasized.

PLA 4433

Florida Partnerships and Corporations: Statutory requirements of Florida partnerships and corporations; creation and dissolution of business organizations, responsibilities of officers and basic rights of stockholders.

PLA 4483

Administrative Law: PR: PLA 3013 or PAD 3003. The law regarding governmental agencies with emphasis on the administrative process, Administrative Procedures Acts and special problems of state administrative law.

PLA 4584

Land Use and Environmental Law: PR: PLA 3013, 3504. Study of the law relating to private and public restraints on land use, including planning, zoning, subdivision and building regulations, with emphasis on recent interpretations by judiciary for environmental protection.

PLA 4585

Landlord and Tenant Law: PR: PLA 3013, LEA 3504. Study of the basic law regarding landlord and tenant relationship, both commercial and residential, as it applied to the practitioner.

PLA 4603

Estates and Trusts: PR: PLA 3013, 3504. A study of wills and trusts, and applicable legal principles of administration of estates through the processes of the Probate Court.

PI & 4623

Estate Administration: PR: PLA 4603. Study of the laws and procedures applicable to administration of estates.

HPA 3(3,0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3.0)

HPA 1(1,0)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3.0)

HPA 3(3,0) HPA 3(3,0)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3,0)

juvenile law. Fundamental procedures and principles applied by the courts to family problems. **PLA 4813** HPA 3(3.0) Juvenile Law and Procedure: PR: PLA 3013 or C.I. Examines both the substantive and procedural law PLA 5546 HPA 3(1.2) Consumer Rights and the Law: PR: C.I. The development of the modern law of consumer rights and remedies available to today's consumer. HPA 3(1.2) PLA 5937 Seminar in Contemporary Legal Problems: PR: C.I. Analysis of current trends in legislation and court decisions and their significance to American society. POS 2041 AS 3(3,0) American National Government: A study of the dynamics of American national government, including POS 2041H AS 3(3.0) Honors American National Government, Same as POS 2041 with honors-level content. POS 3122 AS 3(3,0) State Government and Public Policy: A comparative study of American state governments, political processes, and public policies, with emphasis on Florida. AS 3(3,0) Southern Politics: PR: POS 2041 or C.I. Study of southern politics past and present. Emphasis on factors effecting changes in the region and the states. Southern and national relationship examined. POS 3233 AS 3(3.0) Public Opinion: A substantive and theoretical study of public opinion, with emphasis on opinion forma-POS 3235 AS 3(3.0) Mass Media and Politics: PR: POS 2041 or C.I. Influence of media on campaigns, public officials, pub-POS 3253 AS 3(3,0) Contemporary Revolution and Political Violence: Theories and cases of revolutionary change and **POS 3273** AS 3(3,0) Voting and Elections: Theoretical and substantive inquiry into U.S. electoral system; includes focus on POS 3413 AS 3(3.0) The American Presidency: PR: POS 2041 or C.I. Examination of historical and contemporary role of the presidency, including the presidential selection process and the office's evolution in status, powers, administrative responsibilities, leadership, and decision-making. POS 3424 AS 3(3.0) Congress and the Legislative Process: PR: POS 2041 or C.I. Examination of the Congress as an institution undergoing dynamic change; emphasis upon recruitment of legislators, institutional and informal rules, the committee system, legislative procedures. AS 3(3.0)

Political Parties and Processes: PR: POS 2041 or C.I. In-depth study of the American political party system in the context of changing American politics; topics include development, organization, reforms, legislative and executive roles.

POS 3463

Interest Groups: PR: POS 2041 or C.I. Analyzes the nonelectoral behavior of economics, ideological, and citizen groups; political action committees; and the proliferation of interest organizations over the past quarter century.

POS 3703

Scope and Methods of Political Science: Introduction to the scope and methodology of political analysis. Extensive examination of the discipline, research design and methodology.

PI A 4700

Professional Ethics and Liability: PR: PLA 3013. Ethical responsibilities of professionals. Canons of legal ethics, liability for professional malpractice.

PLA 4763

HPA 3(3.0) Law Office Practices: PR: PLA 3013. Organization, operation and management of law office. Interviewing techniques and practical application of work that is done in a law office.

PI A 4803

Domestic Relations Law: PR: PLA 3013, 3504. Role of the legal assistant in all phases of family and

for juvenile delinguency and dependency. Emphasis on Florida law and comparison with other jurisdictions.

its structure, organization, powers, and procedures.

POS 3173

tion, opinion measurement, policy linkages. May include field experiences in polling.

lic opinion, the definition of political news, and selected public policies.

political violence in the contemporary world.

voter behavior as well as national and state electoral systems.

POS 3443

AS 3(3.0)

AS 3(3,0)

HPA 3(3.0)

HPA 3(3,0)

POS 4142

Metropolitan Politics: Analysis of political patterns, processes, and issues in American communities. Intergovernmental relations and structural and political arrangements in the existing and emerging metropolitan areas.

POS 4206

Political Psychology: The psychological analysis of political behavior, with emphasis on the individual rather than the political system; includes political attitudes and communication, leadership, and personality influences on politics.

POS 4246

Political Socialization: PR: POS 2041 or C.I. Analysis of recruitment and socialization processes. Identification of the agents and processes of political socialization in national and cross-cultural contexts. POS 4265 AS 3(3.0)

Power and Policy in the U.S.: PR: POS 2041 or C.I. Examination of the bases of political power in the U.S. In-depth study of socio-economic political linkages in the policy-making process.

POS 4284

Judicial Process and Politics: Study of the formal and informal judicial process. Legal culture, bureaucratic model, judicial recruitment and outputs, comparative judicial behavior.

POS 4412

Presidential Campaigning: PR: C.I. Introduces the process of candidate selection, convention behavior, actual campaign process and the transition of power.

POS 4603

American Constitutional Law: PR: POS 2041 or C.I. Development of American federalism and national power, commerce clause, and nationalization of the economy.

POS 4604

American Constitutional Law II: PR: POS 2041 or C.I. Development of civil liberties and civil rights in the American federal system.

POS 4622

Politics and Civil Rights: Examination of development and issues of civil rights in the second reconstruction. Course emphasis process and analysis of policy.

POL 4941

Political Science Internship: PR: C.I. Internship working with the national, state, county or municipal government. Assignments with selected civic organization, elected or appointed official.

POS 5746

Quantitative Methods in Political Research: PR: C.I. Methods of model building and research design. including conceptualization and measurement of political variables; techniques of data collection and quantitative analysis and computer usage.

POT 3204

American Political Thought: From its sources to the 20th century, including liberalism, puritanism, the Federalist, the rise of industrialism, resulting social movements, modern variations.

POT 3302

Modern Political Ideologies: A study of modern ideologies since the French Revolution including liberalism, conservatism, capitalism, nationalism, fascism and anarchism.

POT 4003

Political Theory: PR: POS 2041 or C.I. Examination of various normative approaches to the study of political science, stressing contemporary developments in the field.

POT 4025

Ancient, Medieval and Early Modern Political Philosophy: Study of the development of political and social ideas in western thought from early Greece through the 17th century.

POT 4054

Modern Political Philosophy: Study of the development of political and social ideas from the 18th century to the present. May be taken independently of POT 4045 (Ancient, Medieval and Early Modern Political Philosophy).

POT 4066

Contemporary Political Theory: Introduction to the contemporary debate about the status of rights, utilitarism, and liberalism, and communitarian marxist, libertarian, and feminist critiques of liberalism. AS 3(3.0)

POT 4314

Contemporary Democratic Theory: PR: POS 2041 or C.I. Study of democratic theories, emphasizing liberal democracy and its critics, elitist theories, participatory democracy, citizen participation, and relevance of empirical research to democratic theory.

POT 4414

Marxist Political Theory: Survey of Marx & Engels and other thinkers, exposing the theoretical underpinnings of nations and groups who have adapted marxist principles for governance.

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3-9(0.3-9)

PPE 3003

Personality Theory: PR: PSY 2013. A survey of theory and research on the development of personality characteristics.

PPE 5055

Personality Theories: PR: G.A. or C.I. Critical theoretical models of personality development with applications to counseling, psychotherapy and psychological assessment.

PSB 3002

Physiological Psychology: PR: PSY 2013. A survey of the physiological basis of behavior, emphasizing the relationship between the nervous system and behavior. Lecture and demonstration/lab.

PSB 3442

Drugs and Behavior: PR: PSY 2013. Effects of certain drugs upon the nervous system, behavior, and society. Causes of drug abuse and impact on mental health.

PSB 3842

Sleep and Dreams: PR: PSY 2013. An overview of the psychological and physiological foundations of sleep and dreams. Concrete facts and disturbances of sleep. Cultural perspectives on, and contemporary applications of dreams.

PSB 4013C

Introduction to Neuropsychology: PR: PSB 3002. Study of brain function, with particular emphasis on human behavior. Lecture/Lab.

PSB 4103C

Biofeedback Applications: PSY 2013, PSB 3002 and C.I. Introduction to theory, instrumentation, research and clinical application of biofeedback. Training in use of biofeedback equipment. Lecture/Lab.

PSB 5005

Physiological Psychology: PR: PSB 3002 or C.I. An advanced survey of the physiological basis of behavior, emphasizing the relationship between the nervous system and behavior.

PSC 1121

Physical Science: PR: MAC 1104 or MGF 1203. Fundamental laws of mechanics, heat, waves, electricity, magnetism; chemical processes and equations, properties of gases, liquids, solids, solutions. Mathematical analysis and logic applied to conclusionism inferences.

PSC 1121L

Physical Science Lab: CR: PSC 1512. Experiments to apply the scientific method to observation and analysis in mechanics, heat, light, electricity and magnetism, chemical and physical transformations.

PSY 2013

General Psychology: An introductory survey of the basic principles, theories, and methods of contemporary psychology.

PSY 2013H

Honors General Psychology: Same as PSY 2013 with honors-level content.

PSY 2023

Careers in Psychology: PR: PSY 2013. An examination of various career opportunities in Psychology, including educational entry requirements, and related professional issues. Grades "S" or "U."

PSY 3204

Statistical Methods in Psychology: PR: STA 2014. Standard scores, confidence intervals, sampling distributions, hypothesis testing, correlation and regression as applied to research in psychology.

PSY 3214

Research Methods in Psychology: PR: PSY 2013 and STA 2014 or STA 3023, PSY 3204. Investigation of experimental designs and research methods utilized in psychology. Analysis and preparation of experimental designs in psychology.

PSY 3302

Psychological Measurement: PR: PSY 2013 and STA 2014 or 3023. A study of the theory underlying psychological tests and measurements procedures, including reliability, validity, and item analysis.

PSY 3624

Parapsychology: PR: PSY 2013. An examination of the history and development of research on paranormal phenomena, with special emphasis on recent developments in extrasensory perception and psychokinesis.

PSY 3951

Undergraduate Field Work: PR: C.I. Placement in a community agency for supervised experience in applications of psychology to community problems.

PSY 4215

AS 4(2,3) Advanced Research Methods in Psychology: PR: STA 2014, PSY 3214, PSY 3204. Design, analysis, and interpretation of complex research projects in psychology.

PSY 4604

History and Systems of Psychology: PR: EXP 3404 and PPE 3003. Historical development of psychology, with emphasis on classical theoretical positions.

AS 4(4.0)

AS 3(3,0)

AS 3(3,0)

AS 3(3,0)

AS 4(2.2)

AS 3(2,2) AS 3(3,0)

AS 3(3,0)

AS 1(0,2)

AS 3(3.0)

AS 3(3,0)

AS 1(1.0)

AS 4(3.2)

AS 4(3,2)

AS 3(3,0)

AS 3(3,0)

AS 3(1.5)

AS 3(3.0)

AS 3(3.0)

PUP 3204

Environmental Politics: An examination of politics and policy-making concerning issues of conservation, pollution and development of land, air, and water resources.

PUP 3314

Minorities in American Politics: Historical and contemporary role of minority groups in the American political process, including an examination of their electoral significance and relevant legislative, executive, and judicial policies.

PUP 3508

Introduction to Space Studies: Broad-based multidisciplinary introduction to space studies, providing familiarity with some technical aspects as well as the relationship between technical and public policy considerations.

PUP 4003

American Public Policy: PR: POS 2041 or C.I. Policy formation, implementation and evaluation, with a focus upon contemporary American problems, including the malapportionment of societal power and social conflict.

PUP 4323

Women and Politics: An examination of demands for change in the social, political, and economic status of women and the policy response of the system.

PUP 4503

Government and Science: PR: C.I. Examination of interface between science and government. Focus is upon governmental support for science, social accountability, and the role of the scientist-policy maker in comparative context.

PUP 4510

Space Policy: An examination of the politics and policy-making involved with the US space program in the context of domestic demands and other international space programs.

PI IP 4602

Politics of Health: PR: C.I. Analysis of public health policies. Primary focus upon political processes. policymakers, and interest group interventions, including consumers and policy outcomes. Comparative health policies.

PUP 4931

Topics in Public Policy: Intensive analysis of a current policy problem. Sample topics include education, growth management, housing, affirmative action, welfare, and transportation. May be repeated once

PUR 3100

Writing for Public Relations: PR: Grammar Proficiency Examination, and typing test. Development of skills in writing for public relations.

PUR 4000

Public Relations: Principles and practice of Public Relations including techniques, research tools publicity, and management.

PUR 4110

Public Relations Publications: PR: PUR 4000, PUR 3100, Provides basic principles and techniques of desktop production of public relations publications.

PUR 4800

Public Relations Campaigns: PR: PUR 4000 or C.I. Planning and execution of public relations campaigns for profit and non-profit organizations.

BAT 3001

Introduction to Radiation Oncology: PR: Acceptance to program. An overview of radiation therapy treatment procedures and patient care considerations.

RAT 3241

Clinical Radiobiology: Application of the principles and theories of radiobiology to the clinical practice of radiation therapy.

BAT 3242

Oncologic Pathology: PR: Acceptance to program. Study of neoplastic diseases, including causative factors, characteristics, histologic grading, staging and treatment.

RAT 3614

Radiation Therapy Physics I: PR: Acceptance to program. Study of radiation production, properties, interactions, measurement, and protection.

BAT 4247

Radiation Oncology I: Methods of radiation therapy treatment of malignant conditions of the skin, oral cavity, pharvnx, sinuses, thyroid, digestive and respiratory systems.

RAT 4248

Radiation Oncology II: Methods of treatment of malignant conditions of the nervous system, eye, reproductive system, urinary system, connective tissue, and lympho-reticular system.

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(2.1)

AS 3(3.0)

AS 3(1.3)

AS 3(3,0)

HPA 3(3.0)

HPA 3(3.0)

HPA 2(2,0)

HPA 3(3.0)

HPA 3(3,0)

HPA 2(2,0)

RAT 4618C

Radiation Therapy Physics II: PR: RAT 3614. Study of radiation protection techniques, design considerations, modes and characteristics of decay, handling of radionuclides and clinical dosimetry.

RAT 4619C

Radiation Therapy Physics III: PR: RAT 4618. Study of treatment planning principles and techniques. including multiple beam therapy, rotation therapy, arc therapy, and irregular field techniques.

RAT 48041

Clinical Education I: PR: RTE 3000, 3111, 3528, 3684, 3804, 3457, 3549, or C.I. Supervised clinical practice in patient care and orientation to radiation therapy simulation, and treatment planning and delivery procedures.

RAT 48141

Clinical Education II: PR: RAT 4804. Supervised clinical practice in patient care, education, simulation, treatment planning and delivery and utilization of treatment units.

RAT 48241

Clinical Education III: PR: RAT 4814, Continued supervised clinical practice in patient care, education, simulation, treatment planning and delivery and utilization of treatment units.

RED 3012

Basic Foundations of Reading: PR: Junior standing or C.I. Introduction to reading: principles, procedures, and current practices. Study of specific techniques and materials for word attack and comprehension.

RED 4519

Diagnostic and Corrective Reading Strategies: PR: RED 3012 or C.I. and admission to Phase II. An investigation of the needs of individual learners in reading instruction. Organization and techniques for promoting optimum reading growth. Concurrent school experiences required.

RED 5147

Developmental Reading: Principles, procedures, organization, and current practices in the elementary reading program. Materials and methods of instruction.

BED 5514

Classroom Diagnosis and Development of Reading Proficiencies: PR: RED 5147 or equivalent. Classroom diagnosis and corrective teaching in reading; instructional materials. Case study required.

REE 3043

Fundamentals of Real Estate: PR: Junior standing. Emphasis placed upon the application of basic tools of economics, finance, and marketing to solve private and public sector real estate problems. Not usable for credit by Finance majors.

REE 4103

Real Estate Appraisal and Valuation: PR: FIN 3403. Focus on the fundamentals of real estate valuation utilizing tools of financial and economic analysis.

REE 4204

Real Estate Finance: PR: FIN 3403. Focus on the fundamentals of real estate finance utilizing tools of financial and economic analysis.

REE 4303

Real Estate Investment Analysis: PR: FIN 3403. Focus on real estate decision-making in the private sector utilizing tools of financial and economic analysis.

REE 4433

Real Estate Law: PR: Junior standing. An analysis of real estate law with emphasis on Florida statutes and case law.

REL 2300

World Religions: Basic features and historical background on Confucianism, Taoism, Hinduism, Buddhism, Judaism, Christianity, and Islam.

BEL 3600

Studies in Judaism: An inquiry into the foundations and development of Jewish thought in various parts of the world.

RET 3026C

Introduction to Respiratory Care. PR: Admission to the professional upper-division Respiratory Therapy Program. Fundamental respiratory principles and practices will be studied. Introduction to the profession and basic methods are covered. Lecture and lab.

BET 3264C

Mechanical Ventilation: PR: RET 3026C. Function and use of mechanical ventilators, patient evaluation methods. All forms of ventilatory support will be studied. Lecture and laboratory.

RET 3483

Respiratory Disease Assessment: PR: RET 3026C. Physical examination of the chest, demonstrating equipment use, methods and theory. Chest radiography will be extensively covered. Lecture and demonstration.

BA 3(3.0)

BA 3(3.0)

BA 3(3.0)

BA 3(3,0)

AS 3(3.0)

AS 3(3.0)

HPA 4(3.3)

HPA 3(2.3)

HPA 1(1,1)

HPA 6(0.24)

HPA 6(0.24)

ED 3(3.0)

ED 3(3,1)

ED 3(3.0)

ED 3(3,1)

BA 3(3.0)

HPA 4(3.3)

HPA 4(3.3)

HPA 5(0.20)

RET 3484C

Cardiopulmonary Physiology: PR: PCB 3703C. Normal ventilation, lung mechanics, pulmonary circulation, diffusion, and blood gases, with an emphasis toward diagnostic cardiology.

RET 3174

Pediatric Respiratory Care: PR: RET 3026. The study of childhood respiratory diseases, congenital problems, infections, metabolic disorders, and AIDS.

BET 3874

Clinical Practice I: PR: C.I. Basic equipment and patient care. IPPB therapy. Cleaning sterilization and maintenance procedures. Suction techniques.

RET 3875

Clinical Practice II: PR: C.I. Patient care with advanced respiratory equipment. Tracheostomy care. Introduction to cardiopulmonary resuscitation. Introduction to critical care units. Advanced life support techniques and equipment.

RET 4034

Problems in Patient Management: PR: RET 3484. Problem-oriented approach to the treatment of chronic and acute respiratory disorders. Computer-based clinical simulations are utilized. Emphasis on patient centered care planning.

RET 4244

Life Support Systems: PR: RET 3026C. Lecture-laboratory, measures supporting critically ill patients; intubation, airway maintenance, arterial and venous lines, post-operative care. Cardiac output determination, electrocardiography, intra-aortic balloon pumping covered.

RET 4284

Cardiopulmonary Diagnostics I: PR: RET 4244C. Non-invasive cardiac diagnostics, including echocardiography, nuclear cardiology, and stress testing.

RET 4285

Cardiopulmonary Diagnostics II: PR: RET 4244C and RET 4284C. Invasive cardiac diagnostic and therapeutic measures, including cardiac catheterization, PTCA, streptokinase use, and heart surgery.

RET 4414C

Pulmonary Function Studies: PR: RET 3026C. Detailed procedures and tests to provide information for diagnosis of pulmonary disease. Lecture-laboratory.

RET 4441

Vascular Ultrasound: Study of application of ultrasound in the diagnosis of vascular diseases. Includes doppler and color flow doppler examination of arterial and venous systems.

RET 4443

Advanced Cardiac Ultrasound: PR: RET 4284 or C.I. Study of advanced applications of ultrasound in the diagnosis of cardiac abnormalities. Two-dimensional echo, conventional doppler, and color doppler covered

RET 4503

Chest Medicine: PR: RET 3026. Disease states treated medically in conjunction with one or more modalities of respiratory therapy.

RET 4715

Neonatal Medicine: PR: RET 3714C or C.I. Fetal development, prenatal physiology, gas transport in the fetus and newborn. Congenital abnormalities, infections, diseases of the newborn. Resuscitation of the neonate

BET 4876

Clinical Practice III: PR: RET 3875. Care of patients with more complex diseases. Pulmonary function studies. Pediatric and neonatal critical care. Echo and cardiac catheterization. Emergency and trauma.

RET 4934

Selected Topics in Respiratory Therapy: PR: C.I. Current topics of adult critical care, as they apply to the advanced study of respiratory therapy.

RET 5910

Research Methods in Cardiopulmonary Physiology: Introduction to methods used in scientific and medical research in cardiopulmonary physiology. Literature review, experimentation, and data analysis.

BMI 3011

Principles of Risk and Insurance: PR: FIN 3403. Emphasis is on insurance as a risk-handling device. with attention given to risk assumption, risk avoidance, and loss prevention.

BTE 1000

Introduction to Radiologic Sciences: Study of medical imaging and radiation therapy principles and procedures. For prospective and beginning majors in Radiologic Sciences.

RTE 3000

Introduction to Radiologic Sciences: PR: Admission to Radiologic Sciences program. Orientation to career field, radiation protection, principles and procedures of medical imaging and radiation therapy.

HPA 4(3.3)

HPA 3(3.0)

HPA 3(3,0)

HPA 2(2,0)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3,0)

BA 3(3.0)

HPA 8(1.24)

HPA 8(1,24)

HPA 4(3.3)

HPA 3(3,0)

HPA 5(1.16)

HPA 3(3.0)

HPA 3(3.0)

HPA 3(3,0)

HPA 4(3.3)

HPA 4(3.3)

HPA 3(3.0)

RTE 3050

Transitional Concepts in Radiologic Sciences: PR: RT Status. Principles and procedures to prepare for baccalaureate radiologic sciences.

BTE 3111C

Introduction to Patient Care: PR: Acceptance to the program. Provides the student with fundamentals of patient care methods related to radiography.

BTE 3367

Medical Physics: PR: RTE 3684C or C.I. Study of radiation production, characteristics, detection and measurement, and protection, including barrier thickness calculation and shielding.

RTE 3418C

Principles of Radiographic Exposure I: An introduction to the technical variables influencing radiographic and fluoroscopic image quality, including equipment considerations, prime exposure factors, image receptors, and accessory exposure devices.

RTE 3457C

Principles of Radiographic Exposure II: PR: RTE 3418 or C.I. Study of exposure and photographic processing variables influencing radiographic image quality.

RTE 3503C

Radiographic Procedures I: PR: Admission to the program. Provides fundamental knowledge of radiographic positioning, equipment manipulation, and quality evaluation of radiographic studies of the chest, abdomen, routine contrast studies, and the upper extremity.

RTE 3513C

Radiographic Procedures II: PR: RTE 3503C or C.I. Continuation of radiographic positioning, equipment manipulation, and guality evaluation of radiographic studies of the shoulder, bony thorax, lower extremity, vertebral column, cranium, and facial bones.

BTE 3684C

Physics of Image Production: PR: College Physics II. Physics of diagnostic radiology, including radiation production, physical principles of generator operation, and characteristics of electromagnetic radiation.

RTE 3804

Clinical Education I: PR: RTE 3111C or C.I. Supervised clinical practice in radiographic procedures, radiation protection, patient care, equipment.

RTE 4207

Methods in Radiology Management: Concepts of radiology, department management, including principles, personnel management, evaluation and improvement techniques, budgeting, financial considerations and legal aspects, and JCAH quality assurance specifications.

RTE 4209

Radiological Administrative Practice: A directed practice in the management of a radiology department, with application of theory and methodology.

BTE 4385

Radiobiology: PR: RTE 3367C. A study of the effects of ionizing radiation on biologic systems. The responses at the cellular and total organism level are investigated.

RTE 4563

Special Radiographic Procedures: PR: RTE 3513C or C.I. An introduction to special imaging, techniques in radiology, including vascular and nonvascular procedures.

Advanced Imaging Modalities: PR: RTE 3563 and CGS 1060 or C.I. A study of the physical principles and applications of computer tomography, digital imaging, ultrasound, magnetic resonance imaging, and other specialized modalities.

RTE 4473

Quality Assurance: PR: RTE 3367C or C.I. Quality control evaluation of radiographic, fluoroscopic and tomographic imaging systems. Implementation procedures, equipment selection criteria, and processing quality control are also addressed.

RTE 4763

Anatomy for the Medical Imager: A study of the normal anatomical structures and interrelationships of structures as demonstrated in a radiographic and cross-sectional imaging reference.

RTF 4782

Pathophysiology: PR: C.I. The study of radiologic science in the diagnosis and treatment of disease. **RTE 4814L** HPA 5(0,20)

Clinical Education II: PR: RTE 3804. Supervised clinical practice in radiographic/fluoroscopic procedures with emphasis on examinations of the chest, abdomen, extremities and shoulder girdle.

HPA 6(6.0)

HPA 3(3.0)

HPA 3(2.5.1.5)

HPA 3(2.5,1.5)

HPA 3(2.3)

HPA 3(2.3)

HPA 2(2.0)

HPA 4(0,16)

HPA 3(3,0)

HPA 2(1.5, 1.5)

HPA 2(0,8)

HPA 1(1.0)

HPA 2(2,0) HPA 3(3.0)

HPA 3(3.0)

HPA 3(3,0)

HPA 2(2,0)

RTE 4824L

Clinical Education III: PR: RTE 4814, Supervised clinical practice in radiographic/fluoroscopic procedures with emphasis on examinations of the pelvis, thoracic cavity, vertebral column and portable and surgical radiography.

RTE 4834

Clinical Education IV: PR: RTE 4824. Supervised clinical practice in radiographic/fluoroscopic procedures with emphasis on examinations of the cranium, facial bones, and special procedures.

RTE 4844

Clinical Education V: PR: RTE 4834. Supervised clinical practice in radiographic/fluoroscopic procedures with emphasis on surgical and special procedure examinations.

RTE 4854

Advanced Clinical Practicum: PR: RTE 4824. Supervised clinical experience and/or practice in computed tomography, interventional, vascular, and magnetic resonances imaging.

RTE 4903

Directed Study in Radiologic Education: PR: EVT 3371 or EDG 4321 or C.I. Directed activity in classroom instruction in radiologic technology.

RTV 3000

Foundations of Broadcasting: Nature of the media, the mechanics of operation, history, economics, programming, and internal and external control.

RTV 3200

Broadcast Techniques: PR or CR: RTV 3000. Introduction to audio production and multi-camera video production. Instruction in audio mixers, microphones, and tape recorders and TV studio production equipment (cameras, switchers, etc.)

RTV 3210

Radio Production: PR: RTV 3200 or C.I. The production of music (live and recorded), talk, interview, discussion, sports, and documentary, including performance (talent and announcing) and direction.

RTV 3223

Lighting for Video: PR: RTV 3200. Basic lighting techniques for both studio and location, single and multiple-camera video production.

BTV 3231

Broadcast Announcing and Performance: PR: RTV 3200 or C.I. A study of communication problems on camera and microphone. Development of performance skills in announcing, interviewing, narrating, and reporting. Lab TVA.

RTV 3260

Electronic Field Production/Video Editing: PR: RTV 3200. Introduction to non-studio video instruction. Electronic field production and electronic news gathering. Utilization of portable video equipment and control track videotape editing equipment.

RTV 3263

Advanced Video Post-Production: PR: RTV 3260 and C.I. Concentration on A/B roll editing, digital video effects and electronic graphics. Introduction to non-linear video editing systems.

BTV 3300

Broadcast Newswriting: PR: Grammar Proficiency Examination and departmental typing exam. The study and practice of writing news for radio and television.

RTV 3301

Advanced Broadcast Newswriting: PR: RTV 3300. The writing of in-depth news items, including documentaries, features, and investigative materials.

BTV 3501

Broadcast Copywriting: PR: Grammar Proficiency Examination and School Typing Exam. Preparation of written public service and commercial copy for radio and television.

RTV 3810

Broadcast Promotion: PR: RTV 3200. Examination of techniques that stations use to keep listeners and viewers and to attract new ones. Use of advertising and merchandising.

RTV 3942

Television Practicum: PR: RTV 3200 and C.I. Primarily an activity course. Student will serve in some position of responsibility for UCF Weekly News or other TV activity. Can be repeated.

RTV 4206

Television Directing: PR: RTV 3200 and RTV 3260. Preparation and direction of programs, with emphasis on dramatic values of composition.

RTV 4270

Radio Production and Programming: PR: RTV 3200 or C.I. The study and production of current radio formats and their effects on today's radio listener.

BTV 4301

Television News: PR: RTV 3200 or C.I. Practical application of TV news theory.

AS 4(1.3)

AS 4(1.3)

AS 3(1,3)

AS 4(1.3) AS 4(1.3)

AS 3(1.2)

AS 3(2.1)

AS 1(0,3)

AS 4(1,3)

AS 3(2.1)

AS 3(1,3)

HPA 4(0.16)

HPA 2(0.8)

HPA 6(0.24)

HPA 4(0.16)

HPA 2(0.8)

AS 4(1.3)

AS 4(1.3)

AS 3(2,1)

AS 3(3.0)

RTV 4403 Radio, Television and Society: PR: RTV 3000 for RTV majors. A study media upon the habits, customs, and thinking of our times. Considerations of	
RTV 4404	AS 3(3,0)
International Broadcasting: PR: RTV 3000. Comparative analysis of r World broadcasting as a social, political, and economic force.	
RTV 4700	AS 3(3,0)
Regulation of Broadcasting: PR: RTV 3000. Federal, state, local and s practices which govern electronic media.	self-regulatory agencies and
RTV 4800	AS 3(3,0)
Broadcast Management: PR: RTV 4700. Examination of broadcast mana operations at local, regional, and national levels.	COMPANY RECEIPTING AND REAL PROPERTY AND REAL PR
RUS 1120	AS 4(4,1)
Elementary Russian Language and Civilization I: Designed to initiate the guage skills. Open only to students with no previous experience with this land	guage.
RUS 1121	AS 4(4,1)
Elementary Russian Language and Civilization II: PR: RUS 1115, RUS language. Continuation of RUS 1120.	The stand of some of the set
RUS 2210	AS 3(3,0)
Intensive Russian Conversation: PR: One year of Russian or equivale guage, leading toward fluency and correctness in speaking.	nt. Practical use of the lan-
RUS 2230	AS 3(3,1)
Intermediate Russian Language and Civilization I: PR: RUS 1121 or equi guage skills and cultural knowledge at the intermediate level.	ivalent. Development of lan-
RUS 2231	AS 3(3,1)
Intermediate Russian Language and Civilization II: PR: RUS 2230 or RUS 2230, with emphasis on Russian civilization.	equivalent. Continuation of
RUS 3240	AS 3(3,0)
Russian Conversation: PR: RUS 2231 or equivalent. Development of skil prehension through practice. This course may be repeated for credit. When general electives only.	
RUS 3420	AS 3(3,0)
Russian Composition: PR: RUS 2231 or equivalent. Development of skills may be repeated for credit. When repeated, credit will apply to general election	
RUS 4411	AS 3(3,0)
Advanced Russian Conversation: PR: RUS 3240. An advanced conversations from various domains of public life and disciplines.	ation course on directed top-
RUS 4421	AS 3(3,0)
Advanced Russian Composition: PR: RUS 3420. An in-depth study of styl anisms of Russian literary styles.	istic and grammatical mech-
RUW 3100	AS 3(3,0)
Survey of Russian Literature I: PR: RUS 2231. A survey course of the poets from Pushkin to Turgeniev.	major Russian writers and
RUW 3101	AS 3(3,0)
Survey of Russian Literature II: PR: RUS 2231. A survey course of the poets from Dostoyevsky to the present.	major Russian writers and
RUW 3370	AS 3(3,0)
The Russian Short Story: PR: RUS 2231. Masterpieces of the Russian Bulgakov.	Carl and a set of the set of the
RUW 4330	AS 3(3,0)
Russian Poetry: PR: RUS 2231. A survey of Russian poetry from Zhukovsk	y to the present.
RUS 4480 Contemporary Soviet Literature: PR: RUS 2231. A study of the major tre Sologub to Aksyenov.	AS 3(3,0) nds in Soviet literature from
RUW 4481	AS 3(3,0)
Soviet Underground and Emigre Literature: PR: RUS 2231. A study of t dissident literature from Zamyatin to the present.	he Soviet underground and
SCE 3310	ED 4(4,0)
Teaching Science in Elementary School: PR: Junior standing or C.I. Select instruction; techniques; evaluation procedures.	

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SCF 4023

Teaching Science and Technology to Young Children: Provides the knowledge and skills needed to plan and implement a discovery science/design technology program for young children in an integrated. interactive curriculum.

SCE 4360

Science Instructional Analysis: PR: EDG 4321 or C.I. Course objectives for a school curriculum and methods and materials for the middle grades and high school.

SCE 5716

Methods in Elementary School Science: Organization of instruction in elementary school science including methods, evaluation, materials, strategies, and current practices.

SCE 5825

Space Science for Educators: PR: Senior standing or C.I. Introduction to space science, manned space flight and space education curriculum.

SLS 1501

Strategies for Success in College: This course is designed to address the development of life-skills necessary for the contemporary student to appropriately adjust to college requirements that lead to selfmastery and the total concept of lifetime wellness.

SLS 2311

Overview of Selected Medical Careers: Introduction to medical careers in medicine, dentistry, veterinary medicine, osteopathic medicine, optometry, chiropractic medicine, podiatry, and pharmacy. Graded "S" or "U."

SOP 3004

Social Psychology: PR: PSY 2013. Effects of social situations and social variables on the behavior of individuals.

SOP 3724

The Psychology of Racial Prejudice: PR: PSY 2013. Examination of literature relating to prejudice toward ethnic groups; effects of racism on individuals, development and maintenance of prejudice, and possible ways to reduce prejudice.

SOP 3742

Psychology of Women: PR: PSY 2013. Examination of the psychological impact of changing sex roles on women in modern society. Topics include childrearing, working women, and sex differences in personality and cognition.

SOP 3772

Sexual Behavior: PR: PSY 2013. Physiological, social, and clinical aspects of human sexuality.

SOW 3104

Assessing Human Development: Skill development in assessing "person-in-environment" throughout the life cycle. Study of the interaction of bio-psychosocial, cultural, and systematic influences on human functioning.

SOW 3111

Assessing Human Systems: Development of skills in assessing families, groups, organizations, and communities, their impact on human functioning, and their potential for providing social support.

SOW 3203

Social Welfare and Community Resources: Study of social welfare, programs and services, including socio-cultural, political, economic, and historical forces affecting changes in societal responses to human needs.

SOW 3300

Generalist Practice in Social Work: Study of social work functions, knowledge, values, and skills. Development of ability to use a generalist model of practice.

SOW 3352

Interpersonal Skills in Social Work Practice: Study and practice of interviewing, group leadership, written communication, and oral presentations, in consensual as well as conflictual contexts of social work.

SOW 3401

Social Work Research: PR: CGS 1060C. Study of quantitative and qualitative methods of building knowledge for social work and the ethical use of research in professional practice.

SOW 3420

Social Work with Minorities: Study of oppressed groups and relevant social work interventions; skill development in work with, and in behalf of, people of minority groups.

SOW 4232

HPA 3(3,0) Social Welfare Policies and Issues: PR: SOW 3203 or equivalent. Development of skills needed to critically analyze social welfare goals, structures, and practices. Proposes improvements in societal resource systems.

HPA 3(2.1)

HPA 3(2.1)

HPA 3(1,2)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0) AS 3(3.0)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3,0)

HPA 3(2,1)

ED 3(3,0)

ED 3(3.0)

ED 4(3.2)

ED 3(3,0) ED 3(2,1)

AS 1(1.0)

SOW 4341

Micro-Level Roles and Interventions in Social Work: PR: SOW 3300, SOW 3352, Study and simulated practice of roles and tasks in systemic problem solving with individuals, families and supportive and remedial groups.

SOW 4343

Macro-Level Roles and Interventions in Social Work: PR: SOW 3300, SOW 3352. Study and simulated practice of roles and tasks in systemic problem solving to obtain and improve social welfare resources within organizations and communities.

SOW 4431

Evaluating Social Work Practice and Service Programs: PR: SOW 3401, SOW 3300. The study of systematic data collection and of measurement of change in individuals, families, groups, programs, and communities.

SOW 4510

Field Education: PR: Completion of required courses in major: GPA 2.5 in major. CR: SOW 4522, SOW 4620. Supervised learning experiences in agencies which relate social work practice to theory, involving 420 clock hours in the field.

SOW 4522

Field Education Seminar: PR: Completion of required courses in major: CR: SOW 4510, SOW 4620. Weekly seminar to examine the field experience and to relate theory with practice situations.

SOW 4602 HPA 3(3,0) Social Work in Health Settings: Study of social work roles, interventions, and issues related to helping patients in health settings.

SOW 4645

Social Services for the Elderly: Development of interventive skills for obtaining, providing, and improving social services in behalf of elderly persons and their families.

SOW 4654

Children's Services: Study of societal responses to children's needs. Development of skills for preventing family breakdown, placing children in alternative care, and reuniting children with their families.

SOW 5105

Human Behavior and Social Environment I: Individual and study of human development and psychosocial functioning of individuals at various life stages with particular attention to implications of human diversity.

SOW 5106

Human Behavior and Social Environment II: Social Systems: Study of the patterns and dynamics of families, groups, organizations, and communities from a social work and a systems perspective.

SOW 5132

Client Populations: Study of human diversity, focusing on the needs, resources, problems and service issues of several identified minority client populations.

SOW 5235

Social Welfare Policies and Services: Study of societal responses to human needs; forces shaping social welfare systems; and frameworks for analyzing social policies and programs.

SOW 5305

Social Work Practice I: Generalist Practice: Study of social work functions, knowledge, values, roles and skills; the use of a generalist model of practice.

SOW 5306

Social Work Practice II: Intervention Approaches: Study of selected social work theories, strategies, and techniques for helping people and improving system responsiveness to human needs.

SOW 5355

Studies in Urban Social Work Practice: Analysis of one or more urban practice issues and approaches. May be repeated for credit.

SOW 5373

Clinical Supervision: Supervisory theory and practice in clinical settings.

SOW 5404

Social Work Research: Study of group research designs in social work; quantitative analyses; and related ethical issues.

SOW 5432

Evaluating Social Work: Study of single case designs in social work; recording methods; behavioral and standardized measures; applications to individuals, families, groups, programs, communities.

SOW 5532

Field Education I: Generalist Practice: CR: SW Practice I. Supervised practice of social work in an agency for 224 clock hours.

HPA 3(3,0)

HPA 3(3,0)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3,0)

HPA 3(3,0)

HPA 3(3,0)

HPA 3(3,0)

HPA 3(1.2)

HPA 3(1.2)

HPA 3(2.1)

HPA 9(0.27)

HPA 3(2,1)

HPA 3(3,0)

HPA 3(3,0)

HPS 3(3,0)

HPA 3(3.0)

HPA 3(3.0)

Fundamentals of Speech and Hearing Science: Lectures and demonstrations in basic acoustics and

Clinical Observation and Practice: PR: SPA 3550. C.I. Observation and supervised participation in speech pathology and audiology in the university clinic and local clinics. May be taken twice for credit. **SPA 3101** HPA 3(3.0)

Field Education II: Interventions: PR: SOW 5532 Field Education I, CR: SW Practice II, Continuation

Social Work with Women: Alternative approaches to the treatment of women in the urban setting.

of SOW 5532 Field Education I in the same field agency for 224 clock hours.

services to people with problems which affect job performance.

Physiological Bases of Speech and Hearing: PR: SPA 3002. An introduction to the anatomical, physiological, and physical elements underlying the communication process.

SPA 3112

SOW 5533

SOW 5625

SOW 5655

SOW 5662

SOW 5712

SPA 3000

SPA 3002

SPA 3050

and other substances.

child abuse and their family members.

Basic Phonetics: Physiological descriptions and visual notation of speech patterns and regional dialects.

SPA 3112L

Basic Phonetics Laboratory: Students will have practical experiences in transcription of normal and deviant speech.

SPA 3333

Introduction to Signed English and Culture of the Deaf. Vocabulary and grammar through introductory level. Conceptual basis of ASL discussed.

SPA 3550

Clinical Methods in Communicative Disorders: PR: SPA 3002. An analysis of techniques and methods of planning and executing therapeutic programs for communicatively handicapped individuals.

SPA 3550L

Clinical Methods in Communicative Disorders Laboratory: Students will have practical experience in analysis of live and videotaped diagnosis and therapy sessions.

SPA 4011

speech acoustics. Measurement of sound level and resonance. Discussion of vocal frequency, speech duration and intensity, spectrographic analysis, wave composition, speech recognition, and voice quality. HPA 3(3.0)

SPA 4032

Audiology I: Introduction to physics of sound, anatomy of hearing mechanism, pure tone audiometry, hearing aids, problems of the hearing handicapped. Clinical skills development will be required.

SPA 4033

Audiology II: PR: SPA 4030. An overview of medical aspects of hearing loss, electrophysiological audiometry, and other differential diagnostic testing.

SPA 4201

Communicative Disorders: Articulation: PR: SPA 3002, 3112. Survey of articulation disorders and their management.

SPA 4201L

Communicative Disorders: Articulation Laboratory: Students will have practical experience in diagnosis and treatment in articulation disorders.

SPA 4210

Communicative Disorders: Voice: PR: SPA 3101, 3550. Survey of voice disorders and their management. Observations required.

SPA 4222

Nonorganic Speech Disorders: PR: SPA 3550, 4201. Survey of nonorganic aspects of stuttering and voice disorders and their management.

Detection and Prevention of Speech and Hearing Problems: An elective course for non-majors. Live

HPA 3(3.0)

ing communicative disorders. For beginning and prospective majors in communicative disorders. HPA 3(0.6)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3.0)

HPA 1(0.2)

HPA 3(3.0)

HPA 3(3,0)

HPA 3(3.0)

HPA 1(0,2)

HPA 4(3,1)

HPA 3(3.0)

HPA 3(3,0) Child Abuse: Treatment and Prevention: The social worker's role and interventions with victims of

HPA 3(0.3)

HPA 3(3.0)

HPA 3(3.0) Strategies in Employee Assistance Programs: Techniques for establishing, providing, and evaluating

HPA 3(3.0) Interventions with Substance Abusers: Strategies for working with persons who abuse drugs, alcohol,

HPA 3(3.0)

and videotaped demonstrations of speech and hearing cases. Specific suggestions for prevention.

Introduction to Communicative Disorders: Etiology, symptoms, and methods of diagnosing and treat-

HPA 1(0.2)

Organic Speech Disorders: PR: SPA 3101, 4032, 4201. Survey of organically based communication disorders and their management. Observations required. HPA 1(0.2) SPA 42511 Organic Speech Disorders Laboratory: Students will have practical experience in observations of organic speech disorders. SPA 4310 HPA 3(3.0) Audiology II: PR: SPA 4032. An overview of medical aspects of hearing loss, electrophysiological audiometry, and other differential diagnostic testing. SPA 4321 HPA 4(4,0) Aural Habilitation-Rehabilitation: PR: SPA 4011, 4201, Principles and procedures in the utilization of residual hearing, auditory training, speech reading, and the use of hearing aids. SPA 4380 HPA 3(3.0) Introduction to American Sign Language: Development of ASL vocabulary and grammar. Deaf culture, literature, research examined. SPA 4381 HPA 3(3.0) Intermediate American Sign Language: Expansion of ASL vocabulary with increased development of knowledge concerning deaf culture. SPA 4382 HPA 4(3,1) Intermediate American Sign Language: Conversation, Emphasis on refining fluency receptively and expressively. Practicum with the deaf community. **SPA 4402** HPA 3(3,0) Communicative Disorders: Language: PR: SPA 3550, LIN 3710, Survey of language disorders and their management. Observations required. SPA 4402L HPA 1(0.2) Communicative Disorders: Language Laboratory: Students will have practical experience in diagnosis and treatment in language disorders. HPA 3(3.0) SPA 4412 Augmentative Communication Systems: PR: LIN 3710, SPA 4032, Students will learn the rudiments of nonverbal communication systems, for example, Bliss, Rebus, Manual Singing, Language Boards, and finger spelling. **SPA 4556** HPA 3(3.0) Therapeutic Communication: PR: Graduate status or C.I. Practical interviewing and counseling in the area of communicative disorders. SPA 4941 HPA 1(1,1) Practicum in Communicative Disorders. SPA 5005 HPA 3(3,0) Survey of Communicative Disorders: A survey of speech, language, and hearing disorders for habilitative personnel and other interested professionals. **SPA 5120** HPA 4(4,3)

Physiological Acoustics: PR: SPA 4032: Graduate status or C.I. Lectures, readings, and experiments pertaining to the subjective reception of sound.

SPA 5225

SPA 42221

SPA 4251

treatment in nonorganic speech disorders.

Fluency Disorders: PR: Graduate status or C.I. Identification and evaluation of disorders of rhythm. Emphasis will be on methods of intervention in disorders of fluency.

SPA 5225L

Fluency Disorders Laboratory: PR: Graduate status or C.I. Practical application of clinical skills in fluency disorders.

SPA 5236

Speech Problems in Adults: Motor Speech Disorders: PR: Graduate status or C.I., SPA 4251. A study of dysarthrias, apraxias, and other motor speech disorders in adults associated with neurological problems, brain injury, systematic disease and aging.

SPA 5307

Differential Diagnosis of Auditory Disorders: PR: SPA 4032: Graduate status or C.I. Clinical techniques in pure tone speech, acoustic impedance, and electrophy siologic response audiometry.

SPA 5327

Aural Habilitation/Rehabilitation: PR: Graduate status or C.I. Principles and procedures involved in speech and language acquisition management, utilization of residual hearing, speech reading, and the use of hearing aids.

HPA 1(0.2) Nonorganic Speech Disorders Laboratory: Students will have practical experience in diagnosis and

HPA 3(3.0)

HPA 3(3.0)

HPA 1(0,2)

HPA 3(3.0)

HPA 3(3.0)

HPA 4(4,0)

SPA 5404

Language Disorders: Preschool: PR: Graduate status or C.I., LIN 4710, SPA 4402, Graduate students will apply their knowledge of the normal processes of language development to the diagnosis and intervention of communicative impairments of infants and toddlers.

SPA 55531

Differential Diagnosis in Speech and Language Laboratory: PR: SPA 6204, 6403, 6211, 5805. Assignment to diagnostic teams to apply the diagnostic techniques presented in SPA 5553. Experiences include test administration, interviewing, writing diagnostic reports, and oral presentations.

SPA 5600

Administration and Management of Communicative Disorders Programs: PR: SPA 3002. Methods and techniques for organization and administration of speech-language and hearing disorders in public school, hospital, rehabilitation center, and private practice facilities.

SPA 5805

Research in Communicative Disorders: PR: STA 4163, graduate status or C.I. Introduces the student to empirical research in the area of communicative disorders. Emphasis is on hypothesis testing, methodology, analysis, and interpretation of results.

SPC 1600

Fundamentals of Oral Communication: Use of the body and voice; participation in various speaking situations; planning, organizing, and delivering public speeches.

SPC 1600H

Honors Fundamentals of Oral Communication: PR: University Honors Program. Same as SPC 1600 with honors-level content.

SPC 3301

Interpersonal Communication: Nature of the communication process; variables affecting the process and the individuals involved. Analysis of communication models, interactant behavior, situational cues, verbal and non-verbal messages.

SPC 3425

Group Interaction and Decision-Making: A study of small group processes. Attention is given to problem solving, leadership emergence, conformity behavior, and group member role responsibilities.

SPC 3445

Leadership Through Oral Communication: A theoretical and practical investigation of leadership in oral communication situations, principles of parliamentary law, and approaches to problem solving

SPC 3511

Argumentation and Debate: PR: SPC 1600 or C.I. Study and practice in the preparation and delivery of argumentative speeches emphasizing argument, evidence, and organization.

SPC 3601

Advanced Public Speaking: PR: SPC 1600 or C.I. Advanced training in selecting and organizing materials for various types of speeches. Practice in thinking and speaking before audiences.

SPC 4330

Nonverbal Communication: Review of current behavioral research in such areas as proxemics. kinesics, physical characteristics, tactile communication, and paralanguage. Lectures are supplemented by frequent nonverbal exercises.

SPC 4350

Studies in Listening: Analysis of current trends, professional literature, and resource materials bearing upon the teaching of listening. Practice in listening; preparing listening experiences; oral and written reports.

SPC 4440

Group Dynamics: A study of human behavior in group situations.

SPC 4540

Attitudes and Communication: A survey of the immediate and direct ways in which persuasive communications and social groups come to influence attitudes.

SPC 5200

Evolution of Communication Theory: General Survey: Major communication trends from classical era to the present. Comparison of Aristotelian and non-Aristotelian rhetorics. Contributions of principal figures will be discussed.

SPN 1120

Elementary Spanish Language and Civilization I: Designed to initiate the student to the major language skills. Open only to students with no previous experience with this language. AS 4(4,1)

SPN 1121

Elementary Spanish Language and Civilization II: PR: SPN 1115, SPN 1120 or experience with this language. Continuation of SPN 1120.

HPA 3(3.0)

HPA 1(0,4)

HPA 3(3.0)

HPA 3(3.0)

AS 3(1.2)

AS 3(3,0)

AS 3(1.2)

AS 3(2.1)

AS 3(3,0)

AS 3(1,2)

AS 3(1,2)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 4(4,1)

AS 3(3,0)

SPN 1170 AS 8(16,10)
Elementary Spanish Study Abroad: Elementary Spanish language and civilization taught in the native environment.
SPN 2140 AS 3(3,0)
Business Spanish I: Spanish language and culture for beginning Spanish language students from a
business professional perspective. Emphasis on communicative skills in a professional setting. (Does not fulfill University foreign language requirement.)
SPN 2230 AS 3(3,1)
Intermediate Spanish Language and Civilization I: PR: SPN 1121 or equivalent. Development of lan- guage skills and cultural knowledge at the intermediate level.
SPN 2231 AS 3(3,1)
Intermediate Spanish Language and Civilization II: PR: SPN 2230 or equivalent. Continuation of SPN 2230, with emphasis on Spanish civilization.
SPN 2240 AS 3(3,1)
Intensive Spanish Conversation: PR: One year of Spanish or equivalent. Practical use of the lan- guage, leading toward fluency and correctness in speaking at the intermediate level.
SPN 3141 AS 3(3,0)
Business Spanish II: PR: C.I. Continuation of Business Spanish I.
SPN 3142 AS 3(3,0)
Business Spanish III: PR; C.I. Continuation of Business Spanish II.
SPN 3241 AS 3(3,0)
Spanish Conversation: PR: SPN 2231 or equivalent. Development of skills in conversation and com- prehension through practice. This course may be repeated for credit. When repeated, credit will apply to
general electives only.
SPN 3340 AS 3(3,0)
Spanish for Native Speakers: PR: Must be a native speaker. Intensive Spanish for native speakers who have had little or no formal training in the language.
SPN 3420 AS 3(3,0)
Spanish Composition: PR: SPN 2231 or equivalent. Development of skills in composition. This course
may be repeated for credit. When repeated, credit will apply to general electives only. SPN 4143 AS 3(3.0)
Business Spanish IV: PR: C.I. Advanced course in business terminology and development of advanced language skills.
SPN 4410 AS 3(3,0)
Advanced Spanish Conversation: PR: SPN 3241. Advanced conversation on directed topics from vari- ous disciplines: literature, art, psychology, philosophy, music, business, and the sciences.
SPN 4420 AS 3(3,0)
Advanced Spanish Composition: PR: SPN 3420. Readings and written imitations of modern literary styles in the form of themes, sketches, poems, and original stories.
SPN 4510 AS 3(3,0)
Spanish Civilization and Culture: PR: SPN 3241 or SPN 3420. A study of Spanish civilization and culture from Pre-Roman times to the present. Conducted in Spanish.
SPN 4520 AS 3(3,0) Latin American Civilization and Culture: PR: SPN 3241 or SPN 3420. An overview of the currents in
Latin American culture and civilization from the Pre-Columbian period to the present. Conducted in Spanish.
SPN 4780 AS 3(3,0)
Spanish Phonetics: PR: SPN 3241 and 3420. Students will learn the basic principles of Spanish pro- nunciation and perfect the correct punctuation of Spanish through intensive practice and oral drill.
SPN 4800 AS 3(3,0)
Spanish-American Syntax: The course examines the Spanish language from its beginning to the pres- ent, with special emphasis as it is written and spoken in Latin America and the U.S.
SPN 4801 AS 3(3,0)
Spanish Morphosyntax: PR: SPN 3100 or 3101 or 3130 or 3131 or 3420. Emphasizes the structure as well as the capacity for recognizing the differences between semantics, morphology, syntax, and phonology in the Spanish language, as well as the use and correct application of criterion when analyzing texts. Taught in Spanish.
SPW 3100 AS 3(3,0)
Survey of Spanish Literature I: PR: SPN 2231 or equivalent. Main literary currents and works from the Middle Ages through the Eighteenth century.
SPW 3101 AS 3(3,0)
Survey of Spanish Literature II: PR: SPN 2231 or equivalent. Main literary currents and works of the Nineteenth century to the present.

SPW 3130

Survey of Latin-American Literature I: PR: SPN 2231 or equivalent. Main literary currents and works from the colonial period to the Nineteenth Century Romanticism.

CDW 2121

Survey of Latin-American Literature II: PR: SPN 2231 or equivalent. Main literary currents and works of the Nineteenth century from the Realism to the present.

SPW 3320

Modern Hispanic Theatre Workshop I: PR: Departmental consent, Introduction to fundamental actor's technique and practice in Spanish. Short scenes will be performed in class.

SDW 3321

Modern Hispanic Theatre Workshop II: PR: SPW 3320. Participation in a theatre production of a play in Spanish. Open to majors in Spanish, Theatre and any technical performance.

SPW 3370

Spanish Short Story: PR: SPN 2231 or equivalent. A study of representative 19th and 20th-century Spanish short stories and their authors.

SPW 4272

20th Century Spanish Novel: PR: SPN 3101 or 3131. Major works by the leading authors of the 20th century. Texts selected are studied not only for their aesthetic value, but also in terms for their historical and cultural significance.

SPW 4310

Golden Age Drama: PR: SPW 3100. A study of the drama of the Golden Age, with special emphasis on Lope, Tirso, Alarcon, and Calderon. The controversies of the Spanish theatre and its influence abroad. SPW 4364 AS 3(3.0)

Latin-American Narrative/Essay: PR: SPW 3100 or SPW 3130 or SPW 3131 or SPW 3370. Study of Latin-American narrative/essay (changing topics by semester) with emphasis in the 20th century texts, contrasting techniques, procedures, and literary theories. Course could be reoffered when topic changes.

SPW 4381

Latin-American Theatre/Poetry: PR: SPW 3100 or SPW 3101 or SPW 3130 or SPW 3131 or SPW 3370. Study of Latin-American theatre/poetry (changing topics by semester) with emphasis in the 20th century texts, contrasting techniques, procedures, and literary theories. Course could be reoffered when topic changes.

SPW 4450

Spanish Literary Theory: PR: SPN 3420 or equivalent. A study of textual criticism with emphasis in the theory of genre.

SPW 4460

Nineteenth Century Spanish Literature: PR: SPW 3101. A study of the representative authors and works in Spanish Romanticism, Realism, and Naturalism.

SPW 4480

Twentieth Century Spanish Literature: PR: SPW 3101. A study of the representative authors and works in drama and the novel.

SPW 4600

Cervantes I: PR: SPW 3100. Don Quixote.

SPW 4720

The Generation of 1898: PR: SPW 3101. A study of the generation's main authors and their works. SPW 4730 AS 3(3.0)

Hispanic Literature of the United States: PR: SPN 3241 and 3420. Reading and study of outstanding works written by Hispanic writers of the United States.

SPW 4770

Caribbean Spanish Literature: An overview of the literature of the Spanish-speaking Caribbean countries from colonial times to the present.

SSF 3312

Teaching Social Science in the Elementary School: PR: Admission to Phase II or C.I. Selected themes, problems, and concepts; organizing for instruction; techniques; evaluation procedures.

SSE 4361

Social Science Instructional Analysis: PR: EDG 4321 or C.I. Study of instructional programs in social sciences; objectives; materials; techniques; organization of instruction; evaluation procedures; current research for the middle grades and high school.

SSE 5115

Methods in Elementary School Social Science: Study of instructional programs in social sciences; objectives; materials; techniques; current research; and their application in elementary school setting.

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3,0)

AS 3(3.0)

ED 4(4.0)

ED 4(3.2)

ED 3(3.0)

STA 2014

Principles of Statistics: Introduction to statistical concepts in modern society. Basic principles, frequency distributions, measures of location and dispersion, probability, statistical inference.

STA 3023

Statistical Methods I: PR: MAC 1104 or MGF 1203. First methods course introducing probability and statistical inference, including estimation, hypothesis testing, binomial and normal distributions, sample size.

STA 3023H

Honors Statistical Methods I: PR: Honors Program Student: Calculus desired by not necessary. Same as STA 3023 with honors-level content.

STA 3032

Probability and Statistics for Engineers: PR: MAC 3312 and computer programming. Axions of probability; combinatorial and geometrical probability; probability distributions; measures of location and dispersion; sampling and sampling distributions; estimation and tests of hypotheses; engineering applications.

STA 3096

Statistical Graphics: PR: STA 3023 or STA 3032 and a knowledge of a programming language. Principles of graph construction, graphical perception, graphical methods, computer programs for graph construction.

STA 4102

Computer Processing of Statistical Data: PR: STA 4163 and knowledge of a programming language. Use of packages such as SAS, BMD, SPSS for data validation, description and analysis of data, regression and analysis of variance and covariance.

STA 4163

Statistical Methods II: PR: STA 3023 or STA 3032. Methods of analyzing data, statistical models, estimation, tests of hypotheses, regression and correlation, an introduction to analysis of variance, chisquare, and nonparametric methods.

STA 4164

Statistical Methods III: PR; STA 4163. A continuation of STA 4163, including further study of regression, analysis of variance and covariance and multiple comparisons.

STA 4173

Biostatistical Methods: CR: STA 4163. Introduction to the application of statistical principles and methods to problems in medical, biological, and health sciences.

STA 4202

Design of Experiments: PR: STA 4163 or C.I. Methods of constructing and analyzing designs for experimental investigations, concepts of blocking, randomization, replication, confounding in factorial experiments, incomplete block designs.

STA 4222

Sample Survey Methods: PR: STA 3023 or STA 3032. Constructing and analyzing survey designs. Sampling and non-sampling errors. Simple random, stratified, systematic, and multiphase sampling. Methods of estimation.

STA 4321

Statistical Theory I: PR: STA 3023 or STA 3032; CR: MAC 3313. Probability axioms, discrete and continuous sample spaces, conditional probability, independence, one-dimensional random variables, moment generating functions, transformations, jointly distributed random variables.

STA 4322

Statistical Theory II: PR: STA 4321. Conditional distributions, sums of random variables. Chebyshey's inequality, central limit theorem, method of movements, maximum likelihood, confidence intervals. hypothesis testing, transformations of two random variables.

STA 4502

Nonparametric Statistical Methods: PR: STA 3023 or STA 3032. Distribution-free tests on location and dispersion, goodness of fit tests, tests of independence, measures of association, nonparametric analysis of variance.

STA 4664

Statistical Quality Control: PR: STA 3023 or STA 3032. Statistical concepts and methods applied to the control of quality of manufactured products.

STA 4852

Applied Time Series: PR: STA 4163. Forecasting methods, time series analysis, stationary and nonstationary time series, Arima models, forecasting processes.

STA 5156

Probability and Statistics for Engineers: PR: STA 3032 or equivalent. Theory and applications of discrete and continuous random variables, hypothesis tests, confidence intervals, regression analysis and correlation

AS 3(3.0)

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AS 3(3,0)

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AS 3(3.0)

EN 3(3.0)

AS 3(3,0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

EN 3(3,0)

AS 3(3.0)

STA 5205

Experimental Design: PR: STA 4164, STA 5206, STA 5156, Construction and analysis of designs for experimental investigations. Blocking, randomization, replication; Incomplete block designs. Factorial and fractional designs; design resolution.

STA 5206

Statistical Analysis: PR: STA 3023; not open to students who have completed STA 4164. Data analysis; statistical models; estimation; tests or hypotheses; analysis of variance, covariance, and multiple comparisons; regression and nonparametric methods.

STA 5505

Categorical Data Methods: PR: STA 4163 or STA 5206. Considers discrete probability distributions, contingency tables, measures of association, and advanced methods, including loglinear modeling, logistic regression, McNemar's Test, Mantel-Haenszel test,

STA 5825

Stochastic Processes and Applied Probability Theory: PR: STA 4321. Conditional probability and conditional expectations, sequences of random variables, branching processes, random walks, Markov chains, recurrent events, renewal theory, queueing theory, and simple stochastic processes.

SUR 3101C

Surveying: PR: MAC 3311 and Junior standing. Theory and field practice in surveying measurements and the reduction and adjustment of field data.

SYA 3110

The Development of Social Thought: PR: SYG 2000, An overview of theories concerning the nature of man as a "social being." The nature of society from the beginnings of the scientific study of man's life to World War II.

SYA 3120

The Development of Social Thought: PR: SYG 2000, A study of major European and American contributors to modern sociology since World War II.

SVA 3300

Research Methods: PR: SYG 2000 and SYA 3400 (may be taken concurrently). Emphasis on types of sociological data collections, sampling techniques, grant proposal development, critical evaluation of social research, and relationship between theory and social research.

SYA 3400

Research Methods and Statistics: PR: SYG 2000 and one other sociology course.

SYA 4450

Data Analysis: PR: SYA 3300 and SYA 3400. Advanced social research design and analytical skills. Emphasis on social data management, various modes of social data analysis, interpretation, integration, presentation, and report writing.

SYA 4650

Applied Sociology: PR: SYG 2000 and SYO 3000. Examination of the utilization of sociological principles in the treatment of practical human problems and organization.

SYA 5625

ProSeminar: Survey of conceptual issues, methodological concerns, and findings in substantive sociological areas that currently dominate scholarly inquiry, including such topics as crime, deviance, community, alcoholism, education.

SYA 5937

ST: Advanced Population: Examines the theories, methods and information utilized by demographers and focuses on techniques of application of those skills.

SYD 3410

Urban Sociology: PR: SYG 2000. Historical roots of urbanization. Analysis and impact of community change on social organizations in modern industrial societies.

SYD 3700

Race and Ethnic Minorities in the United States: Theoretical analysis of the emergence, maintenance, and disruption of patterns of racial and ethnic stratification.

SYD 3800

Sex Roles in Modern Society: The traditional and changing roles of women and men viewed in a sociological perspective.

SYD 4020

Population: Concerned with the study of human population, its distribution, composition, and change. SYG 2000 AS 3(3,0)

General Sociology: Introduction to the sociological perspective and the scientific study of sociological concepts, theories, processes, and methods used in understanding contemporary human behavior in group interaction.

AS 3(2.2)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

EN3(2,3)

AS 3(3.0)

AS 3(3.0)

AS 4(3.2)

AS 4(3,1)

AS 3(3.0)

AS 3(3.0)

AS 3(3.0)

AS 3(3,0)

AS 4(3.2)

SYG 2000H

General Sociology: Extensive honors work in the field of Sociology. Expectations, requirements, and standards are greater than for standard General Sociology.

SYG 3010

Social Problems: Analysis of major social problems such as mental disorders, sexual deviance, racial discrimination, poverty, community disorganization, and violence.

SYO 3000

Modern Sociology: PR: SYG 2000. An in-depth exploration of contemporary sociology. Introduction to conceptual analysis and methodological techniques, presentation and utilization of sociological literature on major social institutions.

SYO 3360

Social Organization and Human Relations: Analysis of business, government, and industrial organizations. Topics include organizational theory, social systems, social structure, effects of technology, motivation, leadership, decision-making, and human relations.

SYO 3410

Sociology of Mental Illness: A sociological examination of mental illness as a social problem: legal aspects of mental illness, and the mental health professions.

SVO 3530

Social Stratification: PR: SYG 2000. Study of class, status and power, cultural variations in stratification systems; patterns of mobility and change.

SYO 1400

Family Trends: PR: SYG 2000. Study of intimate relationships, practices, trends and issues affecting today's marriages and families.

SVO 4250

Sociology of Education: PR: SYG 2000. This course examines the sociological dimensions of the educational institutions, including the impact of the social structure on learning and the role of education in social change.

SYO 4300

Political Sociology: Sociological analysis of political and parapolitical groups; socioeconomic variable of voting behavior, power elites; societies and systems of government.

SYO 4400

Medical Sociology: Analysis of patient beliefs and behavior, health practitioners, the social organization of hospitals and health services, contemporary problems in the delivery of health care.

SVP 3300

Collective Behavior: PR: SYG 2000. Analysis of relatively unstructured social situations, such as mobs, crowds, etc. as well as more structured forms of collective behavior such as social movements.

SVP 3400

Social Change: PR: SYG 2000. Concerned with the context and essential sources of social development and change.

SYP 3510

Sociology of Deviant Behavior: An examination of the nature, types, and societal reactions to deviant behavior; special emphasis on the process of stigmatization and the emergence of deviant subcultures.

SVP 3520

Criminology: Chief causes of anti-social behavior and current methods of prevention and reform. Effects of heredity and environment, prevalence of delinquency and crime, penal institutions.

SYP 3530

AS 3(3,0) Juvenile Delinguency: Types of delinguency behavior found among juveniles; possible causes and ways society attempts to treat the various forms of delinquency.

SYP 3540

Sociology of Law: The relationship between law and society, including the functions of law and its organization, social and economic consequences, jury selection, and modern trends.

SYP 3551

Sociology of Alcoholism: Introduction to the nature of alcoholism and review of its impact on society. SVP 3602

Sociology of Popular Music: This course examines the role of popular music in the process of social change and in reflecting American culture. Consideration is given to the nature of the popular music business.

SYP 3650

AS 3(3,0) Sociology and Sport: Utilization of sociological concepts and theories to investigate sport as a social institution. Includes subjects of racism, sexism, drug abuse, violence, and current issues of sport.

AS 3(3,0)

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change, motivation, and decision-making in small groups as affected by social interaction and social processes. SYP 4550 AS 3(3.0) Sociology of Drug Abuse: Analysis of the socio-culture elements of the drug culture. AS 3(3,0) SYP 4730 Sociology of Aging: Sociological aspects of aging in America. TAX 3000 BA 3(3,0) Personal Income Tax: A study of federal income tax designated to convey basic tax concepts and skills related to the individual taxpayer. Not open to accounting majors. TAX 4001 BA 3(3.0) Federal Income Tax I: PR: Junior standing and ACG 3101 with a grade of "C" or better or C.I. Concepts and methods of determining taxable income of individuals, and selected topics. TAX 5015 BA 3(3.0) Federal Income Tax II: PR: ACG 3111, TAX 4001 and meet graduate school admission requirements. Concepts and methods of determining taxable income for partnerships and corporations, and selected topics. **THE 1020** AS 3(3.0) Theatre Survey: PR: None. Not restricted to theatre majors. Overview of the art and craft of the theatre. Required of all theatre majors. **THE 1020H** AS 3(3.0) Theatre Survey - Honors: PR: Honors student. Not restricted to theatre majors. Honors-level overview of the art and craft of the theatre. **THE 1925** AS 2(2.4) Basic Technical Skills: PR: None. Not restricted to theatre majors but requires Departmental consent. Practical course in the proper and safe use of all stage equipment, hand, and power tools. Required of all theatre majors. **THE 2300** AS 3(3.0) Script Analysis: PR: None for theatre majors. Non-majors required Departmental consent. Exploration of dramatic form and structure by learning to read, analyze, and understand playscripts for productions. The study of the playscript as a blueprint for production. Required of all theatre majors. **THE 2925** AS 1(0.4) Theatre Practicum I: PR: THE 1925. Not restricted to theatre majors but requires Departmental consent. Participation on UCF Theatre productions. Required of all theatre majors. **THE 2926** AS 1(0,4) Theatre Practicum II: PR: THE 2925. Not restricted to theatre majors but requires Departmental consent. Participation on UCF Theatre productions. Required of all theatre majors. **THE 3110** AS 3(3.0) Theatre History I: PR: None. Open to non-majors. Study of the development of theatre arts from prehistory through the seventeenth century. Required of all theatre majors.

THE 3111

SYP 4000

Theatre History II: PR: THE 3110. Open to non-majors. Study of the development of theatre arts from the seventeenth century to the present. Required of all theatre majors.

THE 3305

Survey of Dramatic Literature: PR: THE 1020, Open to non-majors, Survey of playscripts from Sophocles to Sam Shepard representing a succinct history of Western drama. Required of all theatre majors.

TPA 2200

Stagecraft I: PR: THE 1925. Restricted to theatre majors or Departmental consent. History, theory, and practice of technical theatre production. Production crew required. Required of all theatre majors.

TPA 2204

Stagecraft II: PR: TPA 2200. Restricted to theatre majors or Departmental consent. Continuation of TPA 2200. Production crew as required. Required of all theatre majors.

TPA 2248

Makeup Techniques: PR: THE 1020, 1925, 2300. Restricted to theatre B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Theory and practice of stage makeup. Required of all theatre performance majors.

TPA 3043

AS 3(3,1) Costume History/Design: PR: THE 3111. Restricted to theatre majors or Departmental consent. Lecture/laboratory study of costume and fashion from ancient to modern times. A study of the principal historical periods with an emphasis on basic period silhouette, costume parts and accessories, materials and colors. Required of all technical theatre/design majors.

AS 3(3.0)

AS 3(3.0)

AS 3(3.4)

AS 3(3,4)

AS 2(2.2)

AS 3(3,0) Sociological Social Psychology: PR: SYG 2000, Study of social perception, attitude formation and

TPA 3060

Scenic Design I: PR: TPA 2204 and two semesters of art. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Lecture/laboratory application of the fundamentals of design. composition, color theory, drafting, perspective drawing and rendering as they relate to scenic design. Required of all technical theatre/design majors.

TPA 3061

Scene Design II: PR: TPA 3060. Restricted to B.F.A. technical theatre/design majors or Departmental consent. Continuation of TPA 3061. An intensive, practical scenic design course dealing, with various theatrical styles, genres, multiple and simultaneous settings. Includes script analysis and project design work with an emphasis on visualization of design concepts through models and scenic renderings. Required of all B.F.A. technical theatre/design majors.

TPA 3077

Scene Painting: PR: TPA 2204. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Study of the art and craft of painting for the theatre. Research into period designs and execution of examples selected from a variety of styles. Required of all B.F.A. technical theatre/ design majors.

TPA 3197

Summer Theatre/Tech. Theatre/Design: PR: None. Not restricted to theatre majors but requires Departmental consent. Participation in UCF Summer Theatre Productions.

TPA 3220

Stage Lighting: PR: TPA 2204. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Study of basic electricity, optics, lighting equipment and control, and stage lighting techniques and practices. Service on a lighting crew as required. Required of all technical theatre/ design majors.

TPA 3221

Lighting Design: PR: TPA 3220. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Continuation of Stage TPA 3220. Lecture/laboratory with emphasis on lighting design theory, style and individual lighting design projects. Required of all B.F.A. technical theatre/ design majors.

TPA 3230

Costume Construction: PR: THE 1925. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Lecture/laboratory study of the basic techniques used in the drafting, cutting, fitting, and construction of stage costumes. Required of all technical theatre/design majors.

TPA 3249

Advanced Makeup Techniques: PR: TPP 2248. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Lecture/laboratory study of basic techniques needed for the creation of stage and film prosthetics and masks.

TPA 3250

CADD for Theatre: PR: TPA 3060. Restricted to B.F.A. Technical theatre/design majors or Departmental consent. Projects oriented course covering fundamental material in computer aided drafting and design and its application for Theatre. Required of all technical theatre/design majors.

TPA 3251

Advanced CADD for Theatre: PR; TPA 3250. Restricted to B.F.A. technical theatre/design majors or Departmental consent. Continuation of TPA 3250 with special emphasis placed on 3-Dimensional aspects and applications of computer aided drafting and design for Theatre. Required of all B.F.A. technical theatre/design majors or Departmental consent.

TPA 3290

AS 1(0,20) Theatre Production/Performance I: PR: TPA 2926. Not restricted to theatre majors but requires Departmental consent. Participation in Theatre Production. Required of all B.F.A. technical theatre/ design majors.

TPA 3291

Theatre Production/Performance II: PR: TPA 3290. Not restricted to theatre majors but requires Departmental consent. Participation in Theatre Production. Required of all B.F.A. technical theatre/design majors.

TPA 3601

Stage Management: PR: TPP 2100, THE 2300, TPA 2200, TPA 2204. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Examination of the importance, function, and responsibilities of the stage manager prior to, during and after performance. Introduction to the fundamentals of stage management as related to Departmental productions as well as professional union requirements. Includes prompt books, rehearsal, and performance procedures, and stage management forms and formats. Required of all technical theatre/design majors.

AS 3(2,2)

AS 2(2.0)

AS 1(0,20)

AS 3(2.2)

AS 3(2.2)

AS 2(2.2)

AS 3(0.60)

AS 3(2.2)

AS 3(2.2)

AS 2(2.2)

AS 2(2,0)

AS 2(2,2)

TPA 4049

Costume Design: PR: TPA 2204, 3043 and 2 semesters of art. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Lecture/laboratory application of the fundamentals of design, composition, color theory, and figure drawing as they relate to costume design. Includes script/character analysis and project design work with an emphasis on visualization of design concepts and costume renderings. Required of all B.F.A. technical theatre/design majors.

TPA 4061

Advanced Design: PR: TPA 3061 and 3221 and 4049. Restricted to B.F.A. technical theatre/design majors or Departmental consent. Continuation of design series with emphasis on planning, design, and execution of scenery, lighting, and/or costume designs.

TPA 4293

Theatre Production/Performance III: PR: TPA 3291. Not restricted to theatre majors but requires Departmental consent. Participation in UCF Theatre Productions. Required of all B.F.A. technical theatre/design majors.

TPA 4400

Theatre Management: PR: THE 1020 and TPA 2204. Restricted to theatre majors or Departmental consent. Study of the development, organization, management, funding, and promotion of theatre programs. Additional emphasis placed on management theory and style.

TPA 4940

Technical Theatre/Design Internship: PR: Restricted to B.F.A. technical theatre/design, the internship is subject to Departmental approval. Off-campus internship programs provide opportunity for practical work in professional theatre. Contact the Departmental office for specific requirements. Required of all B.F.A. technical theatre/design majors.

TPP 2100

Introduction to Acting: PR: None. Restricted to theatre majors or Departmental consent. Basic introduction to the fundamentals of acting with emphasis upon the development of imagination, self-awareness, sense memory, improvisation, and the ability to execute basic stage tasks. Required of all theatre majors.

TPP 2170

Acting I - Fundamentals: PR: THE 1020, 1925, 2300, TPP 2100, 2511. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Lecture/laboratory study of the basic principles and techniques of acting, with particular emphasis on characterization and character development. Short scenes will be performed before the class. Required of all theatre performance majors.

TPP 3172

Acting II - Characterization: PR: TPP 3511, 2170. Restricted to B.F.A. theatre performance majors or B.A. theatre majors with Departmental consent. Lecture/laboratory study for advanced work in characterization and character development and basic audition processes. Required of all theatre performance majors.

TPP 3190

Theatre Production/Performance I: PR: THE 2926. Not restricted to theatre majors but requires Departmental consent. Participation in UCF Theatre Productions. Required of all B.FA. theatre performance majors.

TPP 3191

Theatre Production Performance II: PR: TPP 3190. Not restricted to theatre majors but requires Departmental consent. Participation in UCF Theatre Productions. Required of all B.F.A. theatre performance majors.

TPP 3197

Summer Theatre/Performance: PR: None. Not restricted to theatre majors but requires Departmental consent. Participation in UCF Summer Theatre Productions.

TPP 3310

Directing I: PR: THE 1925, 2300, 2925, 3111, 3305, TPP 2100, and TPA 2204. Restricted to theatre majors. Lecture/laboratory study of fundamentals principles and techniques of play direction to include script selection, directorial analysis, casting, composition/picturization, blocking and movement, tempo/rhythm, preparation of prompt scripts, rehearsal planning. Directed short scenes for class presentation and critique. Required of all theatre majors.

TPP 3510

Stage Movement I: PR: None. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Study of physical alignment techniques, centering, warm-ups methods, and exploration of movement dynamics as they relate to acting. Techniques will be drawn from dance, basic tumbling, tai chi chuan, improvisation and pantomime. Essentially a laboratory course. All students must receive a grade of "C" or above to continue in the stage movement sequence. Required of all theatre performance majors.

AS 3(2,2)

AS 1(0,20)

AS 1(0,20)

AS 3(0,60)

AS 3(2,2)

AS 2(2.2)

AS 3(2,2)

AS 3(2,2)

AS 1(0.20)

AS 6(0,40)

AS 3(3.0)

AS 3(3.0)

AS 3(2,2)

TPP 3511

Stage Movement II: PR 3510. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent, Continuation of Stage Movement I. Must be taken sequentially with TPP 3510. All students must receive a grade of "C" or above to continue in the stage movement sequence. Required of all theatre performance majors.

TPP 3512

Stage Movement III: PR: 3511, Restricted to B.F.A. theatre performance majors or Departmental consent. Continuation of Stage Movement II. Attention given to period movement, movement styles and dance. All students must receive a grade of "C" or above to continue in the stage movement sequence. Required of all theatre performance majors.

TPP 3710

Voice Production I: PR: None. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Essentially a laboratory study of principles and practice of the effective speaking or stage voice. Extensive practice in body reinforcement, voice production, placement, resonation, articulation, vowel and consonant formation. Begin work on students' individual speech problems. All students must receive a grade of "C" or above to continue in the voice production sequence. Required of all theatre performance majors.

TPP 3711

Voice Production II: PR: TPP 3710. Restricted to B.F.A. theatre majors or B.A. theatre majors with Departmental consent. Continuation of Voice Production I with continued emphasis on corrective coaching of individual speech problems. Must be taken sequentially with TPP 3710. All students must receive a grade of "C" or above to continue in the voice production sequence. Required of all theatre performance majors.

TPP 3712

Voice Production III: PR: TPP 3711, Restricted to B.F.A, theatre performance majors or Departmental consent. Continuation of Voice Production II. Emphasis placed on the unique demands of the communication of dramatic verse text. Particular attention given to diction and the use of emphasis to illuminate poetic language. All students must receive a grade of "C" or above to continue in the voice production sequence. Required of all theatre performance majors.

TPP 3730

Voice Production IV/Dialects: PR: TPP 3712. Restricted to B.F.A. performance majors or Departmental consent. Continuation of Voice Production III with increased emphasis placed on individual practice and development. Additional emphasis placed on the analysis and sounds of foreign dialects and regional accents. Students also learn to vary stage voice for age and character roles. Must be taken sequentially with TPP 3712. Required of all B.F.A. theatre performance majors.

TPP 4140

Acting III - Verse: PR: THE 3110, TPP 3512, TPP 3712. Restricted to B.F.A. theatre performance majors or Department consent. Class/laboratory study concentration on verse drama with particular emphasis placed on scansion and verse in the plays of William Shakespeare. Required of all B.F. A. theatre performance majors.

TPP 4142

Acting IV - Studio I: PR: TPP 3730, 4140, 4531. Restricted to B.F.A. theatre performance majors or Departmental consent. Lecture/laboratory study designed to expose the student to various acting, styles and plays from classical through postrealism. Emphasis on development of student's virtuosity. All students must receive a grade of "C" or above to continue in the sequence. Required of all B.F.A. theatre performance majors.

TPP 4192

Theatre Production/Performance III: PR: TPP 3191. Not restricted to theatre majors but requires Departmental consent. Participation in UCF theatre productions. Required of all B.F.A. theatre performance majors.

TPP 4193

Theatre Production/Performance IV: PR: TPP 4192. Not restricted to theatre majors but requires Departmental consent. Participation in UCF theatre productions. Required of all B.F.A. theatre performance majors.

TPP 4260

Acting for TV/Film: PR: TPP 4142. Restricted to B.F.A. theatre performance majors or Departmental consent. Lecture/laboratory study designed to expose the student to practical techniques of television and film acting. Extensive studio work. Required of all B.F.A. theatre performance majors or Departmental consent.

TPP 4311

Advanced Directing: PR: TPP 3172, 3191, 3712, 3310 (minimum 3.5 course grade in TPP 3310). Experience as a stage manager and directorial assistant for Departmental mainstage productions and Departmental consent. Restricted to B.F.A. theatre performance majors. Practical experience directing Workshop Theatre production. Restricted to B.F.A. theatre performance majors.

AS 2(2.2)

AS 2(2.2)

AS 2(2.2)

AS 2(2.2)

AS 2(2.2)

AS 2(2.2)

AS 3(2.2)

AS 3(2,2)

AS 1(0,20)

AS 1(0,20)

AS 2(2.2)

AS 3(2,2)

352

TPP 4531

Stage Movement IV: PR: 3572. Restricted to B.F.A. theatre performance majors or Departmental consent. Continuation of Stage Movement III. Attention given to stage combat. Must be taken sequentially with TPP 3512. Required of all B.F.A. theatre performance.

TPP 4940

Theatre Performance Internship: PR: Restricted to B.F.A. theatre performance majors, the internship is subject to Departmental approval. Off-campus internship programs provide opportunity for practical work in professional theatre. Contact the Departmental office for specific requirements. Required of all B.F.A. theatre performance majors.

TSL 5140

Strategies: This course will survey cross-cultural communication and understanding, testing and evaluation, curriculum and methods of teaching ESOL to meet the needs of limited English proficient students.

TLS 5142

Critical Approaches to ESOL: Analysis, planning, design, and evaluation of curriculum and curricular models.

TSL 5250

Applied Linguistics: Applying linguistics, psycholinguistics, and sociolinguistics to teaching English as a second language with emphasis on pronunciation, intonation, structural analysis, morphophonemics, and decoding from print to sound.

TSL 5345

Methods of ESOL Teaching: This course is designed to develop understanding, knowledge and skills of the current methods used in the teaching of ESOL.

TSI 5440

AS 3(3,0) Problems in Evaluation in ESOL: Survey, selection, and design of instruments of evaluation for use with limited English proficients students.

TSL 5525

ESOL Cultural Diversity: This course is designed to identify major cultural groups represented by the LEP population in Florida schools and to understand their special needs.

TTE 4004

Transportation Engineering: PR: EGN 3613 and STA 3032. Investigation of highway, rail, water, and transportation systems. Systems approach to planning, design, construction, operation and administration of transportation networks.

TTE 4601C

Urban Systems Design: PR: TTE 4004. Project course on design of transportation and urban systems using engineering design methodologies.

TTE 5204

Traffic Engineering: PR: TTE 4004. Study of operator and vehicle characteristics, and design for street capacity, signals, signs, and markings.

TTE 5205

Highway Capacity and Traffic Flow Analysis: PR: TTE 4004. Highway capacity for all functional classes of highway. Traffic signalization including traffic studies, warrants, cycle length, timing, phasing and coordination.

TTE 5206

Traffic Flow Theory and Applications: PR: TTE 4004 and STA 3032. Fundamental theories and applications of traffic movements on highways and streets.

TTE 5700

Railroad Engineering: PR: TTE 4004 and C.I. The major technical factors in location, construction, maintenance, and operation of railroad transportation systems.

TTE 5805

Geometric Design of Transportation Systems: PR: TTE 4004. Study of geometric and construction design elements in the engineering of transportation systems.

TTE 5835

Pavement Design: PR: CEG 4101C. Pavement types, wheel loads, stresses in pavement components design factors such as traffic configurations, environment, and economy,

VIC 3000

Visual Communication: A study of the visual system of man and the influences of the visual media on modern society.

ZOO 2010C

General Zoology: PR: High school biology or C.I. Introduction to zoology; structure, function and representative groups; current concepts in zoological sciences. Open only to students whose major requires this specific course.

EN 3(3.0)

EN 3(3.0)

EN 3(3.0)

EN 3(3.0)

AS 3(3.0)

AS 4(2,4)

AS 2(2.2)

AS 6(0.40)

AS 3(3.0)

ED 3(3,0)

AS 3(3.0)

3

EN 4(4.0) EN 2(1.2)

EN 3(3.0)

EN 3(3.0)

ED 3(3,0)

ZOO 3303C

Vertebrate Zoology: PR: 6 hours of zoology or C.I. Evolution and classification followed by an introduction to vertebrate ecology, natural history, and behavior.

AS 4(2.6)

AS 5(3.6)

HPA 4(3.3)

AS 4(3.3)

AS 5(3.4)

HPA 5(4.4)

AS 4(2.8)

AS 4(2.6)

AS 4(2.6)

AS 4(2,6)

HPA 4(3,3)

AS 4(4.0)

ZOO 3713C

Comparative Vertebrate Anatomy: PR: ZOO 2010C. The vertebrate animals, relationships of organs and systems, and their phylogenetic significance.

ZOO 3733C

Human Anatomy: PR: BSC 2010C or equivalent. Structure of the human body.

700 42030

Invertebrate Zoology: PR: 8 hours of biology or C.I. Taxonomy, anatomy and ecology of the invertebrate animals.

ZOO 4603C

Embryology/Development: PR: 8 hours of biology or C.I. Concepts of developmental processes. Emphasis on embryology of vertebrates.

ZOO 4753C

Vertebrate Histology: PR: BSC 201 OC and ZOO 201 OC. Microanatomical detail plus appropriate developmental and functional considerations of major cell types, primary tissues, organs, and organ systems. Survey of modern animal-tissue microtechnique.

ZOO 4880C

Fisheries Management: PR: ZOO 2010C or C.I. Fisheries Management of freshwater environments to include identification, sampling methods, farming and hatchery operations, propagation and population estimates.

ZOO 5456C

Ichthyology: PR: ZOO 3303C or C.I. Introduction to the biology of the fishes, their classification, evolution, and life histories.

ZOO 5463C

Herpetology: PR: 6 hours of zoology or C.I. Introduction to the biology of the amphibians and reptiles, their classification, evolution, and life histories.

ZOO 5475C AS 4(2,6) Ornithology: PR: 6 hours of zoology or C.I. Introduction to the biology of birds, their classification, evolution, and life histories.

ZOO 5486C

Mammalogy: PR: 6 hours of zoology or C.I. Introduction to the biology of mammals, their classification, evolution, and life histories.

ZOO 5745C

Essentials of Neuroanatomy: PR: Human/Comparative Anatomy, or Human/Animal Physiology or C.I. Fundamental concepts of both morphological and functional organization of the nervous system. Primary emphasis on human structure.

ZOO 5815

Zoogeography: PR: 8 hours of zoology or C.I. Principles and concepts concerning regional patterns of animal distributions of the world, both past and present.

FACULTY

The date indicates the first year of employment at the University of Central Florida. ABBOTT, DAVID W., Professor of Psychology (1968), B.A., M.S., Ph.D. (University of Massachusetts) ABEL, EILEEN M., Assistant Professor of Social Work (1978), A.B., M.S.W. (University of Maryland) ABRAMOWITZ, BENJAMIN L., Instructor of Management (1983), M.B.A. (George Washington University) ACIERNO, LOUIS J., Professor of Health Sciences (Cardiopulmonary Science) (1981), B.S., M.D. (Georgetown University) ADICKS, RICHARD R., Professor of English (1968), B.A.E., M.A., Ph.D. (Tulane University) AL-DEEK, HAITHAM M., Assistant Professor of Engineering (1992) B.C.E., M.S., Ph.D. (University of California at Berkeley) ALLEN, JANET S., Visiting Instructor, Instructional Programs (1992), B.S., M.Ed. (University of Maine) ALLEN, JEFFERY W., Assistant Professor of Marketing (1990), B.S., M.B.A., D.B.A. (University of Kentucky) ALLEN, KAY WILLIAMSON, Assistant Professor of Education (1990), B.S., M.Ed., Ph.D. (University of South Carolina) ALLISON, ANNE MARIE, Director of Libraries (1983), B.A., M.A.L.S. (Rosary College) ALY, KHALED A., Assistant Professor of Engineering (1993), B.S., M.S., Ph.D. (University of NY-Buffalo) AMADOR, MARCOS A., Senior Chief Instructor Army ROTC ANDERSON, B. BETTY, Professor of Education (1968), B.A., M.A., Ed.D. (University of Maryland) ANDERSON, HENRY R., Professor of Accounting (1983), B.A., M.S., PhD. (University of Missouri - Columbia), C.P.A., C.M.A., C.C.A. ANDERSON, LOREN A., Associate Professor of Engineering (1982), B.S., M.S.E., Ph.D. (University of Dayton), P.E. (Florida and Ohio) ANDREWS, JOSEPH C., Head, Collection Development and Acquisitions Department and Associate University Librarian (1988), B.A., M.A., M.L.S. (North Carolina Central University) ANDREWS, LARRY C., Professor of Mathematics and Electrical and Computer Engineering (1972), B.S., M.S., Ph.D. (Michigan State University) ANTHONY, JOBY M., Associate Professor of Mathematics (1970), B.S., M.A.M., Ph.D. (North Carolina State University) ARISTIQUETA, MARIA P., Instructor of Public Administration (1988), B.S.W., M.P.A., (University of South Florida) ARMACOST, ROBERT L., Assistant Professor of Engineering (1991), B.S., M.S.O.R., D.Sc. (George Washington University) ARMSTRONG, JOHN H., Interim Chair, Instructional Programs and Associate Professor of Education (1970), B.S., M.S., Ed.D. (Oklahoma State University) ARMSTRONG, LEE H., Professor of Mathematics (1968), B.A., M.S., Ph.D. (Florida State University) ARNOLD, ROBERT L., Director of Instructional Resources and Professor of Communication (1968), B.A., M.A., Ph.D. (Ohio University) ASHLEY, ROBERT A., Assistant Professor of Hospitality Management (1984), B.S., M.S., (Florida International University) ASTRO, RICHARD, Professor of English (1986), B.A., M.A., Ph.D. (University of Washington) ATKINSON, STANLEY M., Associate Professor of Finance (1981), B.B.A. M.B.A., D.B.A. (Mississippi State University)

AZIMI, CYRUS, Visiting Instructor of Psychology (1985), B.S., M.A., Ph.D. (Michigan State) BACH, SUSAN A., Visiting Assistant Professor of Hospitality Management (1993), B.S., M.A., Ph.D. (New York University) BAILEY, CHARLES D., Professor of Accounting (1991), B.B.A., M.B.A., M.P.A., Ph.D. (Georgia State University) BAILEY, REBECCA A., Associate Professor of Education (1988), B.S., M.A., Ph.D. (Florida State University) BAIN, JANICE W., Head, Access Services Department and University Librarian (1986), B.A., M.L.S. (University of Maryland) BALADO, CARL, Associate Professor of Education (1987), B.A., M.S., M.Ed., Ed.D. (Florida Atlantic University) BALLARD, R. ROCHELLE, Associate University Librarian (1989), B.S., M.L.S. (University of Maryland) BANDY, DALTON D., Director, School of Accounting, Professor of Accounting (1985), B.S., M.B.A., Ph.D. (The University of Texas at Austin), C.P.A. BANKS, IVAN W., Assistant Professor, Educational Foundations (1992), B.A., M.Ed., Ed.D. (University of Kentucky) BARNES, BETH, Associate Professor of English (1975), B.A., M.A., Ph.D. (University of North Carolina at Chapel Hill) BARR, CAROL J., Director of Health Information Management and Instructor of Health Sciences (Health Information Management) (1986), B.S., M.A. (University of Central Florida) BARSCH, KARL-HEINRICH, Associate Professor of Foreign Languages and Literatures (1977), B.A., M.A., Ph.D. (University of Colorado) BASSIOUNI, MOSTAFA, Associate Professor of Computer Science (1981), B.S., M.S., Ph.D. (Pennsylvania State University) BAST, CAROL M., Assistant Professor of Legal Studies (1992), B.A., M.A., J.D. (New York Law School) BATARSEH, ISSA E., Assistant Professor of Engineering (1991), B.S., M.S., Ph.D. (University of Illinois at Chicago) BAUER, CHRISTIAN S., JR., Director of External Relations, College of Engineering, and Professor of Engineering (1970), B.S.I.E., M.S.E., Ph.D. (University of Florida), P.E. (Florida) BAUMBACH, DONNA J., Professor of Education (1978), B.S., M.S., Ed.D. (Indiana University) BAZEMORE, NORRIS S., Associate University Librarian (1984), B.A., M.A., M.L.S. (University of South Carolina) **BEADLE, JAMES S., Associate Professor of Education** (1968), B.S., M.S., Ph.D. (Michigan State University) BECK, JAMES K., Director of Undergraduate Affairs, College of Engineering, and Associate Professor of Engineering (1970), B.S.A.E., M.S.E. (University of Central Florida), P.E. (Florida) BECK, KENNETH M., Assistant Professor of Chemistry (1991), B.A., M.S., Ph.D. (University of Illinois at Chicago) BECKER, DONALD C., Assistant Professor of Criminal Justice (1976), B.A., M.Ed. (Wayne State University) BELKERDID, MADJID A., Associate Professor of Engineering (1979), B.S.E., M.S.E., Ph.D. (University of Central Florida), P.E. (Florida) BELL, KATHLEEN, Associate Professor of English (1991), B.S., M.Ed., Ph.D. (Arizona State) BELL, MARTHA, Associate Professor of Education (1989), B.A., M.A., Ed.S., Ph.D. (University of Florida) **BENSON, CYNTHIA, Instructor of Political Science** (1985), B.S., M.A. (Ohio University) BERGNER, JOHN F., JR., Professor of Health Sciences (1975), B.S., M.S.P.H., Ph.D., M.P.H. (University of North Carolina) BERRINGER, ORVILLE M., Professor of Molecular Biology and Microbiology (1981), B.S., M.S., Ph.D. (University of Oregon)

BIEGEL, JOHN E., Professor of Engineering (1982), B.S.I.E., M.S.E.S., Ph.D. (Syracuse University), P.E. (Florida) BIRAIMAH, KAREN L., Associate Professor of Education (1985), B.A., M.A., M.S.Ed., Ph.D. (State University of New York at Buffalo) BISHOP, PATRICIA J., Director of Graduate Studies and Professor of Engineering (1978), B.S.E., M.S.M.E., Ph.D. (Purdue University), P.E. (Florida) BLAIR, TIMOTHY R., Professor of Education (1991), B.S., M.S., Ph.D. (University of Illinois) BLAU, BURTON I., Associate Professor of Psychology (1972), B.A., M.A., Ph.D. (Southern Illinois University) BLEDSOE, ROBERT L., Chair and Professor of Political Science (1968), B.A., M.A., Ph.D. (University of Florida) BLOCK, DAVID L., Director, Florida Solar Energy Center and Professor of Engineering (1968), B.S., M.S., Ph.D. (Virginia Polytechnic Institute), P.E. (Florida) BLUM, RICHARD A., Professor of Communication (1993), B.A., M.S., Ph.D. (University of Southern California) BLUME, DELORYS M., Associate Professor of Education (1972), B.S., M.A., Ed.S., Ed.D. (University of Florida) BOGUMIL, WALTER A., JR., Associate Professor of Management (1972), B.S., M.B.A., Ph.D. (University of Georgia) BOJACK, JOCELYN C., Instructor of Marketing (1988), B.B.A., M.B.A. (Delta State University) **BOLEMON, JAY S., Associate Professor of Physics** (1968), B.S., Ph.D. (University of South Carolina) BOLLET, ROBERT M., Chair, Educational Services and Associate Professor of Education (1973), B.S., M.S., Ed.D. (Ball State University) BOLTE, JOHN R., Vice President, Administration and Finance and Professor of Physics (1968), B.A., M.A., M.S., Ph.D. (State University of Iowa) BORDE, STEPHEN, Assistant Professor of Finance (1994), B.P.S., M.B.A., Ph.D. (Florida Atlantic University) BOREMEN, GLENN D., Associate Professor of Engineering (1984), B.S., M.S., Ph.D. (University of Arizona), P.E. (Florida) BOSE, SUBIR K., Professor of Physics (1987), B.Sc., M.Sc., Ph.D. (University of Allahabad) BOYER, DOROTHY M., Assistant Professor of Social Work (1990), A.B., M.S.W., M.P.H. (University of Pittsburgh) BOYTE, JUDITH P., Director, Office of Academic Support and Information Services (1984), B.A., M.P.A. (University of Central Florida) **BOZEMAN, WILLIAM C., Professor of Education** (1985), B.A., M.Ed., Ph.D. (University of Wisconsin) BRAIN, PRISCILLA V., Instructor in English (1984), B.A., M.A. (University of Central Florida) BRAUN, BRADLEY M., Associate Professor of Economics (1986), B.S., M.A., Ph.D. (Tulane University) BRAY, DENNIS W., Assistant Professor of Military Science (1989), B.S. (Arizona State University) **BRENNAN, JOHN J., Professor of Physics** (1968), B.S., M.S., Ph.D. (Georgia Institute of Technology) BRETT, DAWN I., Instructor of Social Work (1992), B.S., M.S.W., D.S.W. (University of California at Berkeley) BRIGHAM, ROBERT C., Professor of Mathematics and Computer Science (1970), B.S., M.S., PhD. (New York University) BRODIE, LYMAN A., Chair, Department of Music and Associate Professor or Music (1990), B.A., M.M.E. (North Texas State University) BROPHY, JAMES C., Associate Professor of Psychology (1969), B.A., Ph.D. (Vanderbilt University) BROWN, HAROLD K., Assistant Professor of Engineering (1985), B.S., M.S., Ph.D. (Ohio State University) BROWNE-KRIMSLEY, VALERIE A., Coordinator and Assistant Professor - Brevard Campus (1989), M.A. (New York University)

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STOUT, I. JACK, Professor of Biology (1972), B.S., M.S., Ph.D. (Washington State University) STRANGE, C. CLINTON JR., Lecturer in Engineering Technology (1986), B.I.E., M.S.E. (University of Central Florida), E.I. (Georgia) DIE DIE AN ALL DE SUH, EDWARD K., Associate Professor of Social Work (1985), B.A., M.A., M.S.W., Ph.D. (Brandeis University) SULLIVAN, TIMOTHY J., Associate Professor of Education (1971), B.A., M.A., Ed.D. (Northern Illinois University) SUNDARAM, KALPATHY B., Associate Professor of Engineering Science (1987), B.S., B.E., M.T., Ph.D. (Indian Institute of Technology, Bombay) SUNG, STELLA, Assistant Professor of Music (1991), B.A., M.F.A., D.M.A. (University of Texas at Austin) LOW PARTY NO. 1 TO STATE SUTTON, LINDA J., Associate University Librarian (1988), B.A., M.L.S. (Florida State University) SWART, WILLIAM W., Chair, Department of Industrial Engineering and Management Systems and Professor of Engineering (1985), B.S., M.S., Ph.D. (Georgia Institute of Technology), P.E. (Florida) SWEENEY, MICHAEL J., Chair of Health Sciences and Professor of Molecular Biology and Microbiology (1972), B.S., Ph.D. (Temple University School of Medicine) SWEET, HAVEN C., Professor of Biology (1971), B.S., Ph.D. (Syracuse University) TALBOTT, RICHARD E., Associate Dean, College of Health and Public Affairs and Professor of Communicative Disorders (1993), B.S., M.S., Ph.D. (University of Oklahoma) TAN, JUSTIN, Assistant Professor of Management (1992), B.B.A., M.A. (Kansas State University) TANZI, LAWRENCE A., Associate Professor of Communication (1969), B.S.M.E., Ph.D. (Indiana University) TAYLOR, FINLEY M., Assistant Professor of Foreign Languages and Literatures (1970), A.B.; M.A., Ph.D. (University of Tennessee) TAYLOR, JAMES S., Director Environmental Systems Engineering Institute and Professor of Engineering (1977), B.S.I.E., M.S., Ph.D. (University of Florida), P.E. (Florida) (1970) R A. Ph.D. (Indiana University) (1970), B.A., Ph.D. (Indiana University) TAYLOR, MICHAEL D., Professor of Mathematics (1968), B.A., M.S., Ph.D. (Florida State University) TAYLOR, WALTER K., Professor of Biology (1969), B.S., M.S., Ph.D. (Arizona State University) TEEPLE, EUGENE E., Professor of Marketing (1968), B.S., M.B.A., D.B.A. (University of Oregon) TELL, PHILLIP M., Associate Professor of Psychology (1969), B.A., M.A., Ph.D. (University of Virginia) THOMAS, MARGARET H., Interim Chair, Department of Psychology and Professor of Psychology (1971), B.A., M.A., Ph.D. (Tulane University) THOMPSON, RICHARD A., Professor of Education (1969), B.S., M.S., Ed.D. (Ball State University) THOMSON, DOUGLAS R., Assistant Professor of Military Science (1989), B.A., M.A., M.A. (University of Central Florida) (1989), B.A., M.A., M.A. (University of Central Florida) THORNTON, DEBORAH P., Visiting Assistant Professor of Molecular Biology and Microbiology (1989), B.S., M.Ed. (University of North Carolina) TREFONAS, LOUIS M., Professor of Chemistry (1981), B.A., M.S., Ph.D. (University of Minnesota) TRIMBLE, JOHN L., Visiting Assistant Professor of Finance (1990), B.S., M.A., Ph.D. (Texas A&M University)

TUBBS, LeVESTER, Vice President for Student Affairs and Associate Professor of Education (1980), B.S., M.S., Ed.D. (University of Missouri-Columbia) TUCKER, RICHARD D., Professor of Psychology (1972), A.B., M.A., Ph.D. (Emory University) TURNAGE, JANET J., Professor of Psychology (1981), B.A., M.S., Ph.D. (Iowa State University) TZANNES, NICOLAOS S., Chair, Department of Electrical and Computer Engineering, Professor of Engineering (1986), B.E.E., M.E.E., Ph.D. (The Johns Hopkins University) UMPHREY, ROBERT E., Professor of English (1970), B.A., M.A., Ph.D. (University of Washington) UTT, HAROLD A., Jr., Assistant Professor of Communcative Disorders (1981), M.S., Ph.D. (Florida State University) VAJRAVELU, KUPPALAPALLE, Associate Professor of Mathematics and Mechanical and Aerospace Engineering (1984), B.A., M.S., Ph.D. (Indian Institute of Technology) VAN STRYLAND, ERIC W., Professor of Physics (1987), B.S., Ph.D. (University of Arizona) VAZQUEZ, EMIL C., Assistant Professor of Engineering Technology (1987), B.S.E.E., M.B.A., (InterAmerican University), P.E. (Florida) VEIT, MARCIA R., Instructor of Accounting (1980), B.A., M.B.A. (University of Arkansas), C.P.A. VELEZ, DIANA, Assistant Dean, College of Arts and Sciences (1991), B.A., Ph.D. (Princeton University) VEMULAPATI, UDAYA, Assistant Professor of Computer Science (1990), B.S., Ph.D. (Pennsylvania State University) VENTRE, GERARD G., Associate Professor of Engineering (1969), As.E., M.S., Ph.D. (University of Cincinnati), P.E. (Florida) VICKERS, DAVID H., Acting Chair Department of Biology and Associate Professor of Biology (1969), B.S., M.S., Ph.D. (Louisiana State University) VITTES, M. ELLIIOT, Associate Professor of Political Science (1983), B.A., M.A., Ph.D. (University of Massachusetts) WAHID, PARVEEN F., Associate Professor of Engineering Science (1984), B.S., M.S., Ph.D. (Indian Institute of Science, Bangalore) WAHLMAN, MAUDE, Professor of Art (1985), B.A., M.A., M.Phil., Ph.D. (Yale University) WALLACE, RONALD L., Associate Professor of Anthropology (1975), B.A., M.A., Ph.D. (University of Florida) WALTERS, CHERYL D., Assistant University LIbrarian (1987), B.A., M.L.S. (University of South Florida) WALTERS, JOHN S., Associate University Librarian (1990), B.S., M.A. (Pennsylvania University) WANG, ALVIN Y., Associate Chair and Associate Professor of Psychology (1987), B.A., Ph.D. (State University of New York at Stony Brook) WANG, MORGAN, Assistant Professor of Statistics (1991), B.S., M.S., Ph.D. (Iowa State University) WANIELISTA, MARTIN P., Dean, College of Engineering and Professor of Engineering (1970), B.S.C.E., M.S., Ph.D. (Cornell University), P.E. (Florida) WARD, JEANETTE A., Head, Serials Department and University Librarian (1984), B.S., M.L.S. (Rutgers University) WASHINGTON, DAVID W., Associate Professor of Molecular Biology and Microbiology (1974), B.S., M.S., Ph.D. (Texas A&M University) WAYSON, ROGER L., Assistant Professor of Engineering (1990), B.E.S., M.S., Ph.D. (Vanderbilt) P.E. (Texas, Tennessee, Florida) WEAVER, WILLIAM C., Associate Professor in Finance (1990), B.S., M.B.A., Ph.D. (Georgia State University)

WEEKS, ARTHUR R., Assistant Professor of Engineering (1989), B.S.E., M.S.E., Ph.D. (University of Central Florida) WEIDER-HATFIELD, DEBORAH, Professor of Communication (1990), A.B., M.A., Ph.D. (Purdue University) WELCH, JUDITH K., Associate Professor of Accounting (1988), B.A., M.B.A., Ph.D. (Florida State University) WELCH, PAUL R., Associate Professor of Accounting (1988), B.S., M.B.A., Ph.D. (University of Florida) WELKE, JAMES W., Director, School of Communication and Professor of Communication (1986), A.B., M.A., Ph.D. (Indiana University) WELKER, PATRICIA E., Instructor of Health Sciences (Radiologic-Sciences) (1986), A.S., B.S., M.A. (Idaho State University) WELLMAN, CHARLES W., Professor of Art (1971), B.F.A., M.A., M.F.A. (The University of New Mexico) WEST, GAIL M., Visiting Professor, Instructional Programs (1991), B.A., M.A., Ph.D. (Florida State University) WHISLER, BRUCE A., Assistant Dean, College of Arts and Sciences and Associate Professor of Music (1971), B.A., Ph.D. (University of Rochester) WHITE, DANIEL R., Associate Professor of Humanities (1988), B.A., M.A., Ph.D. (Florida State University) WHITE, ROSEANN S., Professor of Molecular Biology and Microbiology (1969), B.S., Ph.D. (University of Texas) WHITEHOUSE, GARY E., Provost and Vice President for Academic Affairs and Professor of Engineering (1978), B.S.I.E., M.S.I.E., Ph.D. (Arizona State University), P.E. (Florida, Pennsylvania) WHITNEY, JOHN C., Director of Orchestral Activities and Professor of Music (1982), B.S., M.M. (New England Conservatory) WHITTIER, HENRY O., Professor of Biology (1968), B.S.Ed., M.A., Ph.D. (Columbia University) WIGMORE, MARY ANN, Visiting Instructor of Accounting (1992), M.S.T. (University of Central Florida) WILDMAN-PEPE, JULIE L., Assistant in Statistical Consulting (1984), B.A., M.S. (Purdue University) WILLIAMS, FJELDHEIM, KARRI J., Associate Professor, College of Education (1984), B.S., M.Ed., Ph.D. (University of Arizona) WINK, DIANE M., Associate Professor of Nursing (1987), B.S., M.A., M.S.N., Ed.D., (University of Central Florida) WODZINSKI, RUDY J., Professor of Molecular Biology and Microbiology (1970), B.S., M.S., Ph.D. (University of Wisconsin) WOELK, MARTHA D., Visiting Instructor of History (1990), B.A., M.A. (University of Central Florida) WOLF, J. GARY, Distinguished Service Professor of Music (1972), B.M.Ed., M.M., D.M.A. (Eastman School of Music) WOOD, ALEXANDER T., Associate Professor of Education (1969), B.A., M.S., Ph.D. (Florida State University) WOOTEN, WILLIAM, Associate Professor of Psychology (1985), B.A., M.S., Ph.D. (Memphis State University) WORBS, HELMUTH E., Associate Professor of Engineering Technology (1978), B.S.M.E., M.S.M.E. (Stanford University), P.E. (Florida, California) WORKMAN, DAVID A., Associate Professor of Computer Science (1976), B.S., M.S., Ph.D. (University of Iowa) WORRELL, LEWIS T., Associate Professor of Health Sciences (Cardiopulmonary Sciences, (1976), B.S., M.P.H. (University of Central Florida) WRANCHER, ELIZABETH A., Associate Professor of Music (1974), B.M. (Indiana University), Prima Soprano Koblenz, Augsburg and Detmoid WYATT, WYATT, Professor of English (1970), B.A., M.A. (Columbia University)

WYCOFF, EDGAR B., Associate Professor of Communication (1972), B.S., M.B.A., Ph.D. (Florida State University) XANDER, JAMES A., Associate Professor of Economics (1969), B.S., Ph.D. (University of Georgia) YARBROUGH, PATRICIA, Chair and Professor of Physical Therapy (1992), P.T., M.P.H., Ph.D. (Georgia State University) YON, DONNA L., Assistant Professor of Accounting (1984), B.S., M.Acc., Ph.D. (Texas A&M University) YONETANI, AYAKO, Assistant Professor of Music (1993), B.M., M.M., D.M.A. (Julliard School of Music) YOUMANS, KAREN G., Instructor of Health Sciences (Health Information Management) (1990), A.A.S., B.A., M.P.A. (Golden State University) YOUSEF, YOUSEF A., Professor of Engineering (1970), B.S.C.E., M.S., Ph.D. (University of Texas), P.E. (Florida, Texas) YUAN, JIANN S., Assistant Professor of Engineering (1989), B.S.E., M.S.E., Ph.D. (University of Florida) ZAYED, AHMED I., Professor of Mathematics (1990), B.S., M.S., Ph.D. (University of Wisconsin) FACULTY AND ADMINISTRATON EMERITI BAKER, GRAEME L. (1968), B.S., M.S., Ph.D. (Montana State University) Professor Emeritus of Chemistry **BARR-JOHNSON, VIRGINIA** (1971), B.A., M.Ed., Ph.D. (Florida State University) Professor Emeritus of Education **BROWN, WILLIAM R** (1972), B.S., M.S., Ph.D. (Purdue University) Professor Emeritus of Sociology BROWNE, ROLAND A. ROWNE, ROLAND A. (1968), B.A.M.A., C.E.F. (Queen's University, Canada) N.S. T. Materials of Canada Barrela Professor Emeritus of English COLBOURN, TREVOR (1978), B.A., A.M., M.A., Ph.D. (The Johns Hopkins University) President Emeritus and Professor of History President Emeritus and Professor of History (1968), B.S., M.S., Ph.D. (Ohio State University) Professor Emeritus of Management **OX, ELAINE B.** (1973), B.S., M.A.T., Ph.D. (Florida State University) Professor Emeritus of Education COMISH, NEWEL W. COX. ELAINE B. Professor Emeritus of Education RAIG, ALBERT (1970), B.S., M.A., Ed.D. (Florida State University) CRAIG, ALBERT Professor Emeritus of Education UTTON, ARTHUR M. (1968), B.S., Ph.D. (Iowa State University) DUTTON, ARTHUR M. Professor Emeritus of Statistics LLIS, LESLIE L. (1968), B.S., M.S., Ph.D. (University of Oklahoma) Professor Emeritus of Biology RICKSON, ERNEST E. ELLIS, LESLIE L. ERICKSON, ERNEST E. (1969), B.E.E., M.S.E., Ph.D. (University of Florida), P.E. (Florida) Professor Emeritus of Engineering ESLER, WILLIAM K. (1968), B.A.Ed., M.A.Ed., Ph.D. (Kent State University) Professor Emeritus of Education FOWLER, EARL C. (1970), B.S.Ed., M.Ed., Ed.D. (University of Akron) Professor Emeritus of Education GREEN, HAROLD E. (1968), B.S., M.Ed., Ed.D. (University of Missouri) Professor Emeritus of Education and Director, Daytona Beach Campus

GRIFFITH, HAROLD L. (1972), B.S., M.S. (Pennsylvania State University), P.E. (Florida) Professor Emeritus of Engineering Technology HARDEN, RICHARD C. (1967), B.M.E., B.E.E., M.S.E., Ph.D. (University of Florida), P.E. (Florida) Professor Emeritus of Engineering and Director, South Orlando Campus HUBLER, J. W. (1967), B.S.C.E., C.E., M.S.E., M.S.C.E. (Yale University), D.Eng. S. (Hon.) (University of Central Florida), P.E. (Florida and 18 other states) Professor Emeritus of Engineering Technology JENKINS, DAVID R. (1969), B.S.C.E., M.S.E.M., Ph.D. (University of Michigan), P.E. (Ohio, Florida) Professor Emeritus of Engineering LYTLE, ERNEST J.* (1968), B.S., M.A., Ph.D. (University of Florida) Professor Emeritus of Mathematical Sciences McGEE, NANCY R.* (1970), B.S., M.A. Ed.D. (Florida Atlantic University) Distinguished Professor Emeritus of Education McLELLON, WALDRON M. (1969), B.S., B.C.E., M.C.E., M.S. (Physics), M.S. (Env. Engr.), Ph.D. (Rensselaer Polytechnic Institute) Professor Emeritus of Engineering MILLER, CALVIN C. (1967), B.A., M.Ed., Ed.D. (Florida State University) Dean and Professor Emeritus of Education MILLER, ERNEST E. (1968), B.S., M.S., Ed.D. (University of North Dakota) Professor Emeritus of Education MILLICAN, CHARLES N. (1965), B.S., M.A., Ph.D. (University of Florida) President Emeritus and Professor of Finance **OSTLE, BERNARD** (1967), B.A., M.A., Ph.D. (Iowa State University) Professor Emeritus of Statistics **REIDENBACH, RICHARD C.** (1970), B.A., M.S., Ph.D. (St. Louis University) Professor Emeritus of Management SCHRADER, GEORGE F. (1969), B.S., M.S., Ph.D. (University of Illinois), P.E. (Florida, Illinois) Professor Emeritus of Engineering **TESORI, ANTHONY P.** (1970), B.S., M.A., Ed.D. (New York University) Professor Emeritus of Education and Director Brevard Campus TOWLE, HERBERT C. (1970), B.S.E., M.S.E., Ph.D. (University of Michigan), P.E. (Florida, New York) Professor Emeritus of Engineering UNKOVIC, CHARLES M. (1968), B.A., M.A., Ph.D. (University of Pittsburgh) Professor Emeritus of Sociology WALKER, LYNN W. (1967), B.A., M.A. (Florida State University) Director Emeritus of Libraries WRIGHT, BURTON (1970), B.S., M.S., Ph.D. (Florida State University) Professor Emeritus of Sociology (1975), B.S., M.S. (University of Minnesota) YAROSH, MARVIN M. Associate Director Emeritus of the Florida Solar Energy Center *Deceased

HONORARY DEGREES AWARDED

December, 1969 Kurt H. Debus, Doctor of Engineering Science William H. Dial, Doctor of Commercial Science June, 1970 John W. Young, Doctor of Applied Science Louis C. Murray, Doctor of Public Service March, 1973 August, 1974 Fred Elmo Clayton, Doctor of Professional Engineering August, 1978 Richard F. Livingston, Doctor of Business Administration June, 1979 Albert F. Hegenberger, Doctor of Engineering Science Lee R. Scherer, Doctor of Engineering Science December, 1979 Joseph D. Duffey, Doctor of Humane Letters Thelma Vivian Jackson Dudley, Doctor of Humanities August, 1980 Howard Phillips (Posthumous), Doctor of Public Service December, 1981 Gene Burns, Master of Letters April, 1982 Andrew Duda, Jr., Doctor of Agricultural Service Ferdinand Duda, Doctor of Agricultural Service John Duda, Doctor of Agricultural Service Robert J. Whalen, Doctor of Engineering Science July, 1982 Mary Jo Stroud Davis, Doctor of Public Service William E. Davis, Doctor of Public Service December, 1982 Joseph A. Boyd, Doctor of Engineering Science J.W. Hubler, Doctor of Engineering Science July, 1983 Charles Wadsworth, Doctor of Public Service December, 1984 Allan E. Gotlieb, Doctor of Laws George J. Becker, Jr., Doctor of Public Service June, 1985 Jerry Collins, Doctor of Public Service D. Robert Graham, Doctor of Public Service Walter O. Lowrie, Doctor of Engineering Science William C. Schwartz, Doctor of Engineering Science March, 1986 Isaac Bashevis Singer, Doctor of Letters October, 1988 Elie Wiesel, Doctor of Letters December, 1988 Sven Caspersen, Doctor of Engineering Science John D. Holloway, Doctor of Public Service Wolfgang-Detlef Petri, Doctor of Commercial Science May, 1989 David Albertson, Doctor of Humane Letters Frank M. Hubbard, Doctor of Public Service William S. Jenkins, Doctor of Humane Letters Charles N. Millican, Doctor of Laws James C. Robinson, Doctor of Public Service Helen Harris Perlman, Doctor of Humane Letters May, 1990 Thaddeus Seymour, Doctor of Letters May, 1991 Roald Hoffman, Doctor of Science May, 1992 Robert A. Bryan, Doctor of Humane Letters Buell G. Duncan, Jr., Doctor of Commercial Science May, 1993

COURTESY APPOINTMENTS

 ACKERMAN, LINDA, Clinical Faculty, MLS, Department of Molecular Biology and Microbiology
 B.S. (University of Florida)
 ALBERT, JONATHON C., Clinical Faculty Cardiopulmonary Sciences, Health Sciences RRT, B.S. (University of Central Florida)
 ALEXANDER, GREGOR, Clinical Faculty Cardiopulmonary Sciences, Health Sciences M.D. (Javeriana University)
 ALI, ARSHAD, Assistant Professor of Biology (University of Salford, England)
 ALLEN, BERNICE, Clinical Faculty, Health Information Management R.N., R.R.A.
 ALMEIDA, ARTIE, Faculty Associate, Instructional Programs M.A. (University of Central Florida)
 ANDERSON, JOHN J., Clinical Faculty of Health Sciences (1993), B.S., M.D. (University of Arkansas)

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 - 21 Education Complex & Gym

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 - 14 Phillips Hall
 - Phillips Hall
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 Physical Plant Complex
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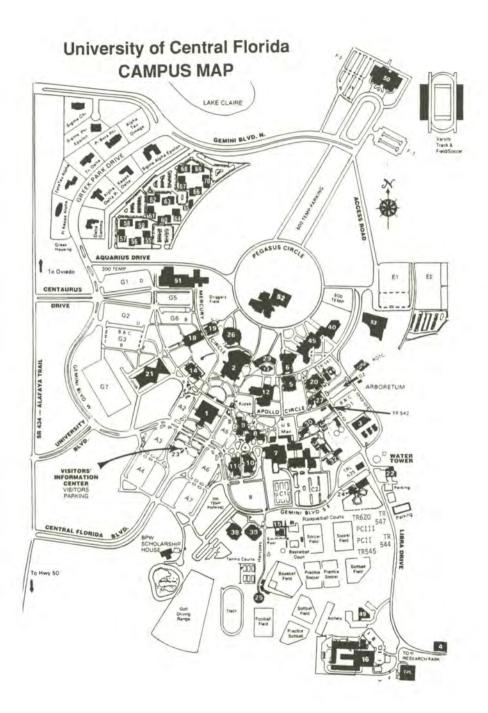
TR 620 ASPECT

PC III Motion Picture Division TR 521 Athletic Advising

TR 542 Social Work Department TR 544 Physical Therapy Division

TR 545 Physical Therapy Lab

TR 547 Continuing Education



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